MONITORING THE FUTURE

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Monitoring the Future Panel Study Annual Report

National data on substance use among adults ages 19 to 65, 1976–2024

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50 YEARS
1974–2024

MONITORING THE FUTURE

PANEL STUDY ANNUAL REPORT:

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Click on any item below to go directly to that page.

Detailed Content

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List of Tables and Figures

Click on any item below to go directly to that page.

CHAPTER 1 - Monitoring the Future Panel Study Design

Overview

Monitoring the Future (MTF) is an ongoing research program conducted at the University of Michigan's Institute for Social Research under a series of investigator-initiated research grants from the National Institute on Drug Abuse beginning in 1974. The integrated MTF study includes annual surveys of nationally representative samples of 8th, 10th, and 12th grade students, as well as a subset of 12th grade students followed into adulthood from each graduating class, beginning with the class of 1976. Repeating these annual cross-sectional surveys over time provides data to examine behavior change across history in consistent age segments of the adult population, as well as among key subgroups.

The MTF Panel Study now includes about 120,000 individuals who were first surveyed in 12th grade, with longitudinal data spanning ages 18 to 65. Each year, approximately 20,000 people in the MTF Panel are surveyed across young adulthood (ages 19 to 30), early midlife (ages 35 to 50), and late midlife (ages 55 to 65). These data, gathered on national samples over such a large portion of the lifespan, are extremely rare and can provide needed insight into the epidemiology, etiology, and life course history of substance use and relevant behaviors, attitudes, and other factors. The current annual report is the latest in a series of publications dating back to 1986, all available at monitoringthefuture.org. An accompanying data dashboard is available at https://monitoringthefuture.org/data/panel/. MTF Panel data are available for researchers through the National Addiction & HIV Data Archive Program at https://www.icpsr.umich.edu/web/pages/NAHDAP/index.html.

Participants

Young Adults (Ages 19 to 30)

In 2024, young adults (N=4,493) were from the 12th grade classes of 2012 to 2023 and provided data at modal ages 19 to 30 (Table/Figure 1). Each individual is invited to participate in a young adult survey every two years. However, because each cohort's panel sample is split into two random subsamples that are surveyed in alternate years (at modal ages 19/20, 21/22, 23/24, 25/26, 27/28, 29/30), a representative sample from each 12th grade class is obtained every year. Combined prevalence estimates and age-specific estimates for young adults ages 19 to 30 are reported in the tables/figures in Chapter 2.

Early Midlife Adults (Ages 35 to 50) and Late Midlife Adults (55 to 65)

In 2024, early midlife adults (N=3,440) were from the 12th grade classes of 2007, 2002, 1997, and 1992, and provided data at modal ages 35, 40, 45, and 50, respectively (Table/Figure 1). Late midlife adults (N=3,043) were from the 12th grade classes of 1987, 1982, and 1977 and provided

data at modal ages 55, 60, and 65, respectively (Table/Figure 1). Combined prevalence estimates for early midlife adults ages 35 to 50 and late midlife adults ages 55 to 65, as well as age-specific estimates, are reported in the tables/figures in Chapter 3.

Research Design & Procedures: Base Year (12th Grade)

The MTF Panel sample is drawn from a national probability sample of students who participated in 12th grade at modal age 18. The methods and findings regarding the 12th grade (base year) survey are available elsewhere. Briefly, 12th graders have been surveyed in the spring of each year since 1975. Each year's data collection of 12th graders takes place in about 100 public and private high schools randomly selected to provide a representative cross-section of 12th graders throughout the contiguous United States.[1]

The final year of high school, 12th grade, is a strategic point to recruit a sample for a longitudinal study to monitor drug use and related attitudes of youth through adulthood. Completion of high school represents the end of an important developmental period in the United States, demarcating both the end of universal education and, for many, the end of living full-time in the parental home. Therefore, it provides an important base year from which to follow individuals as they transition to adulthood. There is also a practical advantage: it is the final point at which a reasonably good national sample of an age-specific cohort can be drawn from schools. However, a limitation of the MTF study design is the exclusion of individuals who dropped out of high school before 12th grade—approximately 5–15% of each age cohort nationally. The dropout rate has been declining in recent years; it was 5% in 2022, according to the National Center for Education Statistics.[2] Because the proportion of students who drop out is small and remains relatively steady from year to year, drop out omission should introduce little or no bias in analyses of trends.[3]

A multistage random sampling procedure is used to secure the nationwide sample of 12th graders each year. Stage 1 is the selection of particular geographic primary areas from within each of 105 Census strata in the United States. Stage 2 is the selection of one or more high schools in each area (with probability proportional to the student enrollment size for 12th grade). Stage 3 is the selection of 12th graders within each high school. Weights are assigned to compensate for differential probabilities of selection at each stage of sampling. In order for us to be able to check

[1] In 2020, due to the school shutdowns that came with the COVID-19 pandemic in March 2020, only 36 schools participated in data collection for 12th graders before data collection halted on March 15, 2020. Analyses indicated that the curtailed sample did not differ from the nationally representative results from previous years in terms of sociodemographic characteristics; Miech, R., Leventhal, A., Johnston, L., O'Malley, P. M., Patrick, M. E., & Barrington-Trimis, J. (2021). Trends in use and perceptions of nicotine vaping among US youth from 2017 to 2020. *JAMA Pediatrics, 175*(2), 185.

[2] National Center for Education Statistics. (2024). Status dropout rates. *Condition of Education*. U.S. Department of Education, Institute of Education Sciences. Retrieved July 16, 2025.

[3] A discussion of the effect of students being absent or who have dropped out can be found in Appendix A of Miech, R. A., Johnston, L. D., Patrick, M. E., O'Malley, P. M. (2025). Monitoring the Future national survey results on drug use, 1975–2024: Overview and detailed results for secondary school students. Monitoring the Future Monograph Series. Ann Arbor, MI: Institute for Social Research, University of Michigan.

the accuracy of observed trends in any given one-year interval, schools are asked to participate in the study for two or three consecutive years on a staggered schedule. Therefore, in any given year, some of the schools in the sample are participating for the first time, and others are participating for their second or third year.

Because many survey questions are needed to cover all of the topic areas in the MTF study, much of the survey content is divided into six different questionnaire forms that are randomly distributed to 12th grade participants in equal proportions. (Five questionnaire forms were used between 1975 and 1988.) About one third of each form consists of key, or "core", variables common to all forms. All demographic and key drug variables are contained in this core set of measures. Other specific drugs are in one or more forms but not in the core set.

Research Design & Procedures: Panel Study

Each year from the 7,000–19,000 12th graders originally surveyed, an MTF Panel subsample (N~2,450[4]) is selected. At that point they are randomly assigned to begin longitudinal follow up one year later (age 19) or two years later (age 20). Each panel participant is surveyed every other year through young adulthood (i.e., at ages 19/20, 21/22, 23/24, 25/26, 27/28, 29/30). Young adults are given a link to a web-based survey with the same survey form (of six forms) that they were originally given in 12th grade. A separate paper form that contains all key measures is also available for those responding via postal mail. While some questions are added to or deleted from the forms in young adulthood, much of the measurement started at age 18 is retained in the follow-up surveys. Starting at age 35, participants are surveyed every five years. At ages 35 to 65, there is a single survey form at each age that is given to all participants (and the same form is used for the web and paper surveys). The panel design is illustrated in Table/Figure 1. Typically, panel data are collected in April through October.

Consent

From the beginning of the study through 2021, the elements of consent were included in the introductory letter (e.g., on the cover page of the survey). Beginning in 2022, informed consent has been obtained at the beginning of each panel survey. The consent form is sent along with the web survey invitation letter, included as the first page of the web survey, and sent on paper with paper surveys.

[4] Only students providing (a) contact information necessary for longitudinal follow up and (b) valid data on sex are eligible for panel subsample selection. As noted previously, 12th grade data collection in 2020 was curtailed due to the COVID-19 pandemic, and all 12th grade students providing contact information and valid data on sex were selected with certainty (N=1,225). Additional information on panel sampling is available in Patrick, M. E., Terry-McElrath, Y. M., Berglund, P., Pang, Y. C., Heeringa, S. G., & Si, Y. (2022). An updated weighting strategy for the Monitoring the Future Panel Study. Monitoring the Future Occasional Paper No. 98. Ann Arbor, MI: University of Michigan, Institute for Social Research.

Oversampling Based on Substance Use

In order to ensure that people reporting drug use are adequately represented in the panel surveys, 12th graders eligible for participation in the panel survey are divided into the following mutually exclusive groups: (1) heavy drug use (i.e., 20 or more occasions of marijuana use or any use of the other illicit drugs in the past 30 days); (2) other substance use (i.e., those not included in the first group but who report 20 or more occasions of nicotine vaping or daily cigarette use in the past 30 days, binge drinking in the past two weeks, or any use of other illicit drugs in the past 12 months); and (3) low or no substance use (i.e., all others). If the 12th grade sample size allows, those in the first two groups are over-sampled by a factor of 3.0 compared to those in the third group. If the 12th grade sample with drug use is not large enough to support a 3:1 over-sample, all 12th graders in group 1 and group 2 are selected with certainty, with the remainder of the target 2,450 respondents from group 3. These differential sampling probabilities are accounted for in the calculation of the panel analysis weights (described below).

Data Collection Procedures

Survey mode. From 1976 to 2017, all MTF Panel surveys were conducted by mailing paper surveys. In 2018 and 2019, one random half of those aged 19 to 30 received the standard MTF Panel procedures with mailed paper surveys; the other random half received new web-push procedures and were encouraged to complete web-based surveys. Analyses of this web-push experiment among young adults documented that, once sociodemographic characteristics were controlled, there were very few differences in substance use prevalence estimates by condition or survey mode.[5] In 2020, we began the transition to web-push survey administration for ages 35 to 60, with one random half receiving the standard MTF mailed surveys and the other half receiving the web-push procedures; we again documented very few differences in substance use prevalence estimates.[6] Web-push procedures are now used for all ages (since 2020 for ages 19 to 30 and since 2021 for ages 35 and older). Combined responses from the two survey modes (web and paper) are shown in this report.

The impact of the change from paper to web-push methodology on response rates was examined. We found a significant difference in response rates by survey condition combining across ages 19

[5] Patrick, M. E., Couper, M. P., Jang, B., Laetz, V. B., Schulenberg, J., Johnston, L. D., Bachman, J., O'Malley, P. M. (2019). Two-year follow-up of the sequential mixed-mode experiment in the U.S. national Monitoring the Future Study. *Survey Practice, 12*(1).
Patrick, M. E., Couper, M. P., Jang, B. J., Laetz, V., Schulenberg, J. E., O'Malley, P. M., Bachman, J., & Johnston, L. D. (2022). Building on a sequential mixed-mode research design in the Monitoring the Future Study. *Journal of Survey Statistics and Methodology, 10*(1), 149–160.
Patrick, M. E., Couper, M. P., Laetz, V. B., Schulenberg, J. E., O'Malley, P. M., Johnston, L., & Miech, R. A. (2018). A sequential mixed mode experiment in the U.S. national Monitoring the Future Study. *Journal of Survey Statistics and Methodology, 6*(1), 72–97.
Patrick, M. E., Couper, M. P., Parks, M. J., Laetz, V., & Schulenberg, J. E. (2021). Comparison of a web-push survey research protocol with a mailed paper and pencil protocol in the Monitoring the Future Panel survey. *Addiction, 116*(1), 191–199.

[6] Patrick, M. E., Pang, Y. C., Terry-McElrath, Y. M., Laetz, V., & Couper, M. P. (2022). Comparison of a web-push vs. mailed survey protocol in the Monitoring the Future panel study among adults ages 35 to 60. *Drug and Alcohol Dependence Reports, 4*, 100089.

to 30 in 2019; the web-push response rate was 39.1% (95% confidence interval [CI] = 37.89, 40.2). This was significantly higher than the standard MTF response rate of 35.1% (95% CI = 33.96, 36.29).[7] In 2020, when the web-push condition was the standard procedure for ages 19 to 30, the overall response rate was 41%. No significant differences in response rates by survey modes were observed among respondents ages 35 to 60 in 2020.[8]

Data collection procedures. Using information provided by 12th grade respondents, contact is maintained with the subset of individuals selected for the MTF Panel study. Newsletters are sent to them each year, providing a short summary of study results on a variety of survey topics. Name and address corrections are requested from both the U.S. Postal Service and the individual.

Panel surveys are sent in the spring to each individual based on their scheduled panel participation, with an incentive check (currently $25). Emails, text messages, reminder letters, and postcards are sent at fixed intervals thereafter. Telephone callers provide reminders, gather updated location information, and prompt response.

Respondents are given access to the web survey (i.e., a link and PIN). We ensure confidentiality of web-based responses by immediately encrypting data. By design, respondents can pause their web surveys and then easily resume answering; we email reminders to both nonrespondents as well as respondents with a partially completed survey. The web-based surveys are optimized for a variety of operating systems and devices, including computers, tablets, and smartphones. Those who do not respond to the web survey within a month are sent paper versions of the surveys; respondents can also ask to be sent paper surveys at future waves. If a respondent asks not to be contacted further, the request is honored.

Panel Attrition & Weighting Adjustments

Longitudinal studies—including MTF—experience attrition. Survey response rates in general have been declining,[9] and response is typically differentially associated with health risks including substance use.[10] A vital feature of the MTF Panel Study is the very low cost per respondent, which allows us to survey such large numbers of respondents.

[7] Patrick, M. E., Couper, M. P., Parks, M. J., Laetz, V., & Schulenberg, J. E. (2020). Comparison of a web-push survey research protocol with a mailed paper and pencil protocol in the Monitoring the Future panel survey. *Addiction, 116*(1), 191–199.

[8] Patrick, M. E., Pang, Y. C., Terry-McElrath, Y. M., Laetz, V., & Couper, M. P. (2022). Comparison of a web-push vs. mailed survey protocol in the Monitoring the Future panel study among adults ages 35 to 60. *Drug and Alcohol Dependence Reports, 4*, 100089.

[9] United States Bureau of Labor Statistics. Household and establishment survey response rates. Updated June 25, 2025. Accessed July 16, 2025.

[10] Keyes, K. M., Jager, J., Platt, J., Rutherford, C., Patrick, M. E., Kloska, D. D., & Schulenberg, J. (2020). When does attrition lead to biased estimates of alcohol consumption? Bias analysis for loss to follow-up in 30 longitudinal cohorts. *International Journal of Methods in Psychiatric Research, 29*(4), e1842.
McCabe, S.E., & West, B.T. (2016). Selective nonresponse bias in population- based survey estimates of drug use behaviors in the United States. *Social Psychiatry & Psychiatric Epidemiology, 51*(1), 141–153.

Response Rates

Response rates by cohort and data collection wave are shown in Tables/Figures 2–4 for original sample response rates (i.e., percentage of the originally-selected individuals who participated at each age; Table/Figure 2), response rates conditional on participation at age 19/20 (Table/Figure 3), and wave-to-wave response rates (Table/Figure 4). The majority of the loss of the original MTF Panel sample occurs at the first panel survey (age 19/20). The 2024 original sample response rates across the young adult surveys (ages 19 to 30) were 28–37%. Due to cohort differences in the propensity to respond, original sample response rates tend to be higher among older cohorts: 36–38% at ages 35 to 50 and 40–54% at ages 55 to 65 in 2024, although response rates within each cohort tend to decline as participants age.

Once participants join the MTF Panel Study, retention rates are relatively high (Table/Figure 3). Conditional on participation at the first panel survey (age 19/20), response rates across the young adult follow-ups at ages 21 to 30 were 56–73% in 2024. Conditional response rates were 48–58% for ages 35 to 50 and 49–60% for ages 55 to 65.

Wave-to-wave response rates, or the percentage of people who responded at the previous wave who respond at the current wave, are very high (Table/Figure 4): 86–105% for ages 21 to 30, 93–101% for ages 35 to 50, and 97–102% for ages 55 to 65. These rates can be greater than 100% when individuals who did not respond at the previous wave rejoin the panel in 2024. Based on concerted efforts by the MTF team, rates over 100% were observed for multiple ages in 2024.

These response rates compare favorably to other similar research studies, especially given the relatively low data collection costs and the many decades over which respondents are followed. Analysis weights are used to adjust for attrition. More information on using weights to adjust back to the nationally representative 12th grade cohorts is available in a study report.

Panel Analysis Weights

An important purpose of the MTF Panel Study is to estimate drug prevalence levels among the nationally representative samples of U.S. high school graduates as they move across adulthood. Thus, we have always been concerned about making appropriate adjustments to account for panel attrition.

In the past, our standard adjustment for this publication series used a drug-specific post-stratification procedure in which we reweighted each cohort's panel sample so that the 12th grade use distribution for a specific drug was the same for the panel respondents as it was for all of the 12th grade students from which they were selected. This procedure was carried out separately for cigarettes, alcohol, and marijuana, as well as other illicit drugs (combined). As expected, it produced prevalence estimates in the panel data that were somewhat higher than those uncorrected for attrition. However, the adjustments were relatively modest.

Starting in 2022, we instituted the use of MTF Panel analysis weights for all estimates reported.[11] Briefly, the MTF Panel analysis weights are calculated such that they weight back to the initial nationally representative 12th grade samples, accounting for: (1) the proportion of 12th grade students not eligible for panel selection, (2) the panel sample selection process including oversampling of those reporting drug use, and (3) panel attrition. This weighting procedure results in an overall improvement in the degree to which the sociodemographic distributions of the initial 12th grade samples are retained, and it likely produces slightly improved substance use estimates due to accounting for historical variation in panel sample selection and attrition over time. To facilitate the ability of data users to evaluate the impact the use of the new weights may have had on prevalence and trend estimates, we replicated all data included in the 2021 version of this report[12] using the new weighting procedures and determined that differences were minimal.[13]

We are not able to adjust for the absence of students who dropped out of school prior to 12th grade. Because nearly all college students have completed high school, the omission of high school dropouts should have almost no effect on college student prevalence estimates, but this omission does affect the estimates for noncollege young adults and the combined young adult and midlife estimates. The omission of about 5–15% of each cohort[14] who dropped out prior to 12th grade might mean that drug use estimates reported here for adults are somewhat lower than would be observed for the age group as a whole. Nevertheless, the year-to-year trends should be minimally affected by the limitations in sample coverage.

[11] Patrick, M. E., Terry-McElrath, Y. M., Berglund, P., Pang, Y. C., Heeringa, S. G., & Si, Y. (2022). An updated weighting strategy for the Monitoring the Future Panel Study. Ann Arbor, MI: Monitoring the Future Occasional Paper No. 98. University of Michigan Institute for Social Research.

[12] Patrick, M. E., Schulenberg, J. E., Miech, R. A., Johnston, L. D., O'Malley, P. M., & Bachman, J. G. (2022). Monitoring the Future Panel Study annual report: National data on substance use among adults ages 19 to 60, 1976-2021. Monitoring the Future Monograph Series. Ann Arbor, MI: Institute for Social Research, The University of Michigan.

[13] Terry-McElrath, Y. M. & Patrick, M. E. (2023). Comparison of estimates before and after the updated weighting strategy change for the Monitoring the Future Panel Study annual report. Monitoring the Future Occasional Paper No. 100. Ann Arbor, MI: Institute for Social Research, University of Michigan.

[14] United States Census Bureau. CPS Historical Time Series Tables on School Enrollment. Updated October 13, 2023. Accessed July 16, 2025.

CHAPTER 2 - Young Adult Substance Use Prevalence and Trends

Executive Summary

The most prevalent substances used by young adults ages 19 to 30 in 2024 were:

	Past 12-month	Past 30-day
Alcohol	80.7%	62.3%
Cannabis (any mode)	41.4%	29.0%
Nicotine (any mode)	36.5%	–
Vaping Nicotine	25.8%	19.4%
Vaping Cannabis	22.3%	15.9%
CBD[15]	19.0%	–
Cigarettes	17.7%	7.5%
Other Drugs[16]	18.4%	–

In addition, binge drinking (having five or more drinks in a row in the past two weeks) was reported by 25.4%, and daily cannabis use (20 or more occasions in the past 30 days) was reported by 10.8% of young adults in 2024.

There were significant changes across in the past year from 2023 to 2024 among young adults ages 19 to 30:

- Decreases in alcohol use (past 12-month) and high intensity drinking (ten or more drinks in the past two weeks) (Tables/Figures 19 and 27).

[15] Cannabidiol (CBD) is a compound found in the cannabis plant. https://nida.nih.gov/research-topics/cannabis-marijuana#what-is-CBD

[16] An index of nonmedical use of any drugs other than cannabis includes hallucinogens (including LSD), cocaine, amphetamines, sedatives (barbiturates), tranquilizers, and narcotics/opioids (including heroin).

- Increases in nicotine pouch use (Table/Figure 53) and delta-8 use (Table/Figure 15) in the past 12 months.

In 2024, young adults had historically high prevalence levels of several substances. These indicators have been available in the full age band since 1988, unless otherwise noted.

- Cannabis: Cannabis use (past 12-month, past 30-day, and daily use) in 2024 remained near or at the recent highest levels ever recorded among young adults, all with significant increases across the past five and ten years (Tables/Figures 5, 7, and 9).
- Vaping cannabis: Vaping cannabis (past 12-month and past 30-day) reached the highest levels ever recorded in 2024, with prevalence in the past year doubling since it was first measured in 2017 (Tables/Figures 11 and 13).
- Vaping nicotine: Nicotine vaping (past 12-month and past 30-day) reached the highest levels ever recorded in 2024, with prevalence in the past month tripling since it was first measured in 2017 (Tables/Figures 41 and 43).
- Nicotine pouches: Nicotine pouch use was first measured in 2023, and it has doubled in one year to 9.5% of young adults reporting past 12-month use in 2024 (Table/Figure 53).
- Hallucinogens/Psychedelics: Use of hallucinogens other than LSD has continued to rise, reaching the highest levels ever recorded in 2024, following increases over the past five and ten years (Table/Figure 63).

In 2024, young adults had historically low prevalence levels of:

- Alcohol: Although alcohol remains the most commonly used substance among young adults, all measures of drinking reached historical lows in 2024, including alcohol use in the past 12 months (Table/Figure 19), alcohol use in the past 30 days (Table/Figure 21), daily drinking in the past 30 days (Table/Figure 23), binge drinking in the past two weeks (Table/Figure 25), and high-intensity drinking in the past two weeks (Table/Figure 27). Significant downward trends over time were found for all measures.
- Cigarette smoking: Smoking among young adults has been declining steadily, with large and significant decreases in past 12-month use (Table/Figure 33), past 30-day use (Table/Figure 35), daily use (Table/Figure 37), and smoking a half pack or more per day (Table/Figure 39) over the past five and ten years. For example, smoking in the past 30 days decreased by nearly three-quarters, from 28.8% in 2004 to 7.5% in 2024.
- Nonmedical use of prescription drugs: Use of narcotics other than heroin, tranquilizers, and amphetamines all reached all-time study low prevalence levels among young adults in 2024 (Table/Figure 57).

Introduction

The multiple cohort sequential design of the MTF Panel provides a useful snapshot of each age group in a given year. In this chapter, we present the most recent prevalence of substance use among young adults (ages 19 to 30) and describe recent historical trends comparing these estimates to young adults in previous years. The data are presented in a series of figures and tables ordered by substance and timeframe of use (e.g., past 12-month, past 30-day). In the figures, estimates for ages 19 to 30 are combined, and the statistical significance levels of one-year change and linear trend estimates across five and ten years are provided. In the tables, estimates for young adults are provided in two-year age groupings (e.g., modal ages 19 and 20) and, for comparison, with estimates from adolescents at age 18 (described in detail in the report on secondary school students[17]) and adults ages 35 to 65 (discussed in the next chapter).

Longitudinal panel studies that track the same individuals across several years are also extremely valuable for examining developmental changes with age and long-term connections across the life course, as we illustrate in other publications.

Most Common Substances: Prevalence & Trends

The prevalence estimates and trends are first presented for the most commonly used substances, including cannabis, alcohol, cigarettes, vaping, and any drug other than cannabis.

We focus on recent trends in substance use among young adults ages 19 to 30 combined. Data are shown for each year in which they are available for that full age band. We present significance tests on trends for one year (the percentage point change between 2023 and 2024), five years (based on a linear slope from 2019 to 2024), and ten years (based on a linear slope from 2014 to 2024).

Cannabis

The term "marijuana" is increasingly being replaced with the term "cannabis". In our surveys, we now use both terms.[18] Measures were updated in 2024, with no significant differences across the old and new items (see Table/Figure 91 for details). Data from the original version is used for determining the trends in 2024, and estimates reported here are based on the old version of the questions unless otherwise noted. The new versions will be used in determining trends in future years. We also continue to update our surveys about modes and types of use, including new

[17] Miech, R. A., Johnston, L. D., Patrick, M. E., O'Malley, P. M. (2025). Monitoring the Future national survey results on drug use, 1975–2024: Overview and detailed results for secondary school students. Monitoring the Future Monograph Series. Ann Arbor, MI: Institute for Social Research, University of Michigan.

[18] National Institute on Drug Abuse. Cannabis (Marijuana).
National Institute on Drug Abuse. Cannabis (Marijuana) Drug Facts.

questions about CBD use in 2024. The estimates here include use of cannabis in any form unless noted otherwise.

12 month. Cannabis use in the past 12 months was reported by 41.4% of young adults in 2024 (Table/Figure 5), with the highest prevalence at ages 27 to 28 (48.6%; Table/Figure 6).

30 day. Cannabis use in the past 30 days was reported by 29.0% of young adults in 2024 (Table/Figure 7), with the highest levels for ages 27 to 28 at 33.1% (Table/Figure 8).

Daily. Daily cannabis use (defined as using on 20 or more occasions in the past 30 days) was reported by 10.8% of young adults in 2024 (Table/Figure 9), with the highest levels at ages 25 to 26 at 15.5% (Table/Figure 10).

Vaping cannabis. Vaping cannabis in the past 12 months was reported by 22.3% of young adults in 2024 (Table/Figure 11), with the highest prevalence at ages 23 to 24 at 26.2% (Table/Figure 12). Vaping cannabis in the past 30 days was reported by 15.9% of young adults in 2024 (Table/Figure 13), with the highest prevalence at ages 23 to 24 at 19.6% (Table/Figure 14).

Delta-8.[19] In 2024, 15.7% of young adults reported using delta-8-THC in the past 12 months (Table/Figure 15), with the highest prevalence at ages 21 to 22 at 20.2% (Table/Figure 16).

CBD. Questions on CBD use were added in 2024, and 19.0% of young adults reported using CBD in the past 12 months (Table/Figure 17), with the highest prevalence at ages 25 to 26 at 22.8% (Table/Figure 18).

Trends. Cannabis use among young adults (including past 12-month, past 30-day, and daily) has increased over the past five years and ten years (Tables/Figures 5–10). Cannabis use in the past 12 months among young adults has increased over the past ten years (from 30.3% in 2014) and past five years (from 38.6% in 2019) to 41.4% in 2024 (Table/Figure 5). Similarly, cannabis use in the past 30 days increased over the past five years (from 25.6% in 2019) and the past ten years (from 18.5% in 2014) to 29.0%, tying the highest level ever recorded in 2024 (Table/Figure 7). Daily cannabis use significantly increased over the past five years (from 9.3% in 2019) and ten years (from 7.1% in 2014; Table/Figure 9).

Vaping cannabis, in particular, has increased among young adults and again reached the highest levels recorded since it was added to the survey in 2017. The prevalence of vaping cannabis in the past 12 months increased over five years, from 18.1% in 2019 to 22.3% in 2024 (Table/Figure 11).

[19] Delta-8 THC is another intoxicating cannabinoid found in the cannabis plant. https://nida.nih.gov/research-topics/cannabis-marijuana#what-Delta-8-THC
Patrick, M. E., Miech, R. A., Pang, Y. C., Leventhal, A. M., & Harlow, A. F. (2025). Use of delta-8-THC and other types of cannabis among young adults in the U.S. *American Journal of Preventive Medicine, 68*(6), 1179–1181.

Vaping cannabis in the past 30 days also increased over the past five years, from 10.9% in 2019 to 15.9% in 2024 (Table/Figure 13).

Use of delta-8 in the past 12 months was added to the survey in 2023 and increased over the past year from 12.4% in 2023 to 15.7% in 2024 (Table/Figure 15).

Alcohol

12 month. Alcohol use in the past 12 months was reported by 80.7% of young adults in 2024 (Table/Figure 19); the highest prevalence was 86.2% at ages 23 to 24 (Table/Figure 20).

30 day. Alcohol use in the past 30 days was reported by 62.3% of young adults in 2024 (Table/Figure 21); peaking during young adulthood at 67.2% at ages 25 to 26 (Table/Figure 22).

Daily. Daily drinking (defined as 20 or more occasions in the past 30 days) was reported by 3.1% of young adults in 2024 (Table/Figure 23). It generally increased across the age strata, reaching 5.4% at ages 29 to 30 (Table/Figure 24).

Binge drinking (i.e., having five or more drinks in a row) in the past two weeks was reported by 25.4% of young adults in 2024 (Table/Figure 25). Prevalence was 29.4% at ages 25 to 26 (Table/Figure 26), reflecting a recent shift upward in the peak age.[20]

High-intensity drinking[21] (i.e., having ten or more drinks in a row) was reported by 6.8% of young adults in the past two weeks (Table/Figure 27). The highest level across young adulthood was 8.5% at ages 25 to 26 (Table/Figure 28).

Trends. Alcohol use among young adults has been decreasing; ***all*** measures reached historical low prevalence levels in 2024. Alcohol use in the past 12 months among young adults in 2024 was 80.7%, which was a significant decrease from 2023 (Table/Figure 19), although there were no significant changes over the past five or ten years. Alcohol use in the past 30 days decreased over the past five and ten years (from 66.5% in 2019 and from 68.1% in 2014 to 62.3% in 2024; Table/Figure 21). Daily drinking also decreased over the past five years (from 4.5% in 2019) and ten years (from 5.2% in 2014) to 3.1% in 2024 (Table/Figure 23).

[20] Jager, J., Keyes, K., Son, D., Patrick, M., Platt, J., & Schulenberg, J. (2022). Age 18–30 trajectories of binge drinking frequency and prevalence across the past 30 years for men and women: Delineating when and why historical trends reversed across age. *Development and Psychopathology*, 1–15.
Patrick, M. E., Terry-McElrath, Y. M., Lanza, S. T., Jager, J., Schulenberg, J. E., & O'Malley, P. M. (2019). Shifting age of peak binge drinking prevalence: Historical changes in normative trajectories among young adults aged 18 to 30. *Alcoholism: Clinical and Experimental Research, 43*, 287–298.

[21] Patrick, M. E., Terry-McElrath, Y. M., Miech, R. A., Schulenberg, J. E., O'Malley, P. M., & Johnston, L. D. (2017). Age-specific prevalence of binge and high-intensity drinking among U.S. young adults: Changes from 2005 to 2015. *Alcoholism: Clinical and Experimental Research, 41*(7), 1319–1328.
Patrick, M. E., Terry-McElrath, Y. M., Kloska, D. D., & Schulenberg, J. E. (2016). High-intensity drinking among young adults in the United States: Prevalence, frequency, and developmental change. *Alcoholism: Clinical and Experimental Research, 40*, 1905–1912.

Binge drinking among young adults reached a new low of 25.4% in 2024 (Table/Figure 25). This is a significant decrease over the past five years (from 30.4% in 2019) and ten years (from 32.9% in 2014; Table/Figure 25). High-intensity drinking (ten or more drinks in a row in the past two weeks) decreased significantly over the past one year (from 8.5% in 2023), five years (from 10.5% in 2019), and ten years (from 11.0% in 2014) to 6.8% in 2024 (Table/Figure 27).

Cigarettes

12 month. Cigarette use in the past 12 months was reported by 17.7% of young adults in 2024 (Table/Figure 33), with the highest level at ages 21 to 22 of 20.2% (Table/Figure 34).

30 day. Cigarette use in the past 30 days was reported by 7.5% of young adults in 2024 (Table/Figure 35), with the peak prevalence at ages 25 to 26 to 8.7% (Table/Figure 36).

Daily. Daily smoking continues to reach new historic low levels among young adults; it was reported by 3.0% of young adults in 2024 (Table/Figure 37), rising across ages from 1.3% at ages 19 to 20 to 4.1% at ages 29 to 30 (Table/Figure 38). Smoking a half pack or more per day was reported by 1.3% of young adults (Table/Figure 39), with the prevalence rising with age across young adulthood reaching a peak at ages 29 to 30 of 2.5% (Table/Figure 40).

Trends. Cigarette smoking among young adults had been declining steadily since 2004 and was tied with (past 12 months) or established new historic prevalence levels (past 30 days, daily, half pack or more) among young adults in 2024. There were significant decreases in past 12-month use, past 30-day use, daily use, and smoking a half pack or more per day over the past five years and ten years (Tables/Figures 33–40). For example, cigarette use in the past 30 days decreased by nearly three-quarters since 2004, when it was 28.8% (Table/Figure 35).

Vaping Nicotine

12 month. Vaping nicotine in the past 12 months was reported by 25.8% of young adults in 2024 (Table/Figure 41) and was most prevalent at ages 23 to 24 when one-third (33.3%) reported vaping in the past 12 months (Table/Figure 42).

30 day. Vaping nicotine in the past 30 days was reported by 19.4% of young adults in 2024 (Table/Figure 43) and was highest at ages 23 to 24 (26.7%; Table/Figure 44).

Trends. Questions about vaping nicotine were added to the young adult surveys in 2017. The prevalence of vaping nicotine in the past 12 months has increased dramatically since then, nearly doubling prevalence in the past 12 months (from 13.7% in 2017 to 25.8% in 2024; Table/Figure 41) and more than tripling prevalence in the past 30 days (from 6.1% in 2017 to 19.4% in 2024, Table/Figure 43). The linear trends are significant over the past five years, although there were no significant one-year increases in 2024.

Nicotine and Tobacco, Other Forms

Any nicotine use (including vaping nicotine, cigarettes, large cigars, small cigars, tobacco using a hookah, and smokeless tobacco) in the past year was an index added in 2023. In 2024, it was reported by 36.5% of young adults (Table/Figure 31); this was not a significant difference in any nicotine use from 2023 to 2024. Across young adulthood, prevalence was highest at ages 25 to 26, with nearly half (43.0%) reporting nicotine use in the past year (Table/Figure 32).

The measures of tobacco use in the past 12 months were expanded in 2023. The use of nicotine pouches nearly doubled from 4.8% in 2023 to 9.5% in 2024 (Table/Figure 53). Across young adulthood, the peak was at ages 25 to 26 when 12.4% of young adults reported nicotine pouch use in the past 12 months (Table/Figure 54).

Tobacco using a hookah was reported 5.3% in 2024, which is a significant decline from 7.9% in 2023 (Table/Figure 49).

There were no significant changes from 2023 to 2024 in other tobacco use measures, including use of large cigars reported by 9.0% (Table/Figure 45), small cigars by 8.3% (Table/Figure 47), and smokeless tobacco by 3.2% (Table/Figure 51).

Any Drug Other Than Cannabis

An index of nonmedical use of any drugs other than cannabis includes hallucinogens (including LSD), cocaine, amphetamines, sedatives (barbiturates), tranquilizers, and narcotics (opioids, including heroin).

12 month. Use of any drug other than cannabis was reported by 18.4% of young adults (Table/Figure 55), peaking at ages 27 to 28 at 24.4% (Table/Figure 56).

Trends. Nonmedical use of any drug other than cannabis remained steady among young adults in 2024. However, there has been a significant decrease over the past ten years for use in the past 12 months (from 21.0% in 2014 to 18.4% in 2024; Table/Figure 55).

Other Substances: Prevalence & Trends

MTF includes specific questions about use of many individual substances. Below are prevalence levels and trends for use in the past 12 months among young adults for nonmedical use of hallucinogens, narcotics (opioids), sedatives/tranquilizers, stimulants, and tobacco in other forms. Additional data are also available.[22]

[22] Data are available through the National Addiction & HIV Data Archive Program at: https://www.icpsr.umich.edu/web/pages/NAHDAP/index.html

Nonmedical Use of Any Prescription Drug

Nonmedical use (that is, use without medical prescription) of any prescription drug (including narcotics, sedatives, tranquilizers, and stimulants) remained at the historic low level of 6.9% in 2024, after first reaching that level in 2023 (Table/Figure 57). There were significant declines over the past five years (from 10.4% in 2019) and ten years (from 15.0% in 2014; Table/Figure 57). Prevalence during young adulthood was highest at ages 29 to 30 at 9.9% (Table/Figure 58).

Hallucinogens (Psychedelics)

Hallucinogen use reached a new all-time study high in 2024, reported by 9.7% of young adults (Table/Figure 59). Across young adulthood, prevalence was highest at ages 25 to 26 at 12.2% (Table/Figure 60). The one-year change was not significant, although there were significant increases with prevalence approximately doubling across the past five years (from 5.2% in 2019) and ten years (from 4.4% in 2014; Table/Figure 59). This increase was driven by hallucinogens other than LSD, the prevalence of which significantly increased from over the past five years (from 3.5% in 2019) and ten years (from 3.4% in 2014) to 8.9% in 2024 (Table/Figure 63), which is also an all-time study high level. Across young adult ages, the highest level was at ages 25 to 26 at 11.1% (Table/Figure 64).

LSD use was reported by 2.1% of young adults in 2024 and has shown a linear decrease over the past five years (from 3.5% in 2019, with a high level of 4.7% in 2020; Table/Figure 61). At all ages across young adulthood prevalence is low, with a maximum at ages 25 to 26 of 3.7% in 2024 (Table/Figure 62).

Use of MDMA (ecstasy, Molly) was reported by 2.5% of young adults in 2024, following a significant negative trend over the past five and ten years (from 6.1% in 2014 and 3.9% in 2019; Table/Figure 65).

We note that the question text changed in 2024 (see Tables/Figures 59–60 and Tables/Figures 63–64), so the trends should be interpreted with caution. However, in all cases the trends continued what we have seen previously over the past several years.

Narcotics (Opioids)

Heroin use was rare, with an estimate of 0.1% of young adults reporting past 12-month use in 2024 (Table/Figure 67), and has significantly decreased over the past five and ten years (0.3% in 2019 and 0.5% in 2014).

Use of narcotics other than heroin was reported by 0.5% of young adults in the past 12 months (Table/Figure 69), which follows significant decreases over the past one year (from 1.3% in 2023), five years (from 3.3% in 2019), and ten years (from 6.7% in 2014). Its peak was 9.2% in 2010

(Table/Figure 69). This is a new historic low level of narcotic use other than heroin among young adults (Table/Figure 69).

The question text was changed for a random portion of participants in 2024, from "narcotics" to "opioid medications" (see Table/Figure 91 for details). The original version of the question (i.e., "narcotics" is shown in Table/Figure 69; both old and new versions are shown in Table/Figure 70). Data from the original version is used for determining the trends in 2024. The new version will be used going forward. The new version was associated with significantly higher prevalence among young adults ages 19 to 30 (Table/Figure 91).

Use of fentanyl was added in 2024, with 0.2% of young adults reporting its use in the past 12 months (Table/Figure 71). Prevalence estimates were low across ages, with prevalence being highest at ages 25 to 26 at 0.8% (Table/Figure 72). However, because fentanyl is sometimes added to other drugs without the user knowing it, the self-reported prevalence likely provides a low estimate of actual consumption.

Sedatives & Tranquilizers (Sleeping Medications & Anti-Anxiety Medications)

Sedative (barbiturate) nonmedical use was reported by 1.2% of young adults in 2024 (Table/Figure 73), with significant decreases over the past five years (from 2.1% in 2019) and ten years (from 3.5% in 2014). There is variability across young adult ages, ranging from 0.2% at ages 19 to 20 to 2.4% at ages 27 to 28 (Table/Figure 74). The question text was changed for a random portion of participants in 2024, from "sedatives" to "sleeping medications" (see Table/Figure 91 for details). There were no significant differences in prevalence for any of the age groupings (Table/Figure 91).

Tranquilizer use was reported by 2.0% of young adults in 2024 (Table/Figure 75), which is an all-time low for young adults. Significant decreases have been observed over the past five years (from 3.7% in 2019) and ten years (from 5.3% in 2014). The question text was changed for a random portion of participants in 2024, from "tranquilizers" to "anti-anxiety medications" (see Table/Figure 91 for details). Data from the original version is used for determining the trends in 2024. The new version will be used going forward. There were no significant differences in reported prevalence among young adults ages 19 to 30 (Table/Figure 91).

Stimulants

Amphetamine nonmedical use was reported by 4.0% of young adults in 2024 (Table/Figure 77), ranging from 2.6% at ages 21–22 to 6.2% at ages 29–30 (Table/Figure 78). Use has declined significantly among young adults over the past five years (from 6.2% in 2019) and ten years (from 7.8% in 2014; Table/Figure 77). Amphetamine use reached a new historic low level among young adults in 2024 (Table/Figure 77).

Cocaine use was reported by 5.1% of young adults in 2024 (Table/Figure 79), with the highest levels at 6.4% at ages 25 to 26 and 29 to 30 (Table/Figure 80). The prevalence declined significantly over the past five years (from 6.3% in 2019; Table/Figure 79).

Methamphetamine use reached a new all-time study low in 2023 and remained steady at that level (0.4%) in 2024 (Table/Figure 81). Across young adulthood, the highest prevalence level was at ages 29 to 30 at 1.3% (Table/Figure 82).

Driving After Using Substances: Prevalence & Trends

Driving after using alcohol

Driving after using alcohol in the past two weeks was reported by 17.0% of young adults in 2024 (Table/Figure 83). There has been a general decrease over the past ten years (from 23.6% in 2014), and a noticeable low level with the COVID-19 pandemic in 2020 (at 14.6%; Table/Figure 83). Across young adulthood, prevalence increases with age to a peak of 24.1% at ages 29 to 30 (Table/Figure 84).

Driving after having five or more drinks in the past two weeks, in particular, was reported by 5.1% of young adults in 2024 (Table/Figure 85), although there has been no significant changes over the past five and ten years. Driving after five or more drinks was most prevalent at ages 21 to 22 at 8.0% (Table/Figure 86).

Driving after using cannabis or other drugs

Driving after using cannabis in the past two weeks was reported by 13.5% of young adults in 2024 (Table/Figure 87), following a significant increase over the past ten years from 7.5% in 2014 (Table/Figure 87). Across young adulthood, the highest prevalence level was at ages 23 to 24 at 20.1% (Table/Figure 88).

Driving after using any drug other than cannabis in the past two weeks was reported by 1.4% of young adults in 2024, with no significant changes over many years (Table/Figure 89). Driving after using other drugs peaked at ages 21 to 22 at 4.3% (Table/Figure 90).

CHAPTER 3 - Midlife Adult Substance Use Prevalence and Trends

Executive Summary

The most prevalent substances used by midlife adults in 2024 were:

	Early Midlife Adults (ages 35–50)		Late Midlife Adults (ages 55–65)	
	Past 12 months	**Past 30 days**	**Past 12 months**	**Past 30 days**
Alcohol	82.1%	64.6%	77.2%	63.2%
Nicotine (any mode)	27.5%	–	24.6%	–
Cannabis (any mode)	26.6%	18.8%	19.7%	13.0%
Cigarettes	14.5%	10.7%	13.2%	10.3%
Other Drugs[23]	11.8%	–	7.2%	–

In addition, binge drinking (having five or more drinks in a row in the past two weeks) was reported by 24.5% of early midlife and 18.8% of late midlife adults in 2024. Daily cannabis use (20 or more occasions in the past 30 days) was reported by 8.2% of early midlife adults and 3.7% of late midlife adults in 2024.

There were significant changes in the past year from 2023 to 2024 among early midlife adults ages 35 to 50 and late midlife adults ages 55 to 65:

- Nicotine pouch use increased in both age groups (Table/Figure 53).
- Vaping cannabis significantly increased from 2023 to 2024 among early midlife adults (past 12-month) and among late midlife adults (past 12-month and past 30-day), reaching new high levels in 2024 (Tables/Figures 11 and 13).

[23] An index of nonmedically supervised use of any drugs other than cannabis includes hallucinogens (including LSD), cocaine, amphetamines, sedatives (barbiturates), tranquilizers, and narcotics (including heroin). The index for ages 55 to 65 differs slightly because hallucinogens were not assessed after age 55 and are not included.

- Daily cannabis use decreased among late midlife adults ages 55 to 65 (Table/Figure 9).
- Alcohol use in the past 30 days and binge drinking decreased among early midlife adults ages 35 to 50 from 2023 to 2024 (Tables/Figures 21 and 25).
- Use of hookah and smokeless tobacco increased among late midlife adults ages 55 to 65 (Tables/Figures 49 and 51).
- Substance use disorder: Disordered use of drugs other than alcohol and cannabis increased among early midlife adults ages 40 to 50 (Table/Figure 96).

In 2024, midlife adults had historically high prevalence levels of several substances. These indicators have been available for early midlife adults ages 35 to 50 since 2008 and for late midlife adults ages 55 to 65 since 2023 unless otherwise noted.

- Cannabis: Daily cannabis use among early midlife adults ages 35 to 50 reached a new all-time high level in 2024 (Table/Figure 9). Past 12-month, past 30-day, and daily use have all doubled or nearly doubled (and significantly increased) over the past five and ten years (Tables/Figures 5, 7, and 9). In addition, cannabis use disorder has increased over the past five years among those ages 40 to 50 (Table/Figure 92). The changes from 2023 to 2024 were not statistically significant for any of these measures for early midlife adults.
- Vaping cannabis (past 12-month and past 30-day) significantly increased over the past five years among early midlife adults, reaching new historic high levels in 2024 (Tables/Figures 11 and 13).
- Vaping nicotine (past 12-month and past 30-day) significantly increased over the five years among early midlife adults, reaching new historic high levels in 2024 (Tables/Figures 41 and 43).
- Hallucinogen/psychedelic use has reached a new all-time study high level among those in early midlife. Use increased over the past five years (from 1.1% in 2019) and ten years (from 0.6% in 2014), to 5.3% in 2024 among those ages 35 to 50 (Table/Figure 59).
- Stimulants: Over the past ten years, there have been significant increases in amphetamine use (from 1.5% in 2014 to 2.9% in 2024; Table/Figure 77) and cocaine use (from 2.1% in 2014 to 3.2% in 2024; Table/Figure 79) among early midlife adults. Cocaine use reached a new historic high among early midlife adults in 2024.

In 2024, midlife adults had historically low prevalence levels of several substances.

- Alcohol use across all indicators has decreased to some extent among early midlife adults ages 35 to 50, reaching new low levels in this age group for the past 30 days and daily drinking in 2024 (Tables/Figures 21 and 23). Alcohol use in the past 30 days decreased

over the past one year and five years. Current daily drinking decreased over the past five and ten years. Alcohol use in the past 12 months decreased over the past five years.

- Cigarette smoking (past 12-month, past 30-day, daily, and half pack or more per day) has continued to decrease over the past decade among early midlife adults (Tables/Figures 33–40).
- Nonmedical use of prescription drugs (that is, use without medical supervision): Over the past ten years, past 12-month prevalence of nonmedical use of any prescription drug has decreased (from 9.4% in 2014 to 7.0% in 2024; Table/Figure 57).
    - Sedatives: Nonmedical use of sedatives has decreased over the past ten years, reaching a new historic low in 2024 of 1.7% (Table/Figure 73).
    - Tranquilizers: Nonmedical use of tranquilizers has decreased over the past ten years, reaching a new historic low in 2024 of 2.7% (Table/Figure 75).
    - Opioids: Nonmedical use of narcotics other than heroin is at the lowest level recorded by the study at 2.0% in 2024. This follows significant decreases over the past ten years (from 4.5% in 2014; Table/Figure 69).

Introduction

MTF has been following individuals from a modal age of 18 throughout adulthood since 1976. In this chapter, we present the most recent prevalence estimates of substance use among early midlife adults ages 35 to 50 combined, late midlife adults ages 55 to 65 combined, and for separate ages. We describe recent historical trends, comparing these estimates to previous years, when possible. (As the oldest cohorts of MTF Panel participants age, we add new ages to this report. For example, the full age span for midlife adults ages 55 to 65 was first reached in 2023, so their combined data were available starting in 2023.) The data are presented in a series of figures and tables ordered by substance and timeframe of use (e.g., past 12 months, past 30 days). In the figures, estimates for ages 35 to 50 are combined, as are the data for ages 55 to 65, and the statistical significance levels of one-year change and linear trend estimates across five and ten years are provided when possible. In the tables, estimates from adolescents at age 18 (presented elsewhere) and young adults at modal ages 19 to 30 (discussed in Chapter 2) are provided for comparison.

Adjusted Lifetime Prevalence Estimates

Longitudinal data allows us to compare participants' most recent responses about ever having used a substance in their lifetime to an adjusted lifetime prevalence estimate, which aggregates data across multiple data collections. These estimates are shown in Tables/Figures 98–106.

To be categorized as using in their lifetime for the adjusted lifetime prevalence estimate, a participant must have reported either lifetime use in the most recent data collection and/or some use in their lifetime in at least two earlier data collections. Respondents ages 18 through 20 cannot have their responses adjusted on the basis of two earlier data collections; therefore, adjusted lifetime prevalence estimates are calculated only for ages 21 and older.

Most Common Substances: Prevalence & Trends

The prevalence estimates and trends are first presented for the most commonly used substances, including cannabis, alcohol, cigarettes, and vaping, as well as for the index of any drug other than cannabis. Estimates for other specific substances are presented in the final section of the chapter.

We focus on recent trends over the past one year, past five years, and past ten years in substance use among early midlife adults ages 35 to 50 combined (shown in Tables/Figures 5–90); data points for late midlife adults ages 55 to 65 are available for the first time in 2023, so only one-year trends are available. Data are given for each year in which they are available for that full age band. We present trends for one year (the percentage point change between 2023 and 2024), five years (based on a linear slope from 2019 to 2024), and ten years (based on a linear slope from 2014 to 2024).

Cannabis

The term "marijuana" is increasingly being replaced with the term "cannabis". In our surveys, we now use both terms.[24] Measures were updated in 2024, with no significant differences across the old and new cannabis items (see Table/Figure 91 for details). Data from the original version is used for determining the trends in 2024, and estimates reported here are based on the old version of the questions unless otherwise noted. The new versions will be used in determining trends in future years. We also continue to update our surveys about modes and types of use, including new questions about CBD use in 2024. The estimates here include use of cannabis in any form unless noted otherwise.

Lifetime. Among midlife adults, adjusted lifetime prevalence of cannabis use was lowest for age 50 (at 73%; Table/Figure 98). The highest adjusted lifetime prevalence levels were for those ages 60 (82%) and 65 (84%), who were in high school during years of peak cannabis use.[25]

12 month. Prevalence of cannabis use in the past 12 months for early midlife adults ages 35 to 50 combined was 26.6% in 2024 (Table/Figure 5) and generally declined with age from 32.6% at age

[24] National Institute on Drug Abuse. Cannabis (Marijuana).
National Institute on Drug Abuse. Cannabis (Marijuana) Drug Facts.

[25] Miech, R. A., Johnston, L. D., Patrick, M. E., O'Malley, P. M., Bachman, J. G., & Schulenberg J. E. (2023). Monitoring the Future national survey results on drug use, 1975-2022: Secondary school students. Monitoring the Future Monograph Series. Ann Arbor: Institute for Social Research, The University of Michigan.

35 to 15.9% at age 65 (Table/Figure 6). Nearly one-fifth (19.7%) of late midlife adults ages 55 to 65 reported using cannabis in the past 12 months (Table/Figure 5).

30 day. Cannabis use in the past 30 days was reported by 18.8% of early midlife adults ages 35 to 50 and 13.0% of late midlife adults ages 55 to 65 in 2024 (Table/Figure 7) and ranged from 24.6% at age 35 to 9.3% at age 50 (Table/Figure 8).

Daily. Current daily cannabis use (defined as using on 20 or more occasions in the past 30 days) for ages 35 to 50 was 8.2% and for ages 55 to 65 was 3.7% in 2024 (Table/Figure 9), ranging from 11.9% at age 35 to 2.9% at age 65 (Table/Figure 10).

Vaping cannabis. Vaping cannabis in the past 12 months was reported by 10.9% of early midlife adults and 5.1% of late midlife adults (Table/Figure 11); 7.4% and 3.5%, respectively, vaped cannabis in the past 30 days (Table/Figure 13). However, there were marked age differences, with a general decrease in prevalence in past 12-month use observed across ages ranging from age 35 (16.2%) to age 65 (5.1%), with a low at age 55 (3.9%; Table/Figure 12). A similar pattern was observed for past 30-day use (Table/Figure 14).

Delta-8. Questions on delta-8-THC were added to the midlife adult surveys in 2024. The prevalence of past 12-month use was 9.3% among early midlife adults ages 35 to 50 and 5.9% among late midlife adults ages 55 to 65 in 2024 (Table/Figure 15). Prevalence tended to decrease across age, from 10.2% at age 35 to 4.8% at age 65 (Table/Figure 16).

CBD. Questions on CBD were added to the surveys in 2024. The prevalence of CBD use in the past 12 months was 17.1% for early midlife adults ages 35 to 50 and 14.5% for late midlife adults ages 55 to 60 in 2024 (Table/Figure 17). Prevalence varied across age, ranging from 12.2% at age 50 to 22.0% at age 35 (Table/Figure 18).

Trends. All measures of cannabis use (past 12-month, past 30-day, daily, vaping 12-month, and vaping 30-day) among early midlife adults ages 35 to 50 have increased over the past five years (and ten years where trends are available). Their prevalence of cannabis use in the past 12 months has nearly doubled in the past ten years from 14.4% in 2014 to 26.6% in 2024 (Table/Figure 5). Their prevalence of cannabis use in the past 30 days has more than doubled from 8.6% in 2014 to 18.8% in 2024 (Table/Figure 7). Again, following the same pattern, their daily cannabis use significantly increased over the past five years and ten years (3.0% in 2014, 4.3% in 2019, 8.2% in 2024; Table/Figure 9). There were no significant increases in overall cannabis use from 2023 to 2024 among late midlife adults.

However, vaping cannabis in the past 12 months significantly increased from 2023 to 2024 among both early midlife and late midlife adults, and vaping cannabis in the past 30 days significantly increased from 2023 to 2024 for late midlife adults, reaching new all-time high prevalence levels

for past 12-month use (Table/Figure 11) and past 30-day use (Table/Figure 13) for both age ranges.

Alcohol

Lifetime. The vast majority of adults reported lifetime alcohol use, with 96–99% of those ages 35 to 65 reporting ever drinking (Table/Figure 99).

12 month. Alcohol use in the past 12 months was also very high, with 82.1% of early midlife adults ages 35 to 50 and 77.2% of late midlife adults ages 55 to 65 reporting it in 2024 (Table/Figure 19). Alcohol use in the past 12 months generally decreased across age, ranging from 82.9% at age 40 to 74.4% at age 65 (Table/Figure 20).

30 day. In 2024, 64.6% of early midlife adults ages 35 to 50 and 63.2% of late midlife adults ages 55 to 65 used alcohol in the past 30 days (Table/Figure 21), ranging from 67.1% at age 40 to 61.4% of those at age 60 (Table/Figure 22).

Daily. Current daily drinking (defined as 20 or more occasions in the past 30 days) was 6.8% for early midlife adults ages 35 to 50 and 10.3% for late midlife adults ages 55 to 65 in 2024 (Table/Figure 23). Unlike other measures of alcohol use, daily drinking generally increased across age stratum, from 5.3% at age 35 to 11.9% at age 65 (Table/Figure 24).

Binge drinking (i.e., having five or more drinks in a row in the past two weeks) was reported by 24.5% of early midlife adults ages 35 to 50 and 18.8% of late midlife adults ages 55 to 65 in 2024 (Table/Figure 25). Its prevalence ranged from 29.9% at age 40 to 14.9% at age 65 (Table/Figure 26).

High-intensity drinking (i.e., having ten or more drinks in a row in the past 30 days[26]) was reported by 5.7% of early midlife adults ages 35 to 50 and 3.5% of late midlife adults ages 55 to 65 (Table/Figure 29), with prevalence generally decreasing across age from 7.0% at age 35 to 2.2% at age 65 (Table/Figure 30).

Trends. Alcohol use across all indicators has decreased to some extent among early midlife adults ages 35 to 50, reaching new low levels in this age group for the past 30 days and daily drinking in 2024. Specifically, alcohol use in the past 30 days decreased over the past one, five, and ten years (from 69.0% in 2014, from 70.9% in 2019, and from 69.1% in 2023 to 64.6% in 2024; Table/Figure 21). Current daily drinking decreased over the past five and ten years (from 8.6% in 2014 and from 8.6% in 2019 to 6.8 in 2024; Table/Figure 23). In addition, alcohol use in the past 12 months decreased over the past five years (from 84.2% in 2019 to 82.1% in 2024;

[26] Note that the timeframe for high-intensity drinking differs from young adulthood. See also: Patrick, M. E., Peterson, S. J., Pang, Y. C., & Terry-McElrath, Y. M. (2024). Links between adolescent binge drinking and midlife alcohol use behaviors by age, sex, and race/ethnicity. *Alcohol: Clinical and Experimental Research, 48*(11), 2060–2069.

Table/Figure 19). Binge drinking among early midlife adults decreased from 27.2% in 2023 to 24.5% in 2024, with no significant longer-term trends (Table/Figure 25).

There were no significant trends from 2023 to 2024 for late midlife adults ages 55 to 65 (Tables/Figures 19–30).

Cigarettes

12 month. Cigarette use in the past 12 months was reported by 14.5% of early midlife adults ages 35 to 50 and 13.2% of late midlife adults ages 55 to 65 in 2024 (Table/Figure 33), with prevalence across age ranging from 12.2% at age 65 to 15.3% at age 35 (Table/Figure 34).

30 day. 10.7% of early midlife adults ages 35 to 50 and 10.3% of late midlife adults ages 55 to 65 smoked cigarettes in the past 30 days in 2024 (Table/Figure 35), with prevalence across age ranging from 14.2% at age 35 to 9.2% at age 65 (Table/Figure 36).

Daily. Daily smoking in the past 30 days was reported by 8.4% of those ages 35 to 50 and 8.9% of those ages 55 to 65 (Table/Figure 37), with relatively similar prevalence levels across age ranging from 7.5% at age 40 to 10.4% at age 60 (Table/Figure 38). Smoking a half pack or more per day was reported by 5.7% of those ages 35 to 50 and 6.7% of those ages 55 to 65 (Table/Figure 39), ranging from 3.9% at age 40 to 8.8% at age 60. Of all daily smokers at age 60, about 8.8% were smoking half a pack a day or more.

Trends. Cigarette use has been steadily declining among early midlife adults ages 35 to 50, with significant declines over the past ten years (past 12-month, past 30-day, daily, and half pack or more per day). Cigarette smoking in the past 12 months has decreased from 20.8% in 2014 to 14.5% in 2024 (Table/Figure 33), and use in the past 30 days has decreased from 16.3% in 2014 to 10.7% in 2024 (Table/Figure 35). Daily smoking has decreased from 12.9% in 2014 to 8.4% in 2024 (Table/Figure 37), and smoking half a pack or more per day from 9.2% in 2014 to 5.7% in 2024 (Table/Figure 39).

There were no significant one-year trends for late midlife adults ages 55 to 65 from 2023 to 2024.

Vaping Nicotine

12 month & 30 day. In 2024, vaping nicotine in the past 12 months was reported by 8.5% of early midlife adults ages 35 to 50 and 3.2% of late midlife adults ages 55 to 65 (Table/Figure 41), generally decreasing across age from age 35 (12.0%) to age 65 (2.5%; Table/Figure 42). In the past 30 days, 6.4% of early midlife adults ages 35 to 50 and 2.7% of late midlife adults ages 55 to 65 vaped nicotine (Table/Figure 43), ranging from 8.8% at age 35 to 2.1% at age 65 (Table/Figure 44).

Trends. Reports of vaping nicotine among early midlife adults ages 35 to 50 significantly increased over the past 5 years, reaching new historic high levels for this age group in 2024 (Table/Figure 41

and Table/Figure 43). There were no significant changes from 2023 to 2024 among late midlife adults ages 55 to 65.

Nicotine and Tobacco, Other Forms

Any nicotine use (including vaping nicotine, cigarettes, large cigars, small cigars, tobacco using a hookah, and smokeless tobacco) in the past 12 months was a new index added in 2023. In 2024, it was reported by 27.5% of early midlife adults ages 35 to 50 and 24.6% of late midlife adults ages 55 to 65 (Table/Figure 31). Prevalence of using any nicotine in the past 12 months generally decreased across age, ranging from 30.9% at age 35 to 22.1% at age 65 (Table/Figure 32). There were no significant trends from 2023 to 2024 among late midlife adults.

The measures of tobacco use in the past 12 months were expanded in 2023 for early midlife adults ages 35 to 50 and late midlife adults ages 55 to 65. In 2024, use of large cigars was reported by 7.3% and 7.6% (Table/Figure 45), small cigars by 5.9% and 6.3% (Table/Figure 47), tobacco using a hookah by 3.4% and 3.4% (Table/Figure 49), smokeless tobacco by 5.0% and 5.7% (Table/Figure 51), and nicotine pouches by 4.9% and 4.3% (Table/Figure 53).

From 2023 to 2024, there were significant increases in the use of nicotine pouches for both early midlife and late midlife adults (from 3.3% to 4.9% and from 2.2% to 4.3%, respectively; Table/Figure 53). This is a large one-year increase, nearly doubling in prevalence for those ages 55 to 65. In addition, late midlife adults ages 55 to 65 significantly increased use of hookah (from 2.0% to 3.4%; Table/Figure 49) and smokeless tobacco (from 3.5% to 5.7%; Table/Figure 51).

Any Drug Other Than Cannabis

An index of nonmedical use (i.e., without medical supervision) of any drugs other than cannabis includes hallucinogens (including LSD), cocaine, amphetamines, sedatives (barbiturates), tranquilizers, and narcotics (including heroin). At ages 55 to 65, hallucinogen use was added to the surveys (and this index) starting in 2024.

12 month. 11.8% of early midlife adults ages 35 to 50 and 7.2% of late midlife adults ages 55 to 65 reported using any drug in the index other than cannabis in the past 12 months (Table/Figure 55), ranging from 14.1% at age 40 to 4.2% at age 65 (Table/Figure 56).

Trends. Use of any drug other than cannabis among early midlife adults has increased over the past five years, from 10.6% in 2019 to 11.8% in 2024 (Table/Figure 55). There was no significant change from 2023 to 2024 among late midlife adults (Table/Figure 55).

Other Substances: Prevalence & Trends

MTF includes specific questions about many individual substances. Below are prevalence levels and trends over the past one, five, and ten years for use in the past 12 months among early midlife

adults ages 35 to 50 for hallucinogens, narcotics (opioids), sedatives/tranquilizers, stimulants, and tobacco in other forms. Trends over the past one year are also available for late midlife adults ages 55 to 65. Additional data are also available.[27]

Nonmedical Use of Any Prescription Drug

Nonmedical use of any prescription drug (including narcotics, sedatives, tranquilizers, and stimulants) in the past 12 months was reported by 7.0% of early midlife adults ages 35 to 50 and 5.8% of late midlife adults ages 55 to 65 in 2024 (Table/Figure 57). There have been significant declines over the past ten years (from 9.4% in 2014; Table/Figure 57). Prevalence during midlife was highest at age 55 at 9.5% (Table/Figure 58).

Hallucinogens (Psychedelics)

Hallucinogen use in the past 12 months was reported by 5.3% of early midlife adults ages 35 to 50 in 2024, which is the highest level recorded since it was first available for the full age range in 2008 (Table/Figure 59). There have been significant increases over the past five years and ten years (from 0.6% in 2014, and 1.1% in 2019; Table/Figure 59). Use ranged from 0.3% at age 65 to 6.8% at age 35 (Table/Figure 60).

We note that the question text changed in 2024 (see Tables/Figures 59–60), so the trends should be interpreted with caution. However, in all cases, the trends continued what we have seen previously over the past several years.

Narcotics (Opioids)

Heroin use among early midlife adults ages 35 to 50 was 0.2% in 2024 and 0.1% for late midlife adults, with no significant change among early midlife adults over the past ten years (Table/Figure 67). Heroin use was more prevalent among previous cohorts, with adjusted lifetime prevalence as high as 6% among those who are 45 and 65 years old (Table/Figure 101).

Nonmedical use of narcotics other than heroin in the past 12 months was reported by 2.0% of early midlife adults and 1.6% of late midlife adults in 2024. There has been a decrease among early midlife adults over the past ten years (from 4.5% in 2014), and prevalence reached a new historical low level in 2024 (Table/Figure 69).

The question text for nonmedical use was changed for a random portion of participants in 2024, from "narcotics" to "opioid medications" (see Table/Figure 91 for details). The original version of the question (i.e., "narcotics" is shown in Table/Figure 69; both old and new versions are shown in Table/Figure 70). Data from the original version is used for determining the trends in 2024. The

[27] Data are available through the National Addiction & HIV Data Archive Program at: https://www.icpsr.umich.edu/web/pages/NAHDAP/index.html

new version will be used going forward. The new version was associated with significantly higher prevalence among late midlife adults ages 55 to 65, but there were no differences among early midlife adults ages 35 to 50 (Table/Figure 91).

Adjusted lifetime prevalence of using narcotics other than heroin reaches as high as 41% of those who were 45 in 2024 (Table/Figure 102).

Fentanyl use was added to the survey in 2024, and it was rare, with 0.3% of early midlife adults and 0.0% of late midlife adults reporting its use in the past 12 months (Table/Figure 71). However, because fentanyl is sometimes added to other drugs without the user knowing it, the self-reported prevalence likely provides a low estimate of actual consumption.

Sedatives & Tranquilizers (Sleeping Medications & Anti-Anxiety Medications)

Nonmedical use of sedatives in the past 12 months was reported by 1.7% of early midlife adults ages 35 to 50 and 2.0% of late midlife adults ages 55 to 65 in 2024 (Table/Figure 73), which was a decrease among early midlife adults over the past ten years from 2.8% in 2014. Use was between 0.8% and 3.8% at each age (Table/Figure 74). The prevalence among early midlife adults reached a new historic low level in 2024. The question text was changed for a random portion of participants in 2024, from "sedatives" to "sleeping medications" (see Table/Figure 91 for details). There were no significant differences in prevalence for any of the age groupings (Table/Figure 91).

Nonmedical use of tranquilizers in the past 12 months was reported by 2.7% of early midlife adults ages 35 to 50 and 2.2% of late midlife adults ages 55 to 65 (Table/Figure 75). Use ranged from 1.2% to 3.7% across ages 35 to 65 (Table/Figure 76). Tranquilizer use among early midlife adults decreased over the past ten years, from 4.3% in 2014, reaching a new historic low level of 2.7% in 2024 (Table/Figure 75). The question about nonmedically supervised use was changed for a random portion of participants in 2024, from "tranquilizers" to "anti-anxiety medications" (see Table/Figure 91 for details). Data from the original version is used for determining the trends in 2024. The new version will be used going forward. The prevalence was higher with the new questions for ages 35 to 50 (past 12 months and past 30 days) and 55 to 65 (past 12 months only; Table/Figure 91).

These substances are also more prevalent among the older cohorts, with adjusted lifetime prevalence as high as 36% for sedatives (Table/Figure 103) and 46% for tranquilizers (Table/Figure 104) among those who were 65 in 2024.

Stimulants

Amphetamine nonmedical use was reported by 2.9% of early midlife adults ages 35 to 50 and 1.1% of late midlife adults ages 55 to 65 in 2024 (Table/Figure 77), ranging from 4.2% at age 35 to 0.3%

at age 65 (Table/Figure 78). There was an increase in use over the past ten years (from 1.5% in 2014; Table/Figure 77).

Cocaine use was reported by 3.2% of early midlife adults ages 35 to 50 and 1.2% of late midlife adults ages 55 to 65 in 2024 (Table/Figure 79). There has been an increase in cocaine use among late midlife adults over the past ten years, from 2.1% in 2014 (Table/Figure 79), and cocaine use in the past 12 months reached a new historic high level among this age group in 2024. By age stratum, there was a range of 4.2% at age 35 descending to 0.9% at age 65 (Table/Figure 80).

Adjusted lifetime prevalence estimates are again much higher among the older cohorts, reaching 57% for amphetamines (Table/Figure 105) and 52% for cocaine use (Table/Figure 106) among those who were 65 in 2024.

Substance Use Disorder

The MTF Panel includes measures of substance use disorder symptoms in the past 12 months for cannabis use disorder, alcohol use disorder, and other drug use disorders.[28] These symptom criteria sums can be understood as indicators of substance use disorder symptoms in the nonclinical population, but they are not equivalent to a diagnosis of substance use disorder. The resulting trichotomous variable—abstaining over the past 12 months, nondisordered use in the past 12 months, disordered use in the past 12 months—and trends in this variable are shown in Tables/Figures 92–97 and are summarized below for each age group. Substance use disorder in the past 12 months is reported for early midlife adults at ages 40 to 65 (not including age 35) from 2017 to 2024.[29] (Substance use disorder measures at age 35 asked about the past five years through 2024; starting in 2025, age 35 measures asked about symptoms in the past 12 months.)

Past 12 month cannabis use disorder. In 2024, 73.9% of early midlife adults ages 40 to 50 reported abstaining from cannabis, 19.8% reported nondisordered use, and 6.4% reported disordered use based on their symptoms of cannabis use disorder (Table/Figure 92). Trends over time indicate that there has been a decrease in abstention from cannabis across the past five years (from 81.4% in 2019 to 73.9% in 2024; Table/Figure 92). There have been increases in cannabis use disorder over the past five years (from 4.0% in 2019 to 6.4% in 2024; Table/Figure 92).

Among late midlife adults ages 55 to 65 in 2024, 81.5% reported abstaining, 14.9% reported nondisordered use, and 3.6% reported disordered use of cannabis (Table/Figure 93). There were no significant changes from 2023 to 2024.

[28] Terry-McElrath, Y. M., & Patrick, M. E. (2025). Substance use disorder criteria sums in the Monitoring the Future Panel Study. Monitoring the Future Occasional Paper No. 101. Ann Arbor, MI: Institute for Social Research, University of Michigan.

[29] Terry-McElrath, Y. M., & Patrick, M. E. (2025). Substance use disorder criteria sums in the Monitoring the Future Panel Study. Monitoring the Future Occasional Paper No. 101. Ann Arbor, MI: Institute for Social Research, University of Michigan.

Past 12 month alcohol use disorder. In 2024, 18.5% of early midlife adults ages 40 to 50 reported abstaining from alcohol, 59.1% reported nondisordered use, and 22.4% reported disordered use (Table/Figure 94), with no significant trends over the past five years.

Among late midlife adults ages 55 to 65 in 2024, 23.6% reported abstaining, 59.0% reported nondisordered use, and 17.4% reported disordered alcohol use (Table/Figure 95). There were no significant changes from 2023 to 2024.

Past 12 month other drug use disorder. The majority of early midlife adults ages 40 to 50 abstain from drugs other than alcohol and cannabis. In 2024, 93.0% reported abstaining, 5.1% reported nondisordered use, and 1.9% reported disordered use of other drugs (Table/Figure 96). Trends indicate decreases in abstention over the past one year and five years (from 95.1% in 2019 and 94.8% in 2023 to 93.0% in 2024; Table/Figure 96). There have been increases in nondisordered use of other drugs over the past five years (from 3.1% in 2019 to 5.1% in 2024). There was a significant increase in other drug use disorder from 2023 to 2024 (1.0% to 1.9%) among early midlife adults (Table/Figure 96).

Among late midlife adults ages 55 to 65 in 2024, 95.8% reported abstaining, 3.3% reported nondisordered use, and 0.9% reported disordered use of other drugs (Table/Figure 97), with no significant changes from 2023 to 2024.

CHAPTER 4 - College and Noncollege Young Adult Substance Use

Executive Summary

In 2024, differences in substance use for college vs. noncollege young adults ages 19 to 22 showed that:

- Alcohol: College students had higher prevalence of alcohol use than noncollege young adults (12-month and 30-day, although there were no differences in binge drinking; Tables/Figures 107–109).
- Cigarettes: Noncollege young adults had higher prevalence of smoking cigarettes (12-month only; Table/Figure 107).
- Vaping nicotine: Noncollege young adults had higher prevalence of vaping nicotine (12-month and 30-day; Tables/Figures 107–108). This follows significant increases over the past five years for vaping nicotine in the past 30 days among noncollege, but not college, young adults (Table/Figure 123).
- Other forms of nicotine use did not differ between college and noncollege young adults overall.
    - However, there were sex differences such that noncollege men had higher prevalence than noncollege women for large cigars, small cigars, smokeless tobacco, and nicotine pouches (Table/Figure 107).
- Other drug use:[30] There were no differences by college status, or between college men and women, in the index of the use of other drugs in the past 12 months in 2024 (Table/Figure 107).
    - MDMA (ecstasy, Molly) was more prevalent among noncollege than college young adults (Table/Figure 107).
    - Amphetamines were more prevalent among college than noncollege young adults (Table/Figure 107).
    - Noncollege men had higher prevalence than noncollege women of hallucinogens and hallucinogens other than LSD (Table/Figure 107).

[30] An index of nonmedical use of any drugs other than cannabis includes hallucinogens/psychedelics (including LSD), cocaine, amphetamines, sedatives (barbiturates), tranquilizers, and narcotics (including heroin).

- Driving after using cannabis and driving after using alcohol were more prevalent among noncollege young adults (Table/Figure 110).

Trends are presented since 1980, when data were first available for the full age band, unless otherwise noted. Trends over time revealed that:

- Cannabis: Over the past five years, daily cannabis use increased among college students but decreased among noncollege young adults, resulting in a convergence between these two groups (Table/Figure 113).
    - For college women, the prevalence of daily cannabis use was at a new all-time study high for that group of 6.8% in 2024 (Table/Figure 114).
- Alcohol: In 2024, alcohol use in the past 30 days reached new historic low levels among both college and noncollege young adults, following significant ten-year downward trends from 61.3% in 2014 to 52.1% in 2024 for college students and from 55.0% in 2014 to 42.7% in 2024 for noncollege young adults (Table/Figure 117). Binge drinking (five or more drinks in a row in the past two weeks) has decreased among all groups (college and noncollege young adults, college men and college women) over the past five and ten years (Tables/Figures 119–120).
    - College women reported higher past 12-month alcohol use than college men in 2024: 76.0% vs. 66.1% (Table/Figure 107).
    - For college men, the prevalence of 30-day alcohol use reached a new all-time study low of 49.1% in 2024 (Table/Figure 118).

Introduction

The MTF Panel Study tracks multiple forms of substance use among U.S. college students and has done so for four and a half decades. This chapter focuses on the current prevalence and trends of drug use among college students and noncollege young adults (who were in high school in 12th grade), focusing on the typical college-attending ages of 19 to 22 (i.e., one to four years after high school).

MTF has been able to generate an unparalleled national sample of college students and same-aged young adults who are not in college every year since 1980 by following national samples of sequential high school classes after they graduate. The graduating class of 1976 was the first such class followed after high school graduation, and, by 1980, the survey included college students one to four years past high school. The MTF follow-up samples have provided excellent coverage of the U.S. college student population for nearly four and a half decades (1980–2024); previous results are available elsewhere.

MTF draws the Panel Study sample prospectively in the senior year of high school, so it has considerable advantages for generating a broadly representative college sample, compared to relying on institution-based samples. In addition, the "before, during, and after college" design permits examination of the many changes associated with the college experience. The design also generates comparable panel data for young adults who are not attending college in the four years after high school, an important segment of the young adult population in its own right, as well as a comparison group for college students.

Definition of College Students

Ages 19 to 22. We compare college students and nonstudents during the most typical ages for college attendance. According to statistics available from the United States Census Bureau[31] and the National Center for Education Statistics,[32] this age band encompasses about 73% of all undergraduate college students enrolled full time in 2019.

Full-time college students. College students are defined here as young adults one to four years past high school who report that they were taking courses as full-time students in a two-year or four-year college or university at the beginning of March of the year in question. In other words, we consider full-time students at both two-year colleges (such as community colleges) and four-year colleges and universities as college students. Full-time college students as defined here constituted about three-fifths (60%) of the entire follow-up sample one to four years past high school in 2024, with roughly 800–1,600 respondents in the college sample each year.

The changing proportions of young adults who attend college and their demographics are relevant to interpreting differences over time. For example, the proportion of college students who are women has risen substantially since 1980. In 1980, women were about 50% of the college respondents, but in 2024 they were 63%. Below, we include prevalence and trends separately for college men and women to permit an assessment of what effect these changing proportions may have on the overall prevalence estimates.[33]

Noncollege young adults. The MTF Panel Study also includes high school graduates one to four years past high school who were not attending college full time. This group includes individuals who did not attend college after high school, are attending part time, or previously attended college but are not currently attending. Having data for both full-time college and noncollege groups is a rare and valuable feature of the MTF Panel. As more young adults attend college, noncollege young adults comprise relatively smaller sample sizes (and thus lead to less precision in our estimates for noncollege young adults). Each year, roughly 500–1,700 respondents constitute the

[31] U.S. Census Bureau.

[32] National Center for Education Statistics. Fall 2019 Enrollment.

[33] In 2018, 2019, and 2020 only, the total sample included a small proportion who had missing data on the sex question.

noncollege group one to four years beyond high school. If data from the missing high school dropout segment—which has declined from around 15% to roughly 5% of a class cohort[34]—were available for inclusion as part of the noncollege segment, any difference between the two groups in terms of their substance use would likely be greater.

Most Common Substances: Prevalence & Trends for College & Noncollege

The prevalence estimates and trends are first presented for the most commonly used substances including cannabis, alcohol, cigarettes, vaping nicotine, and any drug other than cannabis. Prevalence estimates for other specific substances are then presented, followed by prevalence and trends by sex among college young adults for use of the most common substances. Trends are presented since 1980, when data were first available for the full age band, unless otherwise noted. As noted in Chapter 2 of this report, question text for measures related to cannabis, narcotics/opioids, sedatives/sleeping medications, and tranquilizers/anti-anxiety medications was changed for a randomly selected portion of participants in 2024 (see Table/Figure 91 for details). Prevalence tables in this chapter show 2024 prevalence estimates for both the original and updated versions of the relevant substances, as well as the combined "any drug other than cannabis" and "any prescription drug" indices (see Tables/Figures 107–109). Only data from the original versions are used for determining the trends in 2024. All discussion of prevalence estimates in the text below focuses on data from the original versions. New versions will be used in the future.

Cannabis

12-month & 30-day. Prevalence of cannabis use (in any form) in the past 12 months was similar for college (34.9%) and noncollege (37.2%) young adults in 2024 (Table/Figure 107). Likewise, prevalence of cannabis use in the past 30 days was similar for college (22.0%) and noncollege (26.3%) young adults in 2024 (Table/Figure 108).

Daily. The prevalence of current daily cannabis use was similar for college (6.3%) and noncollege (7.4%) young adults in 2024 (Table/Figure 109).

Vaping cannabis. Prevalence of vaping cannabis was similar for college and noncollege young adults in the past 12 months (20.2% vs. 19.7%) and in the past 30 days (12.9% vs. 14.6%; Tables/Figures 107–108).

[34] National Center for Education Statistics. (2024, May). Status Dropout Rates. *Condition of Education*. U.S. Department of Education, Institute of Education Sciences. Accessed July 17, 2025.

Trends. Cannabis use trends showed that, for both college and noncollege young adults, there were significant five-year declines in cannabis use in the past 30 days (from 25.0% to 22.0% from 2019 to 2024 for college; from 30.0% to 26.3% for noncollege). In contrast, there was a significant positive trend over the past ten years in cannabis use in the past 30 days (from 21.3% to 22.0% from 2014 to 2024 for college; from 23.8% to 26.3% for noncollege; Table/Figure 111).

Daily use increased over the past five years among college young adults (from 5.1% to 6.3% from 2019 to 2024) but decreased among noncollege young adults (from 12.9% to 7.4%; Table/Figure 113).

Despite a nonsignificant decrease from 2023 to 2024 in vaping cannabis in the past 30 days for both college and noncollege young adults, there has been an overall increase over the past five years in vaping cannabis in the past 30 days among both college (from 9.7% in 2019 to 12.9% in 2024) and noncollege (from 12.8% in 2019 to 14.6% in 2024) young adults (Table/Figure 115).

Alcohol

12-month & 30-day. College young adults reported higher prevalence than noncollege young adults for alcohol use in the past 12 months (71.5% vs. 63.0%) and past 30 days (52.1% vs. 42.7%; Tables/Figures 107–108).

Daily. The prevalence of daily drinking was similar for college (0.5%) and noncollege (1.9%) young adults (Table/Figure 109).

Binge drinking. In 2024, college (22.8%) and noncollege (21.1%) young adults had similar prevalence levels of binge drinking in the past two weeks (Table/Figure 109). Binge drinking was historically more prevalent among college than noncollege young adults over the years, but the groups have converged, and there have been no significant differences since 2021 (Table/Figure 119).

High-intensity drinking. The prevalence of high-intensity drinking (i.e., ten or more drinks in a row) in the past two weeks was similar for college (4.7%) and noncollege (7.2%) young adults in 2024 (Table/Figure 109).

Trends. In 2024, we observed new historic low levels of alcohol use in the past 30 days among both college and noncollege young adults. Trends showed that the prevalence of alcohol use in the past 30 days declined over the past ten years among both college (from 61.3% in 2014 to 52.1% in 2024) and noncollege (from 55.0 in 2014 to 42.7% in 2024) young adults (Table/Figure 117). There was also a significant five-year decrease in 30 day use among college young adults (from 61.3% in 2019 to 52.1% in 2024) and a one-year decrease in 30 day use among noncollege young adults (from 51.9% in 2023 to 42.7% in 2024; Table/Figure 117).

Similarly, for binge drinking among college and noncollege young adults, significant five- and ten-year trends indicated long-term decreases (Table/Figure 119).

Cigarettes

12-month & 30-day. In 2024, noncollege young adults had significantly higher prevalence levels of smoking in the past 12 months than college students (21.1% vs. 13.5%); past 30 day prevalence was similar between noncollege and college young adults (8.6% vs. 5.8%; Tables/Figures 107–108).

Daily smoking. In 2024, college and noncollege young adults had similar prevalence levels of daily smoking (1.7% vs. 2.8%; Table/Figure 109).

Trends. Trends in cigarette use showed major decreases for both college and noncollege young adults over the past ten years (Table/Figure 121). However this historic decrease (from highs of 42.4% among noncollege in 2001 and from 30.5% among college in 1999) may have ended in recent years. In 2024, there was a nonsignificant one-year increase for cigarette smoking in the past 30 days among both college (from 4.1% to 5.8%) and noncollege (from 8.3% to 8.6%) young adults.

Vaping Nicotine

12-month & 30-day. The prevalence of nicotine vaping was significantly higher among noncollege young adults than college students in 2024 for both the past 12 months (29.9% vs. 19.7%) and past 30 days (24.8% vs. 14.1%; Tables/Figures 107–108).

Trends. There have been dramatic increases in vaping nicotine since it was first reported in 2017, particularly among young adults not in college. Among noncollege young adults, there was a significant five-year increase, and past 30 day nicotine vaping prevalence doubled from 12.4% in 2019 to 24.8% in 2024; Table/Figure 123). In contrast, 30-day use among college young adults showed no significant change over the past five years (Table/Figure 123).

Any Drug Other Than Cannabis

An index of nonmedical use (i.e., without medical supervision) of any drugs other than cannabis includes hallucinogens (including LSD), cocaine, amphetamines, sedatives (barbiturates), tranquilizers, and narcotics (including heroin).

12-month. Use of any drugs other than cannabis was similar among college and noncollege young adults in 2024, with no significant differences in prevalence of use over the past 12 months (13.9% vs. 13.4%; Table/Figure 107).

Other Substances: Prevalence for College & Noncollege

Below, we report 12-month prevalence levels for college and noncollege young adults for use of hallucinogens, narcotics (opioids), sedatives/tranquilizers, stimulants, and nicotine in forms other than cigarettes. Additional data on other individual substances are also available.[35]

Hallucinogens (Psychedelics)

Use of hallucinogens overall in the past 12 months was similar for college and noncollege young adults (7.3% vs. 7.7%) in 2024. There were also no significant differences for past 12-month use of LSD (0.8% vs. 1.9%), hallucinogens other than LSD (7.0% vs. 6.3%), or ketamine (0.8% vs. 0.8%; Table/Figure 107). Noncollege young adults reported higher 12-month use of MDMA (ecstasy, Molly) than college young adults (3.9% vs. 1.4%; Table/Figure 107).

Narcotics (Opioids)

Use of heroin and narcotics other than heroin without medical supervision in the past 12 months was similar for college and noncollege young adults in 2024 (both 0.1% or less for heroin; 0.2% for college and 1.0% for noncollege for other narcotics; Table/Figure 107).

Sedatives & Tranquilizers (Sleeping Medications & Anti-Anxiety Medications)

College students and noncollege young adults had similar levels of 12-month nonmedical use of sedatives (barbiturates; 0.6% vs. 0.4%) and tranquilizers (0.8% vs. 0.6%) in 2024 (Table/Figure 107).

Stimulants

Amphetamine use without a doctor's prescription in the past 12 months was significantly higher for college than noncollege young adults (4.1% vs. 1.5%; Table/Figure 107).

Cocaine use in the past 12 months was similar among college (2.6%) and noncollege (2.5%) young adults in 2024 (Table/Figure 107).

Methamphetamine use in the past 12 months was similar for college and noncollege young adults (0.1% vs. 0.6%) in 2024 (Table/Figure 107).

Nonmedical Use of Any Prescription Drug

Nonmedical use (that is, use without medical prescription) of any prescription drug (including narcotics, sedatives, tranquilizers, and stimulants) in the past 12 months was similar for college (6.0%) and noncollege (3.1%) young adults in 2024 (Table/Figure 107). Similarly, nonmedical use

[35] Data are available through the National Addiction & HIV Data Archive Program at: https://www.icpsr.umich.edu/web/pages/NAHDAP/index.html

of prescription drugs in the past 30 days did not differ across the two groups in 2024 (Table/Figure 108).

Nicotine and Tobacco, Other Forms

Any nicotine use (including vaping nicotine, cigarettes, large cigars, small cigars, tobacco using a hookah, and smokeless tobacco) in the past 12 months was a new index added in 2023. There were no significant differences in this index between college (28.5%) and noncollege (37.6%) young adults in 2024; Table/Figure 107).

There were also no significant differences between college and noncollege young adults in 12 month use of specific modes of nicotine or tobacco use other than cigarettes, including large cigars, small cigars, tobacco using a hookah, smokeless tobacco, and nicotine pouches (Table/Figure 107).

Sex Differences Among College Students: Most Common Substances

Cannabis

In 2024, there were no significant differences between men and women college students for cannabis use (past 12-month, past 30-day, daily, and vaping; Tables/Figures 107–109). Before 2015, college men had consistently higher prevalence of cannabis use than college women. However, there have been significant increases in cannabis use in the past 30 days among college women over the past ten years (from 17.6% in 2014 to 24.0% in 2024) and a near-doubling in daily use (from 3.5% in 2014 to 6.8% in 2024) (Tables/Figures 112 and 114). The observed daily use prevalence of 6.8% in 2024 was near the highest ever observed among college women.

Alcohol

Alcohol use in the past 12 months was significantly higher among college women (76.0%) than college men (66.1%) in 2024; use in the past 30 days was similar between the two groups (Tables/Figures 107–108). Prior to 2000, college men consistently had higher prevalence of alcohol use in the past 30 days. However, 30-day alcohol use among college men has significantly decreased over the past ten years (from 63.2% in 2014 to 49.1% in 2024), while use among women has not significantly changed over the past decade (Table/Figure 118). The observed 30-day prevalence of 49.1% in 2024 was the lowest ever observed among college men.

For binge drinking, there have been significant decreases over the past ten years for both college men (from 42.1% in 2014 to 25.1% in 2024) and college women (from 27.5% in 2014 to 21.8% in 2024; Table/Figure 120). This is near an all-time low among college men since the value was first available in 1980 (Table/Figure 120). Binge drinking among college women remained above the low point of 18.2% reported during the pandemic in 2020 (Table/Figure 120).

Cigarettes

There were no significant differences in cigarette use for college men or college women (Table/Figures 107–109). Trends in prevalence of cigarette use in the past 30 days were similar for college men and women, with significant decreases over the past ten years for both men and women (Table/Figure 122). Noncollege men had higher prevalence than noncollege women for cigarette use in the past 30 days (at 13.4% vs. 4.7%; Table/Figure 108), although there were no significant differences for daily smoking (2.4% vs. 3.4%; Table/Figure 109).

Vaping Nicotine

There were no significant differences in vaping nicotine for men compared to women in college (Tables/Figures 107–108). There was a significant five-year decrease in nicotine vaping in the past 30 days among college men (from 21.6% in 2019 to 13.7% in 2024; Table/Figure 124); no significant change was observed among college women.

Any Drug Other Than Cannabis

Use of any drug other than cannabis in the past 12 months was similar among college men and college women (11.7% vs. 16.0%; Table/Figure 107).

Driving After Using Substances

Noncollege young adults reported significantly higher prevalence, compared to college students, for driving after cannabis use (12.2% noncollege, 4.0% college) and driving after alcohol use (10.6% noncollege, 3.8% college; Table/Figure 110). There were no significant differences for driving after five or more drinks or driving after using any drug other than cannabis (Table/Figure 110). Sex differences by college status are not shown due to low prevalence and small sample sizes.

CHAPTER 5 - Demographic Subgroup Differences

Executive Summary

Use of several substances showed no evidence of significant differences between men and women:

- Cannabis: Men have traditionally had significantly higher prevalence of cannabis use than women. However, in 2024, cannabis use in the past 12 months was similar for men and women in all three age groups: young adulthood (ages 19 to 30), early midlife (ages 35 to 50), and late midlife (ages 55 to 65).
    - No significant difference in cannabis use in the past 30 days by sex were observed among young adults.
    - In early midlife, trends in both 12-month and 30-day cannabis use continue to show the historical gap between men and women is narrowing.
- Nicotine: Early midlife and late midlife men and women reported similar use of cigarette smoking in the past 30 days, nicotine vaping in the past 30 days, and any use of drugs other than cannabis in the past 12 months.

Men had significantly higher prevalence levels of substance use than women in 2024 for several measures across young adults (ages 19 to 30), early midlife adults (ages 35 to 50), and late midlife adults (ages 55 to 65). In particular:

- Alcohol: Binge drinking was higher among men (young adulthood, early midlife adults, late midlife adults) in 2024. Alcohol use in the past 30 days (early midlife adults and late midlife adults) was higher among men. Alcohol use disorder was higher among men (early and late midlife adults).
    - There was a significant decrease from 2023 to 2024 in past 30-day alcohol use among early midlife men but not among early midlife women, which narrowed this gap.
- Cigarette use was higher among men (young adults).
- Vaping nicotine was higher among men (young adults).
- Use of any drug other than cannabis was higher among men (young adults).

In 2024, no significant differences by racial/ethnic subgroups were observed for several substances:

- Any cannabis use in the past 12 months or 30 days among young adults; any cannabis use in the past 30 days among early midlife adults
- Binge drinking among young adults or early midlife adults
- Cigarette smoking for young adults and midlife adults

Significant differences by racial/ethnic subgroups and age groups in 2024 included:

- Young adulthood:
    - White young adults reported higher prevalence than Black young adults for alcohol use in the past 30 days and use of any drug other than cannabis.
    - White young adults reported higher prevalence than Hispanic young adults for alcohol use in the past 30 days and nicotine vaping.
- Early midlife:
    - White early midlife adults reported higher prevalence than Black early midlife adults for cannabis use in the past 12 months, alcohol use in the past 30 days, cigarette smoking, vaping nicotine, and nonmedical use of any drug other than cannabis.
    - White early midlife adults had higher prevalence of cannabis use disorder (compared to Black and Hispanic early midlife adults) and alcohol use disorder (compared to Black early midlife adults).
    - White early midlife adults reported higher prevalence than Hispanic early midlife adults for cigarette use and nicotine vaping.
- Late midlife:
    - White late midlife adults reported higher prevalence than Black late midlife adults for alcohol use in the past 30 days, binge drinking, and use of any drug other than cannabis.
    - White late midlife adults had higher prevalence of cannabis use disorder (compared to Black and Hispanic late midlife adults) and alcohol use disorder (compared to Black and Hispanic late midlife adults).
    - White late midlife adults reported higher prevalence than Hispanic late midlife adults for cannabis use in the past 12 months and 30 days, alcohol use in the past 30 days, and nicotine vaping.
    - Black late midlife adults reported higher prevalence than Hispanic late midlife adults for cannabis use in the past 12 months and 30 days.

Introduction

The demographic distributions for the 2024 MTF Panel sample are shown in Table/Figure 125. Differences in 2024 prevalence levels by sex and race/ethnicity are shown for young adults (ages 19 to 30), early midlife adults (ages 35 to 50), and late midlife adults (ages 55 to 65) in Tables/Figures 126–128. Trends in the prevalence of use by sex and by race/ethnicity are shown separately for young adults (ages 19 to 30) and early midlife adults (ages 35 to 50) in Tables/Figures 129–170. Subgroup data for young adults are available since 1988, for early midlife adults since 2008, and for late midlife adults since 2023. Sample sizes for subgroups shown range in size from 100 to 2,800 each year, depending on the variable and the year.

Sex

In the analyses of subgroup differences, we rely on sex reported in high school at age 18. From 1976–2020, the MTF in-school age 18 surveys asked participants "What is your sex?" and included two response options: male and female. In 2021, a third response option of "Other or prefer not to answer" was added. Since 2022, there have been four response options at age 18: male, female, other, and prefer not to answer. Only male and female are shown.

Race/Ethnicity

In the analyses of subgroup differences, we rely on race/ethnicity reported in high school at age 18. Since 2005, the MTF in-school age 18 survey question has been, "How do you describe yourself? (Select one or more responses.)". Responses include Black or African American; the following four, which are combined for the Hispanic category: Mexican American or Chicano, Cuban American, Puerto Rican, Other Hispanic or Latino; Asian American; White (Caucasian); American Indian or Alaska Native; Native Hawaiian or Other Pacific Islander; Middle Eastern (added in 2021). Prior to 2005, respondents could select only one option.

Trends by race/ethnicity are shown for the three largest subgroups: non-Hispanic Black, Hispanic, and non-Hispanic White. Trends for additional subgroups—such as Asian, American Indian, and Multiracial—are not shown here due to smaller subgroup sample sizes (and due to variation in substance use patterns across these smaller categories, making them into an "other" category would not be informative).

Information on the distribution of race/ethnicity in the 2024 MTF Panel sample is shown in Table/Figure 125, including data collected from ages 19 onward.

Most Common Substances

Results are reported for the most prevalent substances, including cannabis, alcohol, cigarettes, vaping nicotine, and any drug other than cannabis. Tests for significant differences by sex and race/ethnicity are shown in Table/Figure 126 for young adults ages 19 to 30, in Table/Figure 127

for early midlife adults ages 35 to 50, and in Table/Figure 128 for late midlife adults ages 55 to 65. Differences for other subgroups and other substances can be examined in the data available for use by researchers.[36]

Subgroup Differences & Trends by Substance

Cannabis

Sex. In 2024, cannabis use in the past 12 months was similar among men and women in all three age groups (Tables/Figures 126–128). Prior to 2018, young adult men had consistently higher prevalence of use than women, but there have been strong increases in past 12-month cannabis use among young adult women over the past five and ten years that outpaced the past ten-year increases among young adult men that led to similar prevalence levels (Table/Figure 129). There also were no significant differences between young adult men and women in past 30-day cannabis use; trends again show a convergence following increases over the past five and ten years for both groups (Table/Figure 135).

Significant increases in both 12-month and 30-day cannabis use over the past five and ten years were also observed during early midlife for both men and women (Tables/Figures 131 and 137). While these trends show a narrowing of the historical gap between men and women (with men reporting higher prevalence than women), full convergence has not yet occurred.

Race/Ethnicity. In 2024, there were no significant differences for cannabis use in the past 12 months or past 30 days for Black, White, and Hispanic young adults ages 19 to 30 (Table/Figure 126). In early midlife, no significant differences were observed for past 30-day use, but White late midlife adults reported higher 12-month prevalence than Black late midlife adults (Table/Figure 127). In later midlife (ages 55 to 65), Black adults reported higher prevalence of use in the past 12 months and past 30 days than Hispanic adults; White adults had significantly higher levels of cannabis use in the past 12 months and 30 days than Hispanic adults. There were no significant differences between Black and White late midlife adults (Table/Figure 128).

Alcohol

Sex. For alcohol use in the past 30 days among young adults, the historically higher use levels among men than women have ended as trends by sex have converged (Table/Figure 141). In 2024, there were no significant differences for alcohol use in the past 30 days by sex for young adults (Table/Figure 126), although young adult men continued to report higher prevalence of binge drinking than young adult women (29.9% vs. 21.4% in 2024; Table/Figure 147). There were

[36] Data are available through the National Addiction & HIV Data Archive Program at: https://www.icpsr.umich.edu/web/pages/NAHDAP/index.html

significant five- and ten-year decreases in binge drinking among both young adult men and women (Table/Figure 147).

Among early midlife adults ages 35 to 50, the sex differences have been more consistent, with considerably higher prevalence among men than women for alcohol use in the past 30 days (68.3% vs. 61.4%) and binge drinking (32.5% vs. 17.5%) in 2024 (Table/Figure 127). There was a significant one-year decrease in alcohol use in the past 30 days among early midlife men (74.3% to 68.3%), while a five-year decrease was observed among early midlife women (Table/Figure 143). Among late midlife adults ages 55 to 65, men had higher levels of alcohol use in the past 30 days and binge drinking compared to women (Table/Figure 128).

Race/Ethnicity. Racial/ethnic differences in alcohol use among young adults narrowed somewhat in 2024. White young adults continued to have higher prevalence of alcohol use in the past 30 days (67.7%) than either Hispanic (59.3%) or Black (53.8%) young adults, but no differences were observed between Hispanic and Black young adults (Table/Figure 126). Over the last ten years, there was a significant decrease in past 30-day alcohol use among White young adults, while use was statistically stable among Hispanic and Black young adults (Table/Figure 142), narrowing the previous gaps. Binge drinking prevalence was similar across young adult racial/ethnic groups (White 28.3%; Hispanic 24.9%; Black 21.6%; Table/Figure 126). Trends over the past five and ten years showed decreasing binge drinking prevalence among White and Hispanic young adults, but increasing prevalence among Black young adults (Table/Figure 148).

Among early midlife adults ages 35 to 50, any alcohol use in the past 30 days was reported by 67.9% of White adults, 61.2% of Hispanic adults, and 53.0% of Black adults; use was significantly lower among Black than White adults (Table/Figure 127). Prevalence of binge drinking was similar for White (26.0%), Hispanic (22.8%), and Black (20.0%) early midlife adults (Table/Figure 127). There was a significant one-year decline in both alcohol use in the past 30 days and binge drinking among Hispanic early midlife adults (from 77.9% to 61.2% for 30-day use, and from 35.7% to 22.8% for binge drinking; Tables/Figures 144 and 150) and significant five-year decreases in 30-day alcohol use for White and Black adults (Table/Figure 144).

In late midlife (ages 55 to 65), the prevalence of past 30-day alcohol use was higher among White adults (66.5%) than either Black (48.7%) or Hispanic (48.1%) adults (Table/Figure 128). White adults also reported more binge drinking (19.5%) than Black (9.8%) adults, but not Hispanic (21.8%) adults in late midlife (Table/Figure 128).

Cigarettes

Sex. The sex difference in cigarette use among young adults has been relatively consistent across the life of the study, despite significant declines among both young adult men and women over the past five and ten years (Table/Figure 153). In 2024, cigarette use in the past 30 days was significantly higher among young adult men (9.9%) than young adult women (5.4%;

Table/Figure 126). In 2024, there were no differences in cigarette use in the past 30 days between men and women at the early midlife ages of 35 to 50 (11.5% men; 10% women) or late midlife ages of 55 to 65 (9.3% men; 11.2% women; Tables/Figures 127 and 128). For early midlife adults ages 35 to 50, there were significant ten-year declines in cigarette use in the past 30 days for both men and women (Table/Figure 155). However, at late midlife ages 55 to 65, there was a significant one-year increase in 30-day cigarette use for women (from 8.5% in 2023 to 11.2% in 2024). Prevalence remained stable for men (Table/Figure 157).

Race/Ethnicity. While trends in smoking cigarettes in the past 30 days decreased significantly for all three young adult racial/ethnic groups, the strongest decreases were observed among White young adults, resulting in trends converging in 2024 (Table/Figure 154). In 2024, there were no significant differences in cigarette smoking by race/ethnicity for young adults (Table/Figure 126). Trends in cigarette smoking showed decreases over the past ten years for early midlife Black and White adults ages 35 to 50 (Table/Figure 156). Among early midlife adults ages 35 to 50, 30-day cigarette prevalence remained higher for White adults (12.2%) than Black (7.1%) or Hispanic (5.0%) adults (Table/Figure 127). Among late midlife adults ages 55 to 65, 30-day cigarette smoking prevalence did not differ by race/ethnicity (Table/Figure 128).

Vaping Nicotine

Sex. The prevalence of nicotine vaping in the past 30 days was significantly higher for young adult men than women (22.4% vs. 16.8%) in 2024 (Table/Figure 126), but there were no significant sex differences among early midlife adults (Table/Figure 127) or late midlife adults (Table/Figure 128). Significant increases in vaping nicotine were observed over the past five years for men and women in both young adulthood and early midlife (Tables/Figures 159 and 161).

Race/Ethnicity. Nicotine vaping prevalence has historically been higher among White respondents. In 2024, White young adults had higher prevalence of nicotine vaping in the past 30 days than Hispanic (but not Black) young adults (Table/Figure 126). Nicotine vaping prevalence was also higher among White than Black or Hispanic early midlife adults (Table/Figure 127) and higher among White than Hispanic (but not Black) late midlife adults (Table/Figure 128).

Any Drug Other Than Cannabis

An index of nonmedical use of any drugs other than cannabis includes hallucinogens (including LSD), cocaine, amphetamines, sedatives (barbiturates), tranquilizers, and narcotics (including heroin). At ages 55 to 65, the index differed slightly because hallucinogen use was not assessed after age 55 until 2024; starting in 2024, the index includes hallucinogen use for all ages.

Sex. In 2024, young adult men continued to have higher prevalence levels of use of any illicit drug other than cannabis in the past 12 months (21.5% among men vs. 15.5% among women;

Table/Figure 126), but no significant differences between men and women were observed in early midlife or late midlife (Tables/Figures 127 and 128).

Race/Ethnicity. White young adults had higher prevalence of nonmedical use of any drug other than cannabis in the past 12 months in 2024 (19.5%) than Black young adults (11.5%; Table/Figure 126). Black young adults have historically had the lowest prevalence (Table/Figure 166). Similar results were observed at ages 35 to 50 and 55 to 65: White adults reported higher prevalence than Black adults in both early midlife (Table/Figure 127) and late midlife (Table/Figure 128).

Substance Use Disorder

The MTF Panel includes measures of substance use disorder symptoms in the past 12 months for cannabis use disorder, alcohol use disorder, and other drug use disorders. These symptom criteria sums can be understood as indicators of substance use disorder symptoms in the nonclinical population, but they are not equivalent to a diagnosis of substance use disorder.[37] The resulting trichotomous variable—abstaining, nondisordered use, disordered use—is shown by sex and race/ethnicity in Tables/Figures 127–128. Substance use disorder in the past 12 months is reported for early midlife adults at ages 40 to 65 (not including age 35) from 2017 to 2024.[38] (Substance use disorder measures at age 35 asked about the past five years through 2024; starting in 2025, age 35 measures asked about symptoms in the past 12 months.)

Cannabis use disorder. Women were more likely than men to be cannabis abstainers, and men were more likely than women to be nondisordered cannabis users at both ages (Tables/Figure 127–128). Differences by race/ethnicity at ages 40 to 50 showed that Black adults were more likely to be cannabis abstainers than White adults, and White adults were more likely to be nondisordered cannabis users than Black adults (Table/Figure 127). At ages 55 to 65, White adults had significantly higher prevalence of cannabis use disorder than Black and Hispanic adults, and Black adults had significantly higher prevalence than Hispanic adults (Table/Figure 128).

Alcohol use disorder. Men had higher prevalence than women of alcohol use disorder at both ages (Tables/Figures 127–128). In addition, at ages 55 to 65, women were more likely to abstain from alcohol than men (Table/Figure 128). Black adults had higher prevalence of alcohol abstention and lower prevalence of alcohol use disorder compared to both Hispanic and White adults at ages 40 to 50 (Table/Figure 127), but the differences were only significant for Black

[37] Terry-McElrath, Y. M., & Patrick, M. E. (2025). Substance use disorder criteria sums in the Monitoring the Future Panel Study. Monitoring the Future Occasional Paper No. 101. Ann Arbor, MI: Institute for Social Research, University of Michigan.

[38] Terry-McElrath, Y. M., & Patrick, M. E. (2025). Substance use disorder criteria sums in the Monitoring the Future Panel Study. Monitoring the Future Occasional Paper No. 101. Ann Arbor, MI: Institute for Social Research, University of Michigan.

compared to White adults at ages 55 to 65 (Table/Figure 128). In addition, White adults had higher prevalence of alcohol use disorder than Hispanic adults at ages 55 to 65 (Table/Figure 128).

Other drug use disorder. Differences in other drug use and disorder by sex and race/ethnicity were generally not significant, perhaps due to low prevalence levels. The only difference that reached significance was that White adults had higher prevalence than Black adults for other drug use disorder.

Tables/Figures

TABLE/FIGURE 1

Monitoring the Future Panel Study Administration

by Cohort, 1976-2024

12th Grade Cohort	Age 19	Age 20	Age 21	Age 22	Age 23	Age 24	Age 25	Age 26	Age 27	Age 28	Age 29	Age 30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1993	1998	2003	2008	2013	2018	2023
1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1994	1999	2004	2009	2014	2019	2024
1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1995	2000	2005	2010	2015	2020	
1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1996	2001	2006	2011	2016	2021	
1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1997	2002	2007	2012	2017	2022	
1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1998	2003	2008	2013	2018	2023	
1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1999	2004	2009	2014	2019	2024	
1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	2000	2005	2010	2015	2020		
1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	2001	2006	2011	2016	2021		
1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	2002	2007	2012	2017	2022		
1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	2003	2008	2013	2018	2023		
1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2004	2009	2014	2019	2024		
1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2005	2010	2015	2020			
1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2006	2011	2016	2021			
1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2007	2012	2017	2022			
1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2008	2013	2018	2023			
1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2009	2014	2019	2024			
1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2010	2015	2020				
1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2011	2016	2021				
1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2012	2017	2022				
1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2013	2018	2023				
1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2014	2019	2024				
1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2015	2020					
1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2016	2021					
2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2017	2022					
2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2018	2023					
2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2019	2024					
2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2020						
2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2021						
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2022						
2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2023						
2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2024						
2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020							
2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021							
2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022							
2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023							
2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024							
2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024								
2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024									
2015	2016	2017	2018	2019	2020	2021	2022	2023	2024										
2016	2017	2018	2019	2020	2021	2022	2023	2024											
2017	2018	2019	2020	2021	2022	2023	2024												
2018	2019	2020	2021	2022	2023	2024													
2019	2020	2021	2022	2023	2024														
2020	2021	2022	2023	2024															
2021	2022	2023	2024																
2022	2023	2024																	
2023	2024																		

MONITORING THE FUTURE

TABLE/FIGURE 2

Monitoring the Future Panel Study Original Sample Response Rates: Percentage of Original Sample Participating By Cohort and Age, Weighted to Adjust for Oversampling of Respondents Reporting 12th Grade Drug Use

12th Grade Cohort	Age 19	Age 20	Age 21	Age 22	Age 23	Age 24	Age 25	Age 26	Age 27	Age 28	Age 29	Age 30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
1976	0.638	0.802	0.773	0.822	0.775	0.809	0.779	0.753	0.733	0.750	0.730	0.742	0.669	0.635	0.599	0.578	0.549	0.536	0.523
1977	0.849	0.839	0.822	0.823	0.810	0.808	0.755	0.767	0.751	0.752	0.721	0.714	0.681	0.638	0.633	0.596	0.567	0.559	0.544
1978	0.851	0.844	0.823	0.822	0.814	0.781	0.752	0.769	0.750	0.730	0.703	0.698	0.654	0.618	0.609	0.590	0.552	0.545	
1979	0.883	0.823	0.838	0.788	0.790	0.740	0.790	0.747	0.745	0.709	0.725	0.681	0.653	0.598	0.584	0.564	0.544	0.536	
1980	0.874	0.846	0.834	0.784	0.783	0.786	0.774	0.763	0.720	0.725	0.696	0.696	0.656	0.600	0.578	0.569	0.550	0.527	
1981	0.847	0.840	0.808	0.764	0.796	0.762	0.740	0.707	0.713	0.678	0.689	0.659	0.607	0.569	0.545	0.512	0.486	0.482	
1982	0.842	0.838	0.779	0.786	0.764	0.739	0.695	0.707	0.669	0.665	0.640	0.600	0.572	0.574	0.535	0.514	0.473	0.484	
1983	0.833	0.795	0.792	0.777	0.732	0.722	0.704	0.677	0.663	0.639	0.607	0.598	0.551	0.547	0.502	0.471	0.469		
1984	0.783	0.819	0.775	0.747	0.719	0.713	0.685	0.689	0.642	0.616	0.602	0.574	0.509	0.507	0.474	0.458	0.446		
1985	0.801	0.807	0.740	0.715	0.706	0.685	0.663	0.633	0.610	0.575	0.574	0.555	0.495	0.481	0.471	0.431	0.420		
1986	0.781	0.742	0.727	0.720	0.672	0.685	0.642	0.593	0.591	0.561	0.542	0.533	0.516	0.482	0.441	0.400	0.399		
1987	0.745	0.731	0.713	0.688	0.688	0.644	0.593	0.596	0.555	0.558	0.537	0.546	0.503	0.461	0.423	0.388	0.395		
1988	0.753	0.775	0.732	0.730	0.674	0.656	0.611	0.623	0.597	0.599	0.553	0.546	0.519	0.475	0.446	0.446			
1989	0.762	0.725	0.733	0.666	0.657	0.600	0.594	0.549	0.556	0.517	0.527	0.500	0.469	0.429	0.399	0.399			
1990	0.737	0.715	0.685	0.618	0.617	0.565	0.569	0.528	0.552	0.494	0.505	0.466	0.428	0.409	0.373	0.365			
1991	0.745	0.740	0.660	0.671	0.583	0.633	0.541	0.561	0.514	0.520	0.486	0.495	0.438	0.400	0.371	0.350			
1992	0.769	0.733	0.690	0.664	0.652	0.613	0.573	0.563	0.558	0.510	0.514	0.535	0.462	0.428	0.376	0.380			
1993	0.745	0.667	0.684	0.635	0.643	0.562	0.569	0.525	0.528	0.488	0.542	0.486	0.446	0.391	0.371				
1994	0.723	0.666	0.671	0.636	0.602	0.562	0.563	0.511	0.509	0.531	0.494	0.466	0.426	0.381	0.378				
1995	0.705	0.695	0.640	0.629	0.573	0.592	0.521	0.566	0.543	0.557	0.479	0.522	0.449	0.412	0.386				
1996	0.735	0.646	0.651	0.576	0.580	0.542	0.539	0.549	0.533	0.496	0.501	0.480	0.433	0.386	0.375				
1997	0.678	0.626	0.581	0.576	0.537	0.547	0.566	0.519	0.510	0.468	0.490	0.468	0.409	0.363	0.362				
1998	0.660	0.623	0.580	0.541	0.522	0.580	0.516	0.500	0.454	0.474	0.448	0.460	0.383	0.353					
1999	0.631	0.597	0.544	0.529	0.578	0.541	0.483	0.476	0.479	0.456	0.461	0.446	0.383	0.373					
2000	0.630	0.555	0.561	0.599	0.566	0.504	0.478	0.473	0.463	0.457	0.452	0.423	0.377	0.347					
2001	0.564	0.555	0.609	0.543	0.542	0.465	0.498	0.446	0.503	0.426	0.457	0.412	0.361	0.352					
2002	0.614	0.612	0.598	0.550	0.531	0.510	0.492	0.489	0.492	0.453	0.459	0.417	0.375	0.373					
2003	0.669	0.541	0.555	0.497	0.498	0.479	0.494	0.434	0.434	0.411	0.428	0.375	0.365						
2004	0.603	0.557	0.518	0.520	0.490	0.492	0.444	0.464	0.425	0.405	0.385	0.376	0.347						
2005	0.566	0.501	0.513	0.524	0.495	0.481	0.426	0.417	0.405	0.388	0.363	0.389	0.347						
2006	0.515	0.497	0.509	0.494	0.472	0.475	0.433	0.445	0.384	0.389	0.371	0.417	0.372						
2007	0.567	0.537	0.502	0.486	0.487	0.478	0.423	0.433	0.401	0.403	0.407	0.396	0.375						
2008	0.586	0.515	0.511	0.468	0.451	0.445	0.400	0.396	0.404	0.404	0.373	0.422							
2009	0.513	0.500	0.477	0.445	0.419	0.389	0.351	0.342	0.360	0.344	0.353	0.350							
2010	0.494	0.477	0.441	0.423	0.424	0.378	0.352	0.376	0.356	0.387	0.346	0.354							
2011	0.489	0.452	0.425	0.390	0.376	0.357	0.350	0.352	0.376	0.351	0.338	0.337							
2012	0.477	0.409	0.415	0.354	0.392	0.365	0.359	0.424	0.353	0.351	0.349	0.334							
2013	0.463	0.383	0.378	0.343	0.358	0.361	0.404	0.379	0.338	0.346	0.331								
2014	0.445	0.319	0.395	0.332	0.369	0.388	0.389	0.315	0.363	0.290									
2015	0.352	0.318	0.354	0.327	0.404	0.347	0.319	0.318	0.296										
2016	0.342	0.352	0.375	0.380	0.361	0.317	0.321	0.282											
2017	0.399	0.326	0.384	0.305	0.349	0.323	0.312												
2018	0.341	0.408	0.369	0.330	0.335	0.325													
2019	0.264	0.360	0.290	0.356	0.305														
2020	0.440	0.414	0.409	0.356															
2021	0.345	0.364	0.336																
2022	0.395	0.338																	
2023	0.374																		

Notes: Original sample response rates are weighted by drug use strata and account for the total sample initially selected from each cohort for Panel participation; thus, the denominator incudes complete and partial surveys as well as refusals, non-contacts, and those lost to contact, etc. Only those identified as (a) ineligible/foreign exchange, (b) deceased, or (c) unable to respond (due to dementia, etc) are excluded from the denominator.

MONITORING THE FUTURE

TABLE/FIGURE 3

Monitoring the Future Panel Study Response Rates: Conditional on Participation at Age 19/20: Percentage of Age 19/21 Sample Participating By Age, Weighted to Adjust for Oversampling of Respondents Reporting 12th Grade Drug Use

12th Grade Cohort	Age 21	Age 22	Age 23	Age 24	Age 25	Age 26	Age 27	Age 28	Age 29	Age 30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
1976	0.887	0.897	0.883	0.883	0.877	0.832	0.842	0.822	0.830	0.824	0.764	0.732	0.695	0.664	0.642	0.634	0.614
1977	0.890	0.888	0.864	0.880	0.814	0.834	0.815	0.817	0.779	0.782	0.748	0.706	0.695	0.658	0.631	0.622	0.601
1978	0.891	0.909	0.881	0.872	0.821	0.854	0.817	0.811	0.761	0.779	0.722	0.686	0.677	0.658	0.619	0.608	
1979	0.896	0.890	0.850	0.840	0.844	0.841	0.806	0.801	0.788	0.775	0.723	0.667	0.653	0.630	0.606	0.600	
1980	0.902	0.875	0.849	0.868	0.840	0.832	0.779	0.803	0.759	0.771	0.722	0.668	0.641	0.629	0.613	0.589	
1981	0.887	0.853	0.865	0.847	0.812	0.795	0.787	0.766	0.759	0.740	0.680	0.639	0.614	0.580	0.548	0.543	
1982	0.861	0.875	0.851	0.833	0.778	0.796	0.752	0.750	0.714	0.683	0.644	0.649	0.604	0.581	0.531	0.544	
1983	0.865	0.870	0.823	0.824	0.789	0.785	0.746	0.741	0.685	0.691	0.634	0.632	0.578	0.548	0.542		
1984	0.871	0.843	0.828	0.803	0.779	0.787	0.736	0.709	0.701	0.667	0.594	0.589	0.555	0.532	0.517		
1985	0.844	0.819	0.806	0.782	0.770	0.736	0.703	0.678	0.665	0.648	0.577	0.563	0.551	0.506	0.496		
1986	0.845	0.863	0.792	0.829	0.762	0.729	0.709	0.700	0.653	0.668	0.633	0.590	0.541	0.497	0.500		
1987	0.846	0.812	0.821	0.774	0.717	0.714	0.678	0.671	0.648	0.657	0.611	0.560	0.525	0.478	0.486		
1988	0.853	0.856	0.794	0.780	0.742	0.746	0.719	0.720	0.669	0.653	0.631	0.578	0.538	0.540			
1989	0.858	0.804	0.778	0.742	0.716	0.685	0.676	0.661	0.645	0.629	0.587	0.538	0.501	0.503			
1990	0.804	0.790	0.740	0.719	0.685	0.679	0.676	0.635	0.615	0.609	0.539	0.512	0.472	0.459			
1991	0.793	0.810	0.711	0.770	0.669	0.694	0.639	0.643	0.603	0.608	0.546	0.500	0.466	0.445			
1992	0.807	0.810	0.778	0.761	0.688	0.701	0.680	0.643	0.625	0.679	0.577	0.535	0.473	0.479			
1993	0.819	0.816	0.789	0.731	0.705	0.693	0.654	0.656	0.675	0.648	0.581	0.508	0.488				
1994	0.803	0.835	0.739	0.737	0.706	0.692	0.644	0.711	0.623	0.637	0.564	0.511	0.505				
1995	0.793	0.803	0.732	0.737	0.675	0.728	0.695	0.712	0.628	0.669	0.588	0.538	0.506				
1996	0.793	0.772	0.700	0.710	0.668	0.743	0.666	0.658	0.614	0.652	0.563	0.503	0.495				
1997	0.728	0.779	0.677	0.711	0.725	0.705	0.665	0.638	0.636	0.639	0.546	0.485	0.487				
1998	0.758	0.746	0.669	0.757	0.685	0.688	0.604	0.662	0.582	0.649	0.535	0.492					
1999	0.724	0.761	0.752	0.760	0.649	0.689	0.640	0.656	0.621	0.647	0.549	0.530					
2000	0.758	0.814	0.729	0.690	0.637	0.674	0.618	0.660	0.603	0.617	0.542	0.496					
2001	0.814	0.776	0.734	0.671	0.703	0.663	0.706	0.632	0.650	0.629	0.529	0.521					
2002	0.806	0.768	0.712	0.701	0.689	0.703	0.693	0.657	0.647	0.609	0.547	0.535					
2003	0.747	0.754	0.665	0.727	0.670	0.695	0.590	0.637	0.578	0.593	0.534						
2004	0.732	0.761	0.698	0.717	0.638	0.692	0.607	0.619	0.562	0.582	0.526						
2005	0.731	0.819	0.678	0.756	0.632	0.692	0.602	0.629	0.542	0.636	0.558						
2006	0.761	0.769	0.666	0.740	0.666	0.727	0.602	0.650	0.586	0.685	0.605						
2007	0.719	0.764	0.696	0.726	0.634	0.673	0.613	0.642	0.610	0.624	0.582						
2008	0.720	0.748	0.631	0.704	0.601	0.649	0.583	0.663	0.543	0.688							
2009	0.745	0.727	0.657	0.635	0.572	0.573	0.606	0.578	0.583	0.586							
2010	0.719	0.713	0.680	0.612	0.590	0.637	0.611	0.653	0.584	0.613							
2011	0.663	0.678	0.606	0.620	0.590	0.601	0.630	0.617	0.579	0.601							
2012	0.709	0.670	0.667	0.669	0.604	0.708	0.586	0.629	0.592	0.604							
2013	0.653	0.658	0.606	0.669	0.650	0.687	0.577	0.659	0.563								
2014	0.697	0.727	0.638	0.755	0.650	0.687	0.636	0.633									
2015	0.668	0.698	0.709	0.698	0.620	0.691	0.573										
2016	0.746	0.683	0.683	0.601	0.658	0.559											
2017	0.661	0.638	0.620	0.625	0.601												
2018	0.678	0.674	0.638	0.628													
2019	0.768	0.701	0.698														
2020	0.744	0.731															
2021	0.691																
2022																	
2023																	

Notes: Response rates conditional on Age 19/20 are weighted by drug user strata and represent the percent of those who participated at Age 19/20 who also responded at the specified follow-up wave. Respondents identified as (a) ineligible/foreign exchange, (b) deceased, or (c) unable to respond (due to dementia, etc) are not included in calculations.

TABLE/FIGURE 4

Monitoring the Future Panel Study Wave-to-Wave Response Rates: Percentage of those who Completed the Previous Wave who Participated By Age, Weighted to Adjust for Oversampling of Respondents Reporting 12th Grade Drug Use

12th Grade Cohort	Age 21	Age 22	Age 23	Age 24	Age 25	Age 26	Age 27	Age 28	Age 29	Age 30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
1976	1.211	1.029	1.003	0.985	1.006	0.931	0.942	0.996	0.996	0.990	0.908	0.949	0.943	0.963	0.948	0.979	0.969
1977	0.969	0.982	0.985	0.981	0.932	0.948	0.996	0.982	0.961	0.950	0.949	0.936	0.992	0.942	0.946	0.987	0.974
1978	0.968	0.973	0.988	0.951	0.924	0.985	0.997	0.949	0.938	0.956	0.933	0.943	0.987	0.963	0.933	0.981	
1979	0.949	0.959	0.942	0.938	1.000	1.011	0.943	0.950	0.972	0.962	0.929	0.915	0.978	0.969	0.963	0.978	
1980	0.954	0.927	0.940	1.003	0.990	0.971	0.931	0.950	0.969	0.960	0.943	0.915	0.964	0.983	0.960	0.950	
1981	0.953	0.911	0.987	0.997	0.930	0.928	0.963	0.958	0.966	0.971	0.899	0.936	0.960	0.937	0.950	0.987	
1982	0.925	0.938	0.981	0.940	0.910	0.957	0.962	0.940	0.957	0.902	0.922	0.999	0.929	0.958	0.916	1.018	
1983	0.952	0.979	0.924	0.930	0.964	0.938	0.941	0.942	0.917	0.936	0.914	0.991	0.916	0.938	0.990		
1984	0.990	0.913	0.927	0.956	0.953	0.968	0.937	0.896	0.938	0.931	0.866	0.994	0.933	0.962	0.971		
1985	0.924	0.887	0.953	0.960	0.940	0.926	0.919	0.907	0.940	0.967	0.879	0.971	0.980	0.913	0.970		
1986	0.933	0.971	0.925	0.952	0.955	0.867	0.921	0.946	0.915	0.947	0.959	0.933	0.914	0.902	1.004		
1987	0.957	0.944	0.965	0.937	0.861	0.926	0.934	0.937	0.968	0.979	0.929	0.915	0.917	0.919	1.020		
1988	0.974	0.942	0.922	0.898	0.907	0.949	0.979	0.962	0.927	0.913	0.944	0.912	0.936	0.998			
1989	0.961	0.923	0.898	0.901	0.903	0.916	0.936	0.942	0.947	0.967	0.914	0.913	0.929	0.995			
1990	0.931	0.865	0.905	0.915	0.923	0.934	0.973	0.935	0.919	0.945	0.879	0.953	0.913	0.981			
1991	0.885	0.908	0.884	0.945	0.927	0.886	0.950	0.931	0.944	0.952	0.891	0.912	0.928	0.946			
1992	0.899	0.907	0.945	0.923	0.880	0.919	0.974	0.906	0.920	1.050	0.880	0.924	0.881	1.007			
1993	0.918	0.954	0.940	0.885	0.886	0.936	0.927	0.930	1.027	0.995	0.867	0.875	0.949				
1994	0.929	0.956	0.897	0.884	0.935	0.910	0.904	1.036	0.969	0.879	0.886	0.891	0.988				
1995	0.913	0.907	0.895	0.944	0.909	0.958	1.044	0.984	0.884	0.940	0.896	0.915	0.939				
1996	0.888	0.890	0.892	0.942	0.928	1.012	0.989	0.903	0.941	0.968	0.882	0.890	0.969				
1997	0.857	0.922	0.926	0.948	1.055	0.947	0.899	0.900	0.960	0.999	0.854	0.885	0.997				
1998	0.883	0.869	0.900	1.070	0.988	0.863	0.880	0.949	0.989	0.969	0.843	0.920					
1999	0.863	0.889	1.060	1.025	0.836	0.881	0.994	0.957	0.961	0.976	0.845	0.971					
2000	0.891	1.077	1.012	0.842	0.842	0.936	0.966	0.966	0.979	0.924	0.859	0.919					
2001	1.081	0.978	0.889	0.856	0.918	0.961	1.014	0.956	0.909	0.966	0.830	0.979					
2002	0.974	0.899	0.887	0.927	0.927	0.959	0.999	0.927	0.933	0.922	0.858	0.994					
2003	0.829	0.917	0.900	0.963	0.991	0.905	0.878	0.947	0.985	0.913	0.909						
2004	0.860	0.933	0.945	0.944	0.905	0.943	0.958	0.874	0.906	0.931	0.911						
2005	0.907	1.046	0.964	0.918	0.862	0.867	0.951	0.931	0.896	1.001	0.923						
2006	0.988	0.994	0.926	0.963	0.916	0.937	0.887	0.872	0.965	1.074	0.945						
2007	0.887	0.905	0.973	0.983	0.869	0.907	0.949	0.932	1.019	0.983	0.935						
2008	0.872	0.910	0.881	0.950	0.888	0.887	1.011	1.022	0.923	1.044							
2009	0.929	0.889	0.879	0.875	0.839	0.878	1.024	1.006	0.980	1.018							
2010	0.893	0.887	0.962	0.892	0.830	0.994	1.012	1.032	0.972	0.914							
2011	0.871	0.862	0.885	0.917	0.930	0.984	1.076	0.995	0.899	0.961							
2012	0.871	0.864	0.943	1.030	0.918	1.162	0.982	0.829	0.990	0.953							
2013	0.816	0.898	0.949	1.053	1.129	1.048	0.836	0.913	0.979								
2014	0.889	1.041	0.932	1.169	1.054	0.810	0.933	0.922									
2015	1.007	1.028	1.142	1.061	0.789	0.918	0.927										
2016	1.093	1.080	0.963	0.832	0.891	0.890											
2017	0.965	0.937	0.909	1.059	0.894												
2018	1.086	0.810	0.908	0.986													
2019	1.101	0.989	1.050														
2020	0.930	0.859															
2021	0.973																
2022																	
2023																	

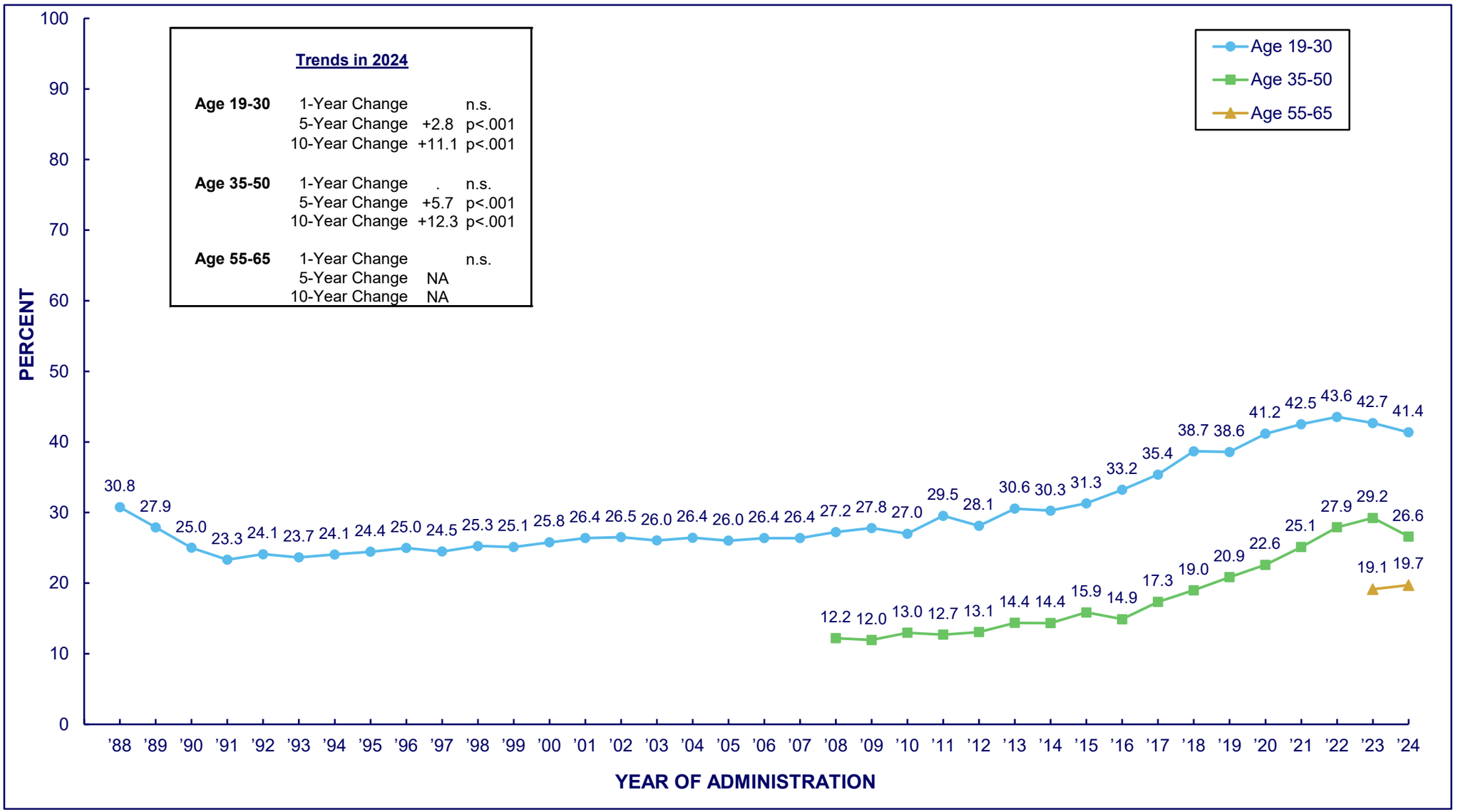
Notes: Wave-to-wave response rates are weighted by drug user strata and represent the ratio of those participating at any specified follow-up wave to those participating at the prior follow-up wave. Respondents identified as (a) ineligible/foreign exchange, (b) deceased, or (c) unable to respond (due to dementia, etc) are not included in calculations.

TABLE/FIGURE 5

CANNABIS [1]

Trends in 12-Month Prevalence among Respondents of Modal Ages 19 through 65, by Age Group

MONITORING THE FUTURE



[1]In 2024, the text for this question was changed on half of the survey forms. Reported trends are based on the 2024 estimates from the original version of the question text.

(Age-specific data provided in the following table.)

TABLE/FIGURE 6

CANNABIS [1]

Trends in 12-Month Prevalence among Respondents of Modal Ages 18 through 65, by Age Group

Year	Age 18	Ages 19–20		Ages 21–22		Ages 23–24		Ages 25–26		Ages 27–28		Ages 29–30	
		Original	Revised	Original	Revised	Original	Revised	Original	Revised	Original	Revised	Original	Revised
1976	44.5												
1977	47.6												
1978	50.2	52.5											
1979	50.8	50.8											
1980	48.8	50.5		50.4									
1981	46.1	49.4		50.7									
1982	44.3	46.2		46.3		46.7							
1983	42.3	42.9		45.5		43.6							
1984	40.0	42.4		43.4		38.7		38.6					
1985	40.6	42.0		40.7		41.5		39.7					
1986	38.8	39.6		40.0		38.1		34.2		33.1			
1987	36.3	36.6		37.9		34.3		34.8		32.3			
1988	33.1	34.6		33.5		32.9		30.7		27.1		25.5	
1989	29.6	30.5		31.6		28.2		26.1		26.4		25.0	
1990	27.0	27.8		27.6		27.0		24.5		23.4		20.4	
1991	23.9	25.3		25.9		23.7		22.8		21.4		21.0	
1992	21.9	27.5		25.8		25.7		23.7		22.1		20.3	
1993	26.0	26.7		25.4		25.7		22.7		22.4		19.4	
1994	30.7	29.6		29.8		24.4		21.6		19.5		20.0	
1995	34.7	30.9		27.1		25.1		23.4		20.7		19.6	
1996	35.8	33.3		30.1		27.3		21.3		20.7		17.7	
1997	38.5	34.5		29.6		24.0		23.5		17.7		18.3	
1998	37.5	36.7		30.7		25.6		21.7		20.9		16.9	
1999	37.8	37.6		30.6		26.7		21.9		18.5		16.5	
2000	36.5	35.0		33.1		26.1		23.1		19.3		19.0	
2001	37.0	34.1		35.9		28.1		24.3		19.8		17.4	
2002	36.2	34.1		31.9		31.6		24.0		19.3		19.8	
2003	34.9	34.4		33.3		29.4		23.9		20.7		16.9	
2004	34.3	34.3		31.9		28.0		27.7		22.0		16.4	
2005	33.6	34.0		32.2		26.5		25.9		19.8		18.7	
2006	31.5	33.8		31.3		28.4		22.9		21.9		20.6	
2007	31.7	33.0		31.2		28.0		24.9		23.8		17.6	
2008	32.4	30.7		33.6		27.9		25.1		22.9		23.2	
2009	32.8	32.2		32.3		30.2		25.9		23.8		22.3	
2010	34.8	29.0		33.4		31.0		24.8		21.1		22.2	
2011	36.4	34.5		34.7		30.8		28.5		26.8		21.3	
2012	36.4	33.3		32.4		29.7		26.4		27.0		19.4	
2013	36.4	34.6		36.9		33.7		28.6		26.4		23.0	
2014	35.1	37.6		34.3		30.6		29.0		27.1		23.7	
2015	34.9	39.2		37.1		33.2		31.8		25.9		22.1	
2016	35.6	38.9		43.2		34.2		28.4		29.1		27.0	
2017	37.1	38.4		41.4		36.0		34.8		33.9		28.8	
2018	35.9	41.2		42.5		46.1		37.2		32.3		34.0	
2019	35.7	38.1		43.5		40.5		37.8		34.0		38.3	
2020	35.2	38.4		44.7		41.8		45.2		41.7		35.1	
2021	30.5	39.3		43.4		45.1		43.9		42.1		40.5	
2022	30.7	37.8		42.7		44.3		45.3		46.8		41.5	
2023	29.0	42.4		39.3		45.6		45.4		43.2		39.2	
2024	25.8	31.5	38.2	42.8	43.9	40.5	47.7	42.4	43.0	48.6	47.9	39.3	46.7

(Table continued on next page.)

TABLE/FIGURE 6 (cont.)

CANNABIS [1]

Trends in 12-Month Prevalence

among Respondents of Modal Ages 18 through 65, by Age Group

Year	Age 35		Age 40		Age 45		Age 50		Age 55		Age 60		Age 65	
	Original	Revised	Original	Revised	Original	Revised	Original	Revised	Original	Revised	Original	Revised	Original	Revised
1976														
1977														
1978														
1979														
1980														
1981														
1982														
1983														
1984														
1985														
1986														
1987														
1988														
1989														
1990														
1991														
1992														
1993														
1994	15.4													
1995	17.3													
1996	16.1													
1997	17.5													
1998	14.7		16.3											
1999	15.0		14.2											
2000	15.3		13.7											
2001	14.7		12.2											
2002	14.5		14.1											
2003	13.7		13.3		15.0									
2004	12.9		15.0		12.3									
2005	13.5		15.8		11.9									
2006	11.0		11.6		12.0									
2007	11.7		12.5		12.8									
2008	14.3		11.6		11.0		12.1							
2009	12.3		12.4		12.7		10.2							
2010	14.6		13.3		13.2		11.1							
2011	17.9		9.9		12.2		11.0							
2012	14.2		13.0		12.7		12.4							
2013	18.2		15.4		12.5		11.9		12.8					
2014	19.7		13.2		11.1		13.7		11.7					
2015	20.8		14.2		14.8		13.9		12.8					
2016	19.3		16.9		11.7		12.4		12.9					
2017	23.8		17.4		15.1		14.0		15.3					
2018	23.6		21.6		18.2		13.1		16.6		16.8			
2019	26.7		23.9		16.4		17.5		17.6		13.7			
2020	27.0		26.6		20.3		17.2		16.9		17.9			
2021	32.1		28.2		25.2		16.2		15.6		15.6			
2022	37.1		28.9		25.0		20.6		18.1		19.3			
2023	38.2		30.6		27.4		21.4		20.1		18.6		18.7	
2024	32.6	36.4	31.7	29.2	26.0	32.7	15.7	21.8	23.8	17.6	19.0	19.9	15.9	16.6

[1]In 2024, the text for this question was changed on half of the survey forms. Estimates for both the original version and the new version of the question are presented here. For details on the survey items, please refer to Table/Figure 91.

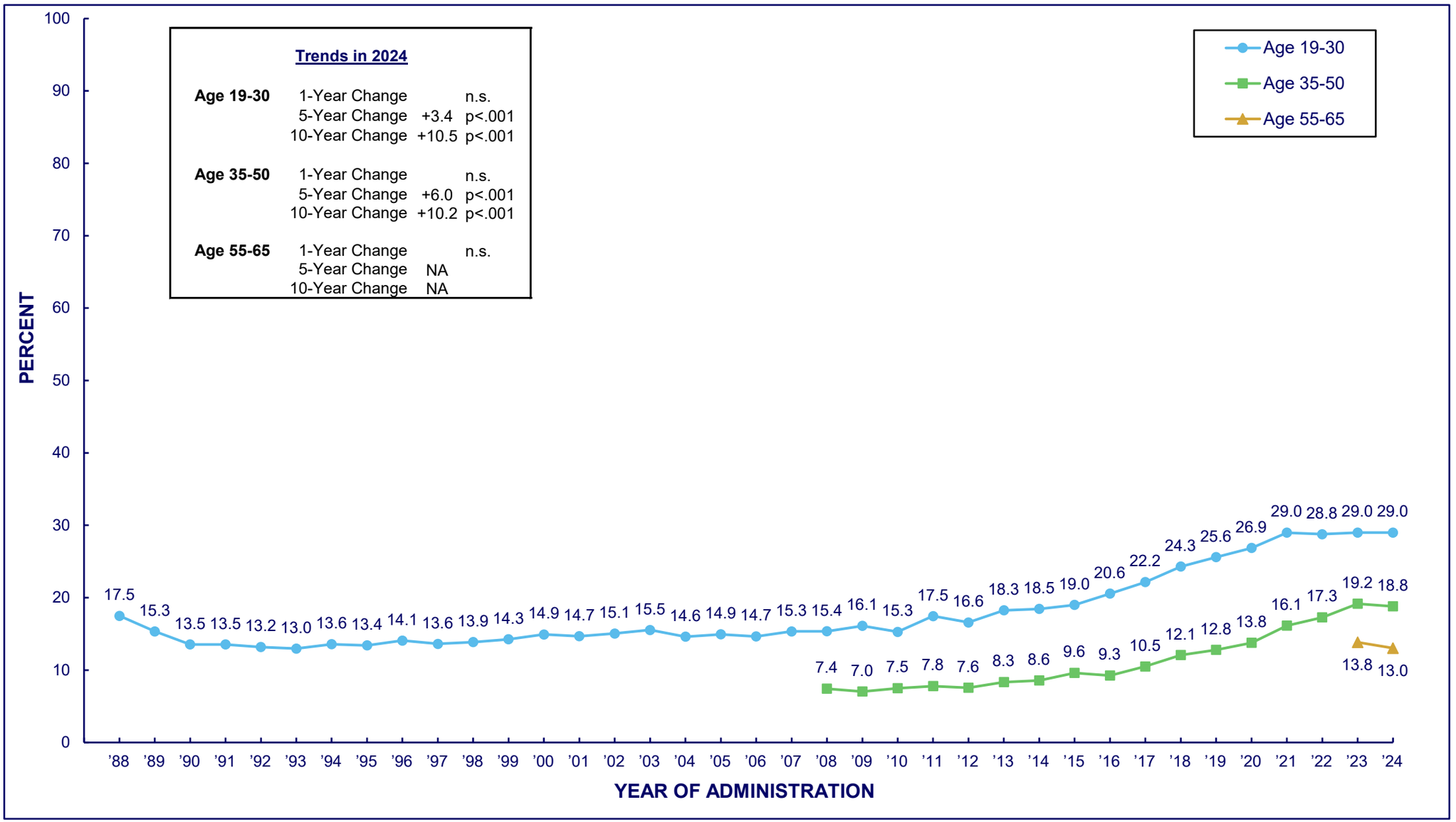
MONITORING THE FUTURE

TABLE/FIGURE 7

CANNABIS [1]

Trends in 30-Day Prevalence among Respondents of Modal Ages 19 through 65, by Age Group

MONITORING THE FUTURE



[1]In 2024, the text for this question was changed on half of the survey forms. Reported trends are based on the 2024 estimates from the original version of the question text.

(Age-specific data provided in the following table.)

TABLE/FIGURE 8

CANNABIS [1]

Trends in 30-Day Prevalence among Respondents of Modal Ages 18 through 65, by Age Group

Year	Age 18	Ages 19–20		Ages 21–22		Ages 23–24		Ages 25–26		Ages 27–28		Ages 29–30	
		Original	Revised	Original	Revised	Original	Revised	Original	Revised	Original	Revised	Original	Revised
1976	32.2												
1977	35.4												
1978	37.1	37.9											
1979	36.5	37.1											
1980	33.7	34.6		36.3									
1981	31.6	33.8		35.0									
1982	28.5	29.5		29.5		31.0							
1983	27.0	25.9		28.8		29.7							
1984	25.2	25.5		26.7		25.8		25.4					
1985	25.7	23.9		25.5		26.5		25.1					
1986	23.4	23.3		23.6		23.6		20.2		21.3			
1987	21.0	20.8		22.4		19.9		21.0		20.7			
1988	18.0	19.1		18.8		18.0		17.4		16.5		15.1	
1989	16.7	15.1		16.4		16.0		14.9		14.3		15.4	
1990	14.0	14.9		14.0		13.7		13.5		13.3		11.9	
1991	13.8	13.1		14.2		13.4		13.7		14.0		12.8	
1992	11.9	14.7		14.0		12.0		13.1		13.0		12.5	
1993	15.5	13.9		13.5		13.1		13.2		12.7		11.7	
1994	19.0	16.0		17.0		13.1		12.3		11.3		12.1	
1995	21.2	18.6		14.9		12.4		11.9		10.9		11.8	
1996	21.9	19.5		16.1		15.3		12.8		11.0		10.1	
1997	23.7	20.0		18.5		13.2		10.5		10.3		9.7	
1998	22.8	19.0		17.1		14.3		13.1		11.0		9.2	
1999	23.1	22.2		17.3		15.2		12.0		9.2		10.2	
2000	21.6	21.0		20.1		14.2		12.8		11.2		10.8	
2001	22.4	20.4		21.8		14.4		14.3		9.8		8.4	
2002	21.5	20.5		18.4		17.3		15.2		9.7		10.3	
2003	21.2	22.2		18.6		18.7		14.3		12.1		8.9	
2004	19.9	19.5		18.0		15.8		15.4		11.8		8.4	
2005	19.8	18.4		17.6		14.0		16.0		11.8		12.1	
2006	18.3	17.9		17.1		16.5		13.2		13.4		10.3	
2007	18.8	17.4		19.3		16.6		15.0		13.6		10.3	
2008	19.4	16.8		17.8		16.4		13.3		14.2		13.4	
2009	20.6	18.7		19.0		17.6		16.0		13.5		11.9	
2010	21.4	17.7		17.4		17.5		13.0		13.7		12.2	
2011	22.6	20.5		21.3		17.6		17.2		16.3		11.4	
2012	22.9	21.1		19.1		17.8		14.8		14.8		11.7	
2013	22.7	22.4		23.7		20.0		15.4		15.0		12.9	
2014	21.2	25.1		19.8		18.5		18.1		16.5		13.3	
2015	21.3	23.8		23.6		19.9		19.6		14.3		13.6	
2016	22.5	22.0		29.0		20.8		18.3		18.2		15.9	
2017	22.9	22.1		26.5		23.8		22.8		20.7		17.5	
2018	22.2	24.8		25.5		28.1		23.4		22.0		22.5	
2019	22.3	24.7		29.6		25.5		24.6		25.1		24.5	
2020	21.1	22.1		28.7		27.6		31.3		27.0		23.7	
2021	19.5	28.8		29.5		28.4		31.9		28.5		27.0	
2022	20.2	23.9		26.0		32.4		31.5		28.7		27.9	
2023	18.4	29.4		27.9		32.2		30.1		28.2		26.0	
2024	16.2	19.1	24.7	32.0	28.7	29.7	33.4	32.0	29.4	33.1	30.8	26.0	31.7

(Table continued on next page.)

TABLE/FIGURE 8 (cont.)

CANNABIS [1]

Trends in 30-Day Prevalence

among Respondents of Modal Ages 18 through 65, by Age Group

Year	Age 35		Age 40		Age 45		Age 50		Age 55		Age 60		Age 65	
	Original	Revised	Original	Revised	Original	Revised	Original	Revised	Original	Revised	Original	Revised	Original	Revised
1976														
1977														
1978														
1979														
1980														
1981														
1982														
1983														
1984														
1985														
1986														
1987														
1988														
1989														
1990														
1991														
1992														
1993														
1994	9.1													
1995	11.2													
1996	8.6													
1997	10.6													
1998	8.9		9.7											
1999	9.0		8.6											
2000	8.9		8.6											
2001	8.9		8.3											
2002	9.6		7.8											
2003	7.9		8.2		9.1									
2004	8.0		9.1		6.6									
2005	7.5		9.2		7.2									
2006	6.0		7.2		6.6									
2007	6.0		7.6		7.2									
2008	8.2		7.5		6.5		7.8							
2009	6.3		7.2		8.3		6.1							
2010	8.5		7.6		7.4		6.6							
2011	10.9		6.2		8.2		6.0							
2012	9.1		6.9		6.7		7.5							
2013	10.8		9.6		5.8		7.4		8.2					
2014	11.1		7.1		6.9		9.2		8.4					
2015	13.1		8.8		8.4		8.4		8.8					
2016	11.1		11.0		7.3		8.0		6.5					
2017	14.1		10.3		8.7		9.3		10.3					
2018	15.0		13.6		11.0		9.0		10.0		11.3			
2019	16.4		14.9		10.2		10.3		12.5		9.2			
2020	16.7		15.9		11.9		11.0		10.7		11.6			
2021	19.0		18.9		17.0		10.5		9.7		11.0			
2022	23.4		18.4		15.5		12.0		12.2		12.7			
2023	26.1		18.5		18.7		13.6		14.6		13.0		14.1	
2024	24.6	25.2	21.6	17.1	19.3	20.3	9.3	12.8	15.1	12.3	13.5	14.3	10.2	11.0

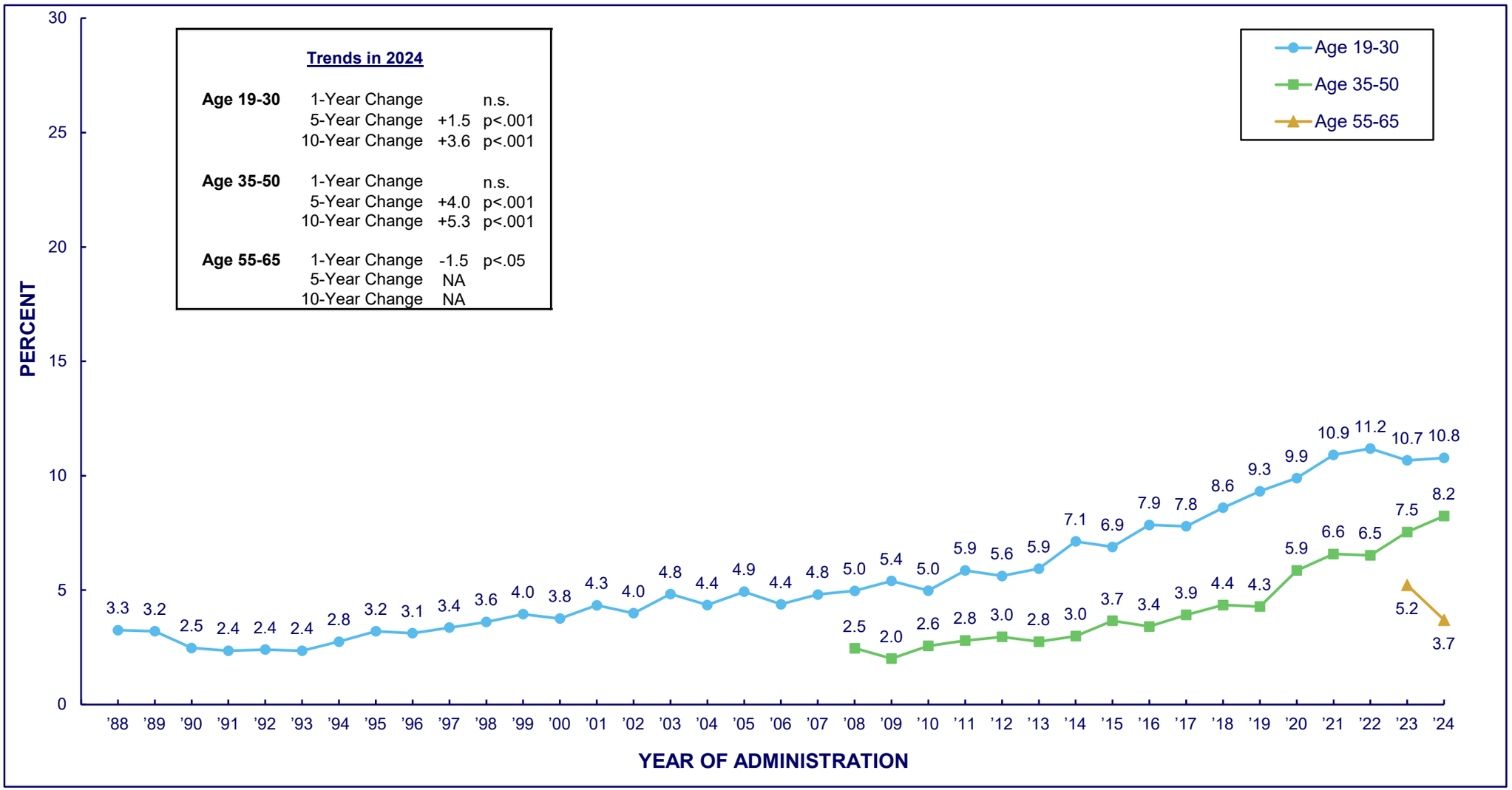
[1]In 2024, the text for this question was changed on half of the survey forms. Estimates for both the original version and the new version of the question are presented here. For details on the survey items, please refer to Table/Figure 91.

MONITORING THE FUTURE

TABLE/FIGURE 9

CANNABIS [1]

Trends in 30-Day Prevalence of Daily Use among Respondents of Modal Ages 19 through 65, by Age Group



[1]In 2024, the text for this question was changed on half of the survey forms. Reported trends are based on the 2024 estimates from the original version of the question text.

(Age-specific data provided in the following table.)

TABLE/FIGURE 10

CANNABIS [1]

Trends in 30-Day Prevalence of Daily Use among Respondents of Modal Ages 18 through 65, by Age Group

Year	Age 18	Ages 19–20		Ages 21–22		Ages 23–24		Ages 25–26		Ages 27–28		Ages 29–30	
		Original	Revised	Original	Revised	Original	Revised	Original	Revised	Original	Revised	Original	Revised
1976	8.2												
1977	9.1												
1978	10.7	10.5											
1979	10.3	10.8											
1980	9.1	8.3		11.4									
1981	7.0	7.7		9.4									
1982	6.3	6.3		6.4		8.3							
1983	5.5	5.2		5.8		6.7							
1984	5.0	4.8		5.3		5.8		6.3					
1985	4.9	4.6		4.5		5.4		6.0					
1986	4.0	3.5		4.2		4.7		3.6		4.6			
1987	3.3	3.3		3.9		4.4		4.6		4.8			
1988	2.7	3.1		3.6		3.0		3.6		3.1		3.0	
1989	2.9	2.7		3.1		2.9		3.2		4.0		3.3	
1990	2.2	2.5		2.4		2.6		2.6		2.4		2.2	
1991	2.0	2.1		2.2		2.0		2.7		2.6		2.5	
1992	1.9	1.5		2.4		2.2		2.8		2.5		2.9	
1993	2.4	2.0		2.1		2.5		2.4		2.3		2.7	
1994	3.5	3.4		3.0		3.0		2.4		2.4		2.3	
1995	4.6	5.0		3.3		3.4		2.4		2.8		2.4	
1996	4.9	4.7		3.1		2.6		3.5		2.3		2.5	
1997	5.8	5.1		5.3		2.7		2.3		2.6		2.3	
1998	5.6	5.1		5.2		3.4		2.9		2.7		2.6	
1999	6.0	6.1		4.5		5.1		3.0		3.0		2.2	
2000	6.0	5.7		5.0		3.7		3.5		2.5		2.4	
2001	5.8	6.2		6.6		4.5		4.5		2.0		2.6	
2002	6.0	5.7		5.3		5.6		2.5		2.3		2.9	
2003	6.0	6.4		6.7		6.7		3.4		4.2		2.1	
2004	5.6	5.7		4.8		5.6		5.6		2.9		1.9	
2005	5.0	6.3		4.9		4.8		6.2		3.2		4.2	
2006	5.0	5.2		4.5		5.2		4.6		4.6		2.3	
2007	5.1	4.4		5.5		5.0		4.7		5.7		3.5	
2008	5.4	4.2		5.8		4.6		5.6		4.2		5.4	
2009	5.2	5.4		6.0		6.1		5.9		3.8		5.2	
2010	6.1	5.6		5.4		6.1		3.5		5.2		4.1	
2011	6.6	5.9		6.3		6.8		7.4		4.2		4.2	
2012	6.5	6.2		5.8		6.5		5.5		4.9		4.8	
2013	6.5	6.4		7.9		6.9		5.7		5.5		3.0	
2014	5.8	8.9		7.2		6.9		6.9		7.2		5.8	
2015	6.0	9.2		6.4		7.8		7.3		5.8		5.2	
2016	6.0	6.4		10.1		9.3		6.8		6.7		7.7	
2017	5.9	5.9		9.8		9.2		8.2		6.3		7.4	
2018	5.8	6.7		8.2		9.5		10.2		8.5		8.3	
2019	6.4	6.9		10.4		10.1		9.7		10.6		8.3	
2020	6.9	5.6		12.3		10.2		11.1		11.2		8.3	
2021	5.8	11.1		9.5		10.5		12.7		9.8		11.9	
2022	6.3	7.0		11.3		13.2		10.9		11.4		11.3	
2023	6.5	10.4		9.8		11.8		10.0		10.2		11.3	
2024	5.1	5.7	6.7	9.4	7.9	8.6	12.5	15.5	9.2	14.4	10.8	8.4	13.0

(Table continued on next page.)

TABLE/FIGURE 10 (cont.)

CANNABIS [1]

Trends in 30-Day Prevalence of Daily Use
among Respondents of Modal Ages 18 through 65, by Age Group

Year	Age 35		Age 40		Age 45		Age 50		Age 55		Age 60		Age 65	
	Original	Revised	Original	Revised	Original	Revised	Original	Revised	Original	Revised	Original	Revised	Original	Revised
1976														
1977														
1978														
1979														
1980														
1981														
1982														
1983														
1984														
1985														
1986														
1987														
1988														
1989														
1990														
1991														
1992														
1993														
1994	2.3													
1995	2.4													
1996	2.1													
1997	3.5													
1998	2.4		3.2											
1999	1.9		2.1											
2000	2.7		2.7											
2001	2.5		1.7											
2002	3.1		2.9											
2003	2.4		2.4		3.1									
2004	2.1		1.9		2.1									
2005	2.2		1.9		2.1									
2006	2.6		3.0		1.3									
2007	2.5		2.6		2.9									
2008	2.3		2.6		2.7		2.2							
2009	1.9		1.9		2.3		2.0							
2010	3.4		2.7		2.1		2.0							
2011	3.0		2.7		3.1		2.4							
2012	3.9		3.1		2.3		2.7							
2013	3.7		2.8		2.7		2.0		2.9					
2014	4.8		2.0		2.5		2.8		2.3					
2015	4.9		4.0		2.8		3.1		2.8					
2016	3.9		4.3		3.0		2.5		3.0					
2017	5.2		4.7		3.3		2.7		3.2					
2018	4.6		5.4		3.6		3.9		3.6		4.7			
2019	5.2		6.0		2.7		3.5		3.7		2.7			
2020	8.0		6.4		4.8		4.4		3.6		4.7			
2021	9.5		7.4		6.3		3.5		4.4		4.3			
2022	8.4		7.6		4.7		5.4		3.9		4.9			
2023	11.2		6.6		7.8		4.6		5.9		3.8		6.2	
2024	11.9	12.0	8.8	6.3	8.9	4.3	3.2	3.6	4.5	5.6	3.6	5.6	2.9	4.0

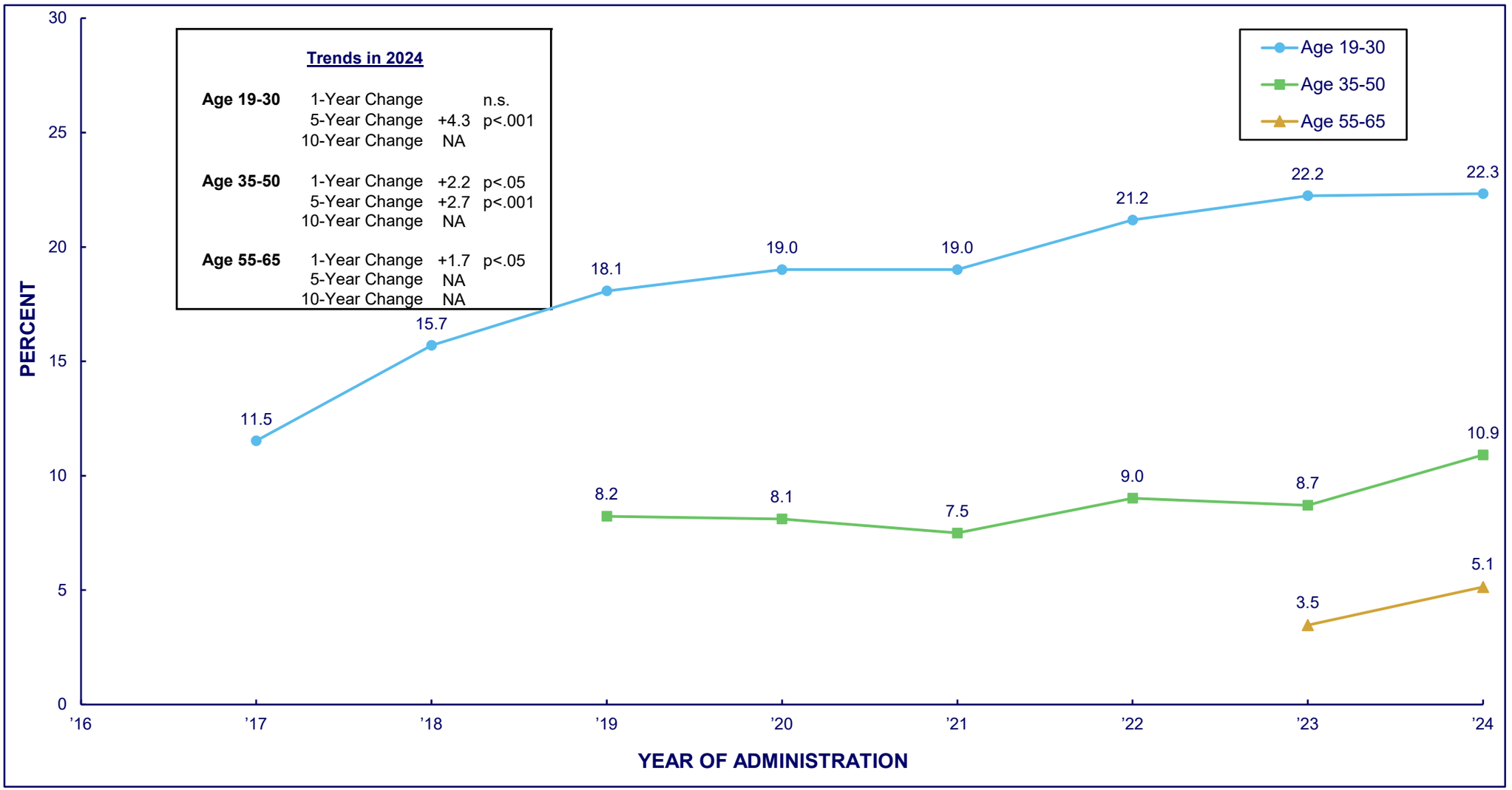
[1]In 2024, the text for this question was changed on half of the survey forms. Estimates for both the original version and the new version of the question are presented here. For details on the survey items, please refer to Table/Figure 91.

MONITORING THE FUTURE

TABLE/FIGURE 11

VAPING CANNABIS

Trends in 12-Month Prevalence among Respondents of Modal Ages 19 through 65, by Age Group



(Age-specific data provided in the following table.)

TABLE/FIGURE 12

VAPING CANNABIS

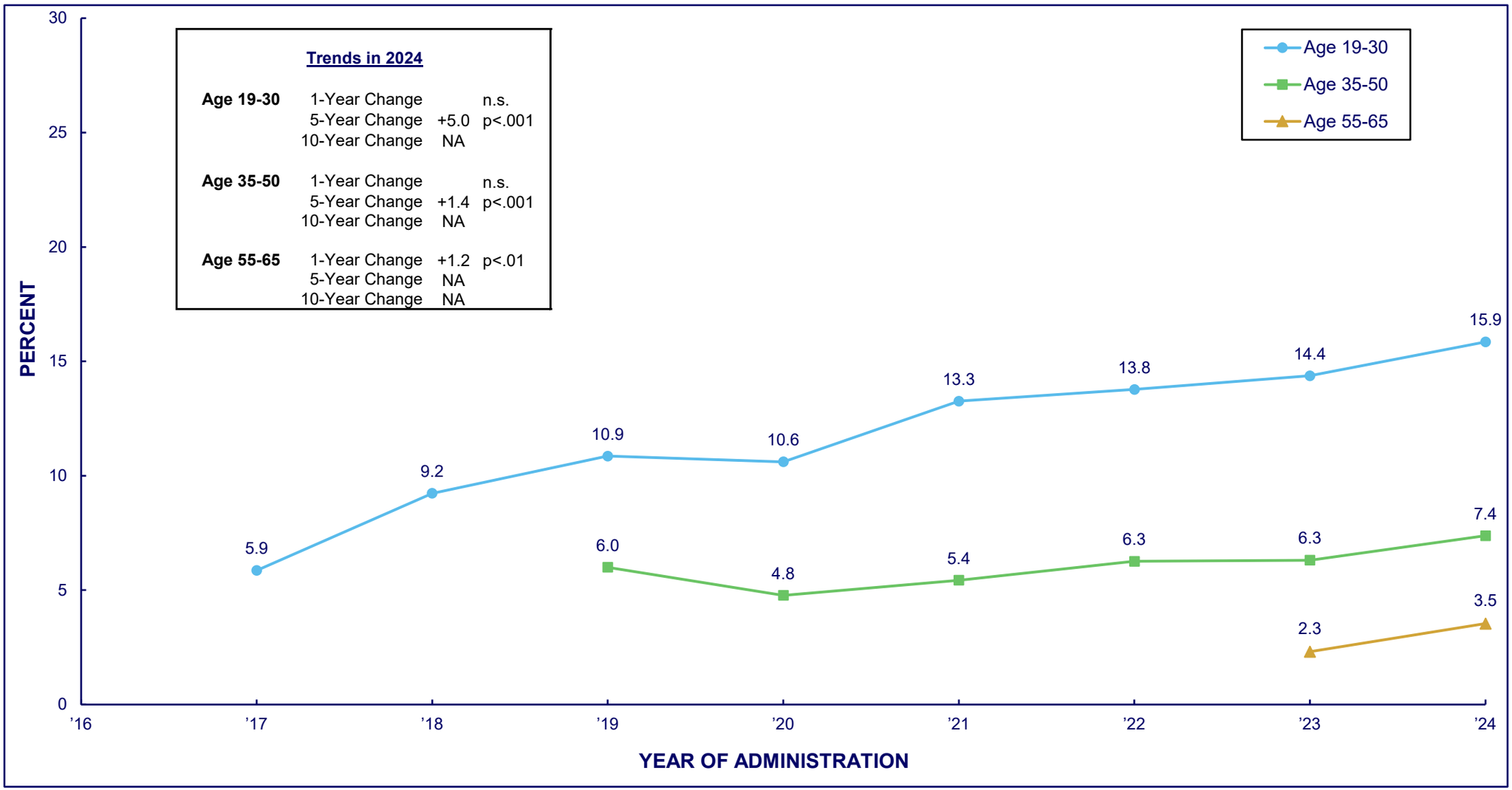
Trends in 12-Month Prevalence among Respondents of Modal Ages 18 through 65, by Age Group

Year	Age 18	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
2017	9.5	11.0	11.3	17.2	11.2	11.7	6.6							
2018	13.1	13.8	15.7	18.5	20.5	11.8	14.3							
2019	20.8	18.1	20.6	20.0	17.6	15.8	17.1	16.0	8.6	4.2	5.8	5.4	3.7	
2020	22.1	22.4	23.3	18.2	17.5	19.8	13.8	11.1	10.5	5.4	6.0	3.0	3.5	
2021	18.3	19.8	20.1	21.0	20.4	16.4	17.3	10.6	7.5	6.9	5.3	3.2	2.4	
2022	20.6	23.4	23.3	24.5	18.1	21.4	18.0	13.6	9.0	8.3	5.2	3.9	3.5	
2023	19.6	26.8	24.4	22.6	21.9	22.0	18.4	13.6	9.7	7.5	4.3	4.6	2.8	3.1
2024	17.6	19.2	21.2	26.2	22.2	22.0	21.2	16.2	10.9	10.4	6.7	3.9	6.3	5.1

TABLE/FIGURE 13

VAPING CANNABIS

Trends in 30-Day Prevalence among Respondents of Modal Ages 19 through 65, by Age Group



(Age-specific data provided in the following table.)

TABLE/FIGURE 14

VAPING CANNABIS

Trends in 30-Day Prevalence

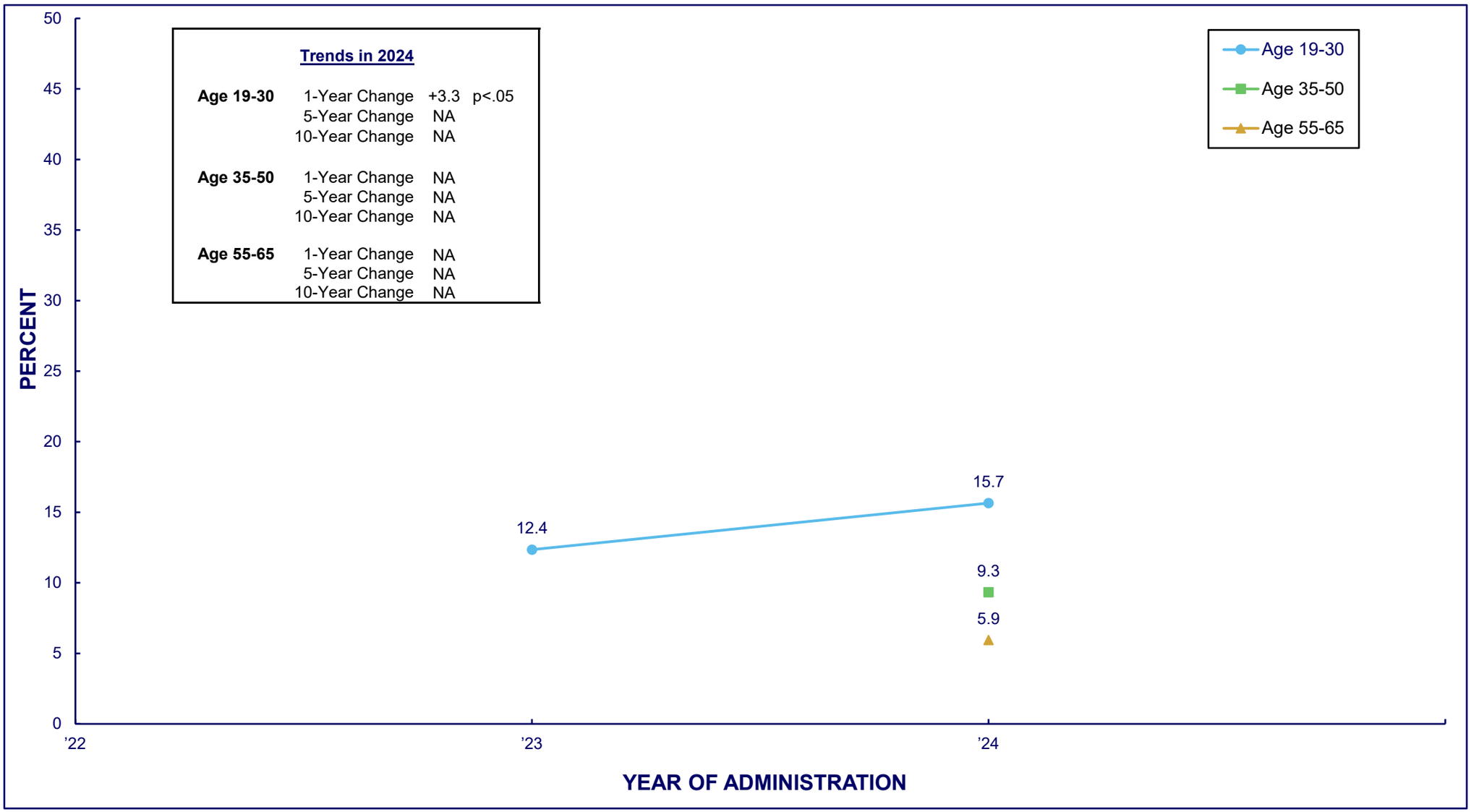
among Respondents of Modal Ages 18 through 65, by Age Group

Year	Age 18	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
2017	4.9	5.1	6.2	7.0	5.2	7.6	4.0							
2018	7.5	7.2	10.6	12.2	12.5	7.2	6.2							
2019	14.0	10.5	11.4	10.4	10.1	10.9	11.9	12.1	6.5	2.8	3.9	3.9	2.7	
2020	12.2	13.3	11.5	11.2	10.7	10.1	7.8	7.3	5.7	2.8	3.6	1.7	1.8	
2021	12.4	13.8	13.3	13.1	15.7	11.4	12.7	8.2	4.9	5.4	3.5	2.0	1.2	
2022	14.8	13.3	16.0	15.9	10.9	13.6	12.9	9.0	6.2	6.2	3.6	2.9	2.8	
2023	13.7	16.8	17.0	15.9	12.9	13.4	12.1	10.5	6.4	5.3	3.2	2.7	2.1	2.1
2024	12.1	12.4	15.5	19.6	15.5	16.5	14.0	10.2	8.4	7.3	4.1	3.4	4.0	3.2

TABLE/FIGURE 15

DELTA-8

Trends in 12-Month Prevalence among Respondents of Modal Ages 19 through 65, by Age Group



(Age-specific data provided in the following table.)

TABLE/FIGURE 16

DELTA-8

Trends in 12-Month Prevalence

among Respondents of Modal Ages 18 through 30, by Age Group

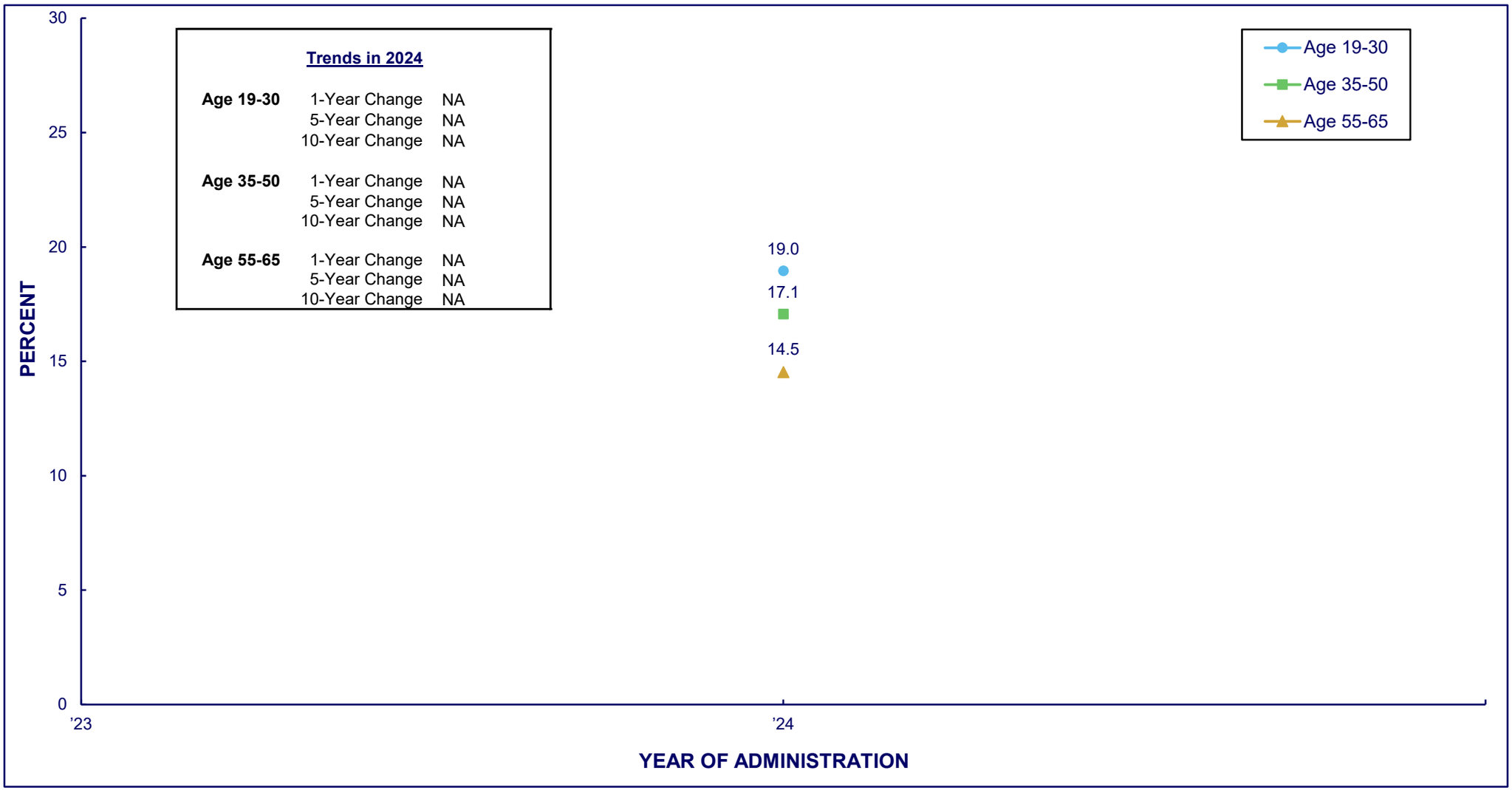
Year	Age 18	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
2023	11.4	11.2	15.1	13.8	13.2	11.7	10.2							
2024	12.3	14.8	20.2	16.6	18.0	14.2	12.4	10.2	9.6	10.1	7.4	6.6	6.2	4.8

MONITORING THE FUTURE

TABLE/FIGURE 17

CBD

Trends in 12-Month Prevalence among Respondents of Modal Ages 19 through 65, by Age Group



(Age-specific data provided in the following table.)

TABLE/FIGURE 18

CBD

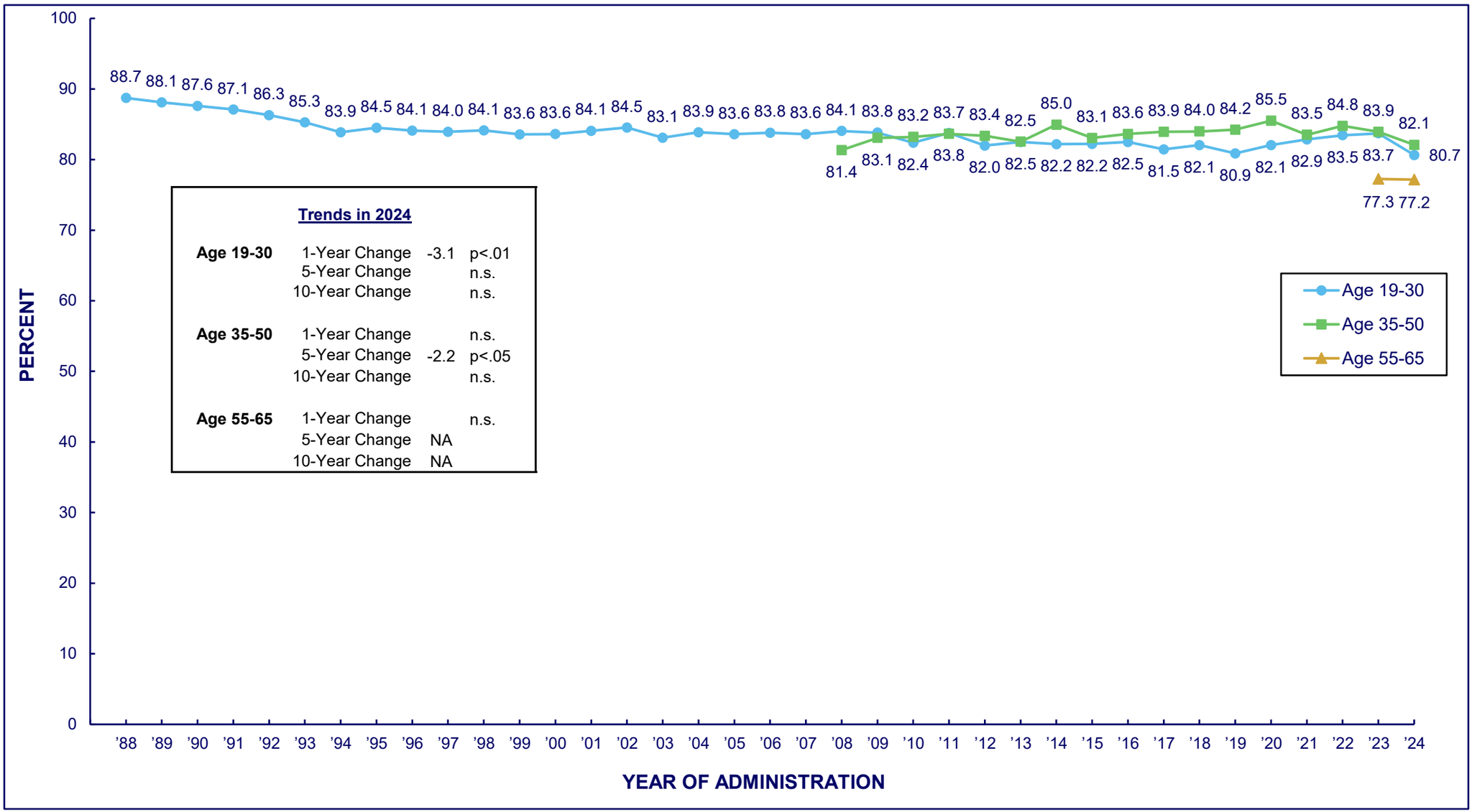
Trends in 12-Month Prevalence among Respondents of Modal Ages 18 through 65, by Age Group

Year	Age 18	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
2024	13.3	14.0	21.0	18.4	22.8	16.6	20.2	22.0	17.3	16.8	12.2	14.8	13.5	15.4

TABLE/FIGURE 19

ALCOHOL

Trends in 12-Month Prevalence among Respondents of Modal Ages 19 through 65, by Age Group



(Age-specific data provided in the following table.)

TABLE/FIGURE 20

ALCOHOL

Trends in 12-Month Prevalence

among Respondents of Modal Ages 18 through 65, by Age Group

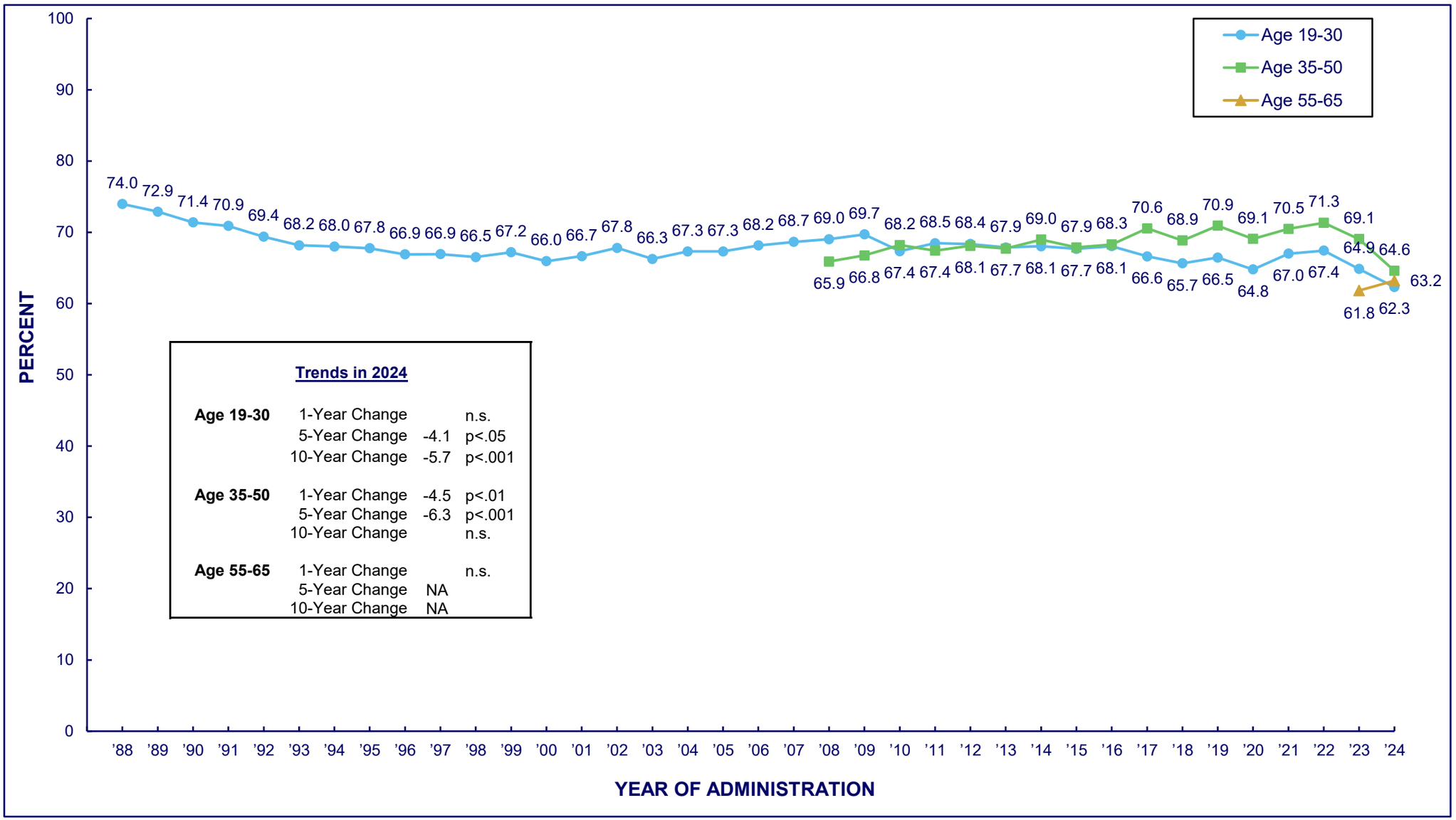
Year	Age 18	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
1976	85.7													
1977	87.0													
1978	87.7	90.4												
1979	88.1	90.5												
1980	87.9	89.2	90.7											
1981	87.0	91.1	91.8											
1982	86.8	89.5	91.5	90.8										
1983	87.3	89.1	92.4	91.4										
1984	86.0	89.5	90.1	90.4	89.2									
1985	85.6	89.3	90.4	92.0	90.3									
1986	84.5	88.2	90.5	89.0	88.6	88.8								
1987	85.7	88.5	91.4	90.5	90.4	87.7								
1988	85.3	87.3	89.2	89.6	90.3	87.5	88.4							
1989	82.7	87.3	89.7	89.3	88.4	88.0	86.1							
1990	80.6	86.0	89.8	87.8	87.9	87.0	87.1							
1991	77.7	85.2	88.8	88.4	88.4	86.3	85.5							
1992	76.8	82.9	88.0	89.1	86.4	85.7	85.3							
1993	76.0	80.4	85.5	87.0	88.4	86.3	83.9							
1994	73.0	79.1	85.2	86.4	86.0	83.5	83.0	83.4						
1995	73.7	78.5	85.1	87.2	85.9	86.3	84.0	82.3						
1996	72.5	80.0	83.8	86.2	85.5	85.5	83.6	84.3						
1997	74.8	79.4	84.1	85.0	86.0	85.2	83.8	83.4						
1998	74.3	80.2	85.5	84.9	84.6	85.8	83.6	82.7	77.4					
1999	73.8	80.4	84.7	84.5	84.4	83.8	83.7	82.1	80.5					
2000	73.2	78.2	85.5	86.4	84.0	83.0	84.2	81.5	79.7					
2001	73.3	78.2	86.9	85.7	85.7	83.4	83.8	82.5	81.5					
2002	71.5	78.2	84.8	87.5	87.5	84.0	84.4	85.2	80.9					
2003	70.1	75.8	84.1	87.3	85.3	82.3	82.7	82.8	81.3	79.1				
2004	70.6	76.9	85.7	85.8	86.4	85.3	83.0	85.4	80.8	79.7				
2005	68.6	77.3	84.7	86.5	84.9	84.7	83.9	85.6	82.2	79.5				
2006	66.5	77.8	83.6	87.6	84.7	85.8	83.8	83.2	79.8	82.8				
2007	66.4	73.4	87.2	87.9	84.8	84.3	84.3	84.6	85.2	80.7				
2008	65.5	73.8	87.5	85.9	84.6	84.5	87.7	84.3	82.1	80.1	79.1			
2009	66.2	71.8	84.7	87.6	88.6	86.9	83.5	83.5	85.7	82.7	80.3			
2010	65.2	67.6	82.3	88.6	85.3	84.5	85.7	85.0	86.2	82.2	79.9			
2011	63.5	72.1	81.0	87.7	89.9	87.1	84.7	89.0	84.1	80.1	81.5			
2012	63.5	70.0	80.4	84.2	88.6	86.0	82.5	85.7	83.4	84.2	80.2			
2013	62.0	67.3	82.8	83.8	87.2	87.4	86.1	86.2	84.3	81.3	79.2	76.9		
2014	60.2	65.9	82.4	83.7	84.5	89.4	85.9	88.2	83.6	83.9	84.3	78.0		
2015	58.2	69.3	83.2	84.6	83.6	84.8	86.2	85.7	81.0	84.3	81.4	78.2		
2016	55.6	66.6	86.3	84.9	83.0	82.7	89.5	85.7	85.6	82.0	81.6	79.6		
2017	55.7	65.2	83.5	86.9	82.4	84.6	84.5	86.9	82.2	84.5	82.6	81.9		
2018	53.3	63.3	83.2	88.6	86.4	84.5	84.5	87.3	84.2	85.2	79.6	80.1	77.2	
2019	52.1	63.5	81.9	85.3	85.5	85.1	83.6	88.0	85.8	80.0	83.9	81.6	78.1	
2020	55.3	63.1	81.9	84.3	88.0	85.8	84.9	88.4	84.2	86.0	83.5	80.2	78.1	
2021	46.5	66.6	80.6	84.8	86.6	87.9	84.1	86.9	84.9	83.6	79.2	79.2	79.0	
2022	51.9	62.4	82.5	84.4	86.5	85.8	87.4	85.4	87.1	84.3	82.6	83.9	80.3	
2023	45.7	65.4	82.4	86.1	85.2	88.7	87.6	85.5	85.4	83.0	82.0	79.5	77.8	74.3
2024	41.7	57.5	81.5	86.2	83.8	81.4	84.3	81.8	82.9	82.7	81.0	80.5	76.4	74.4

MONITORING THE FUTURE

TABLE/FIGURE 21

ALCOHOL

Trends in 30-Day Prevalence among Respondents of Modal Ages 19 through 65, by Age Group



Trends in 2024

Age 19-30	1-Year Change		n.s.
	5-Year Change	-4.1	p<.05
	10-Year Change	-5.7	p<.001
Age 35-50	1-Year Change	-4.5	p<.01
	5-Year Change	-6.3	p<.001
	10-Year Change		n.s.
Age 55-65	1-Year Change		n.s.
	5-Year Change	NA	
	10-Year Change	NA	

(Age-specific data provided in the following table.)

TABLE/FIGURE 22

ALCOHOL

Trends in 30-Day Prevalence

among Respondents of Modal Ages 18 through 65, by Age Group

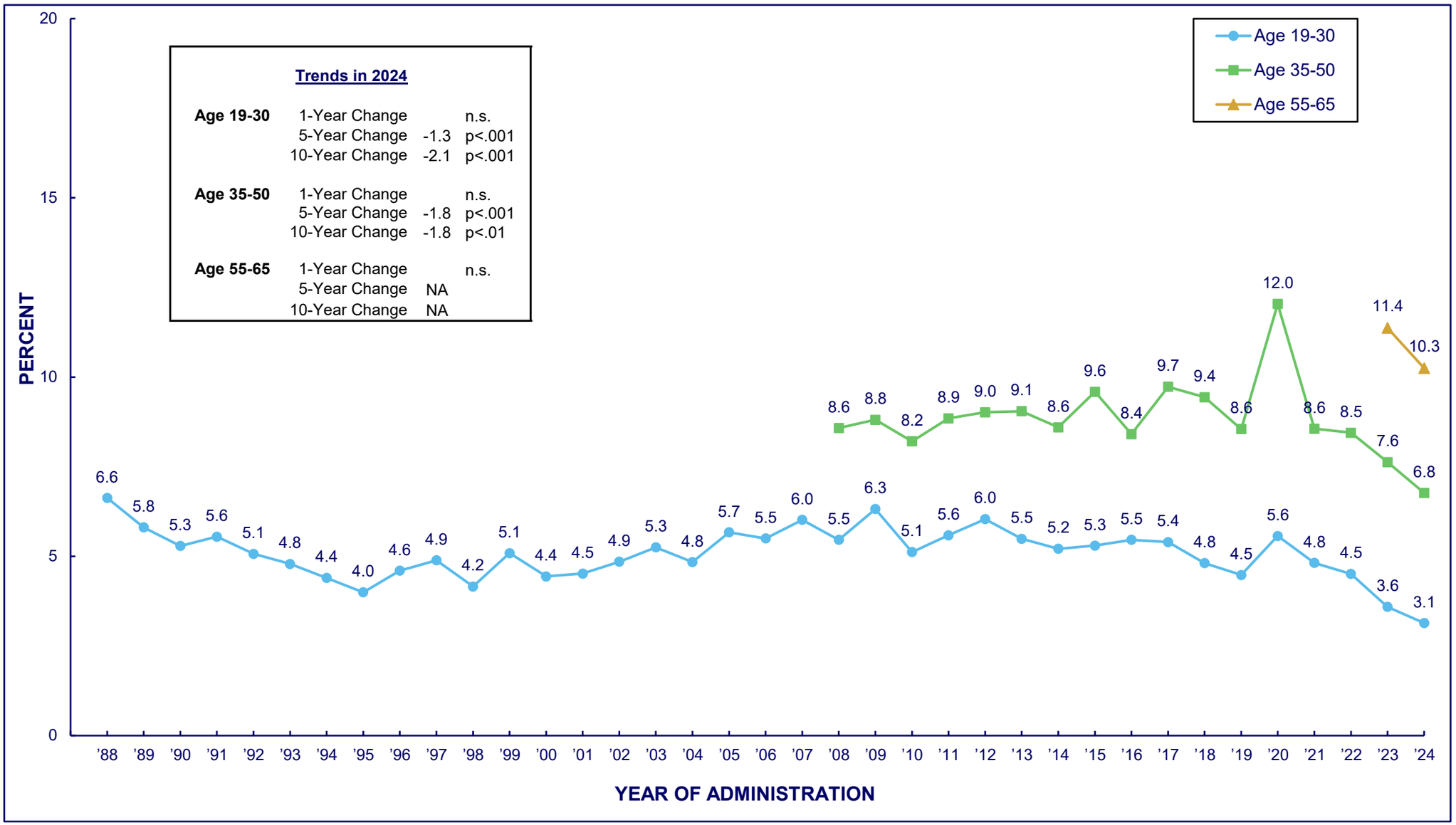
Year	Age 18	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
1976	68.3													
1977	71.2													
1978	72.1	76.8												
1979	71.8	76.5												
1980	72.0	76.5	79.3											
1981	70.7	77.6	80.8											
1982	69.7	76.1	79.7	79.1										
1983	69.4	74.6	79.7	78.6										
1984	67.2	74.3	79.2	77.7	76.2									
1985	65.9	74.4	76.6	80.3	77.1									
1986	65.3	72.8	77.4	76.7	76.1	74.4								
1987	66.4	72.8	78.3	75.5	77.9	75.2								
1988	63.9	69.1	75.6	75.4	75.4	74.7	73.2							
1989	60.0	69.1	74.6	73.3	73.6	74.2	72.5							
1990	57.1	66.7	74.3	73.3	72.1	71.5	70.6							
1991	54.0	64.8	73.9	73.0	72.7	70.8	69.9							
1992	51.3	62.0	72.0	72.5	69.4	69.6	70.2							
1993	51.0	59.7	70.1	72.1	70.2	69.3	67.3							
1994	50.1	60.7	71.3	69.5	69.7	69.0	67.9	65.7						
1995	51.3	58.9	68.7	71.4	70.3	69.5	67.7	67.1						
1996	50.8	58.1	68.3	69.7	67.7	70.0	67.5	65.2						
1997	52.7	59.6	67.4	67.8	70.4	69.4	66.5	66.0						
1998	52.0	60.4	68.0	69.9	66.5	68.7	65.4	63.0	60.9					
1999	51.0	62.5	68.6	69.2	67.8	69.4	65.7	65.2	64.5					
2000	50.0	56.9	69.4	70.0	67.9	65.3	65.5	64.4	62.4					
2001	49.8	58.8	70.9	70.0	68.2	65.7	65.6	64.5	65.4					
2002	48.6	59.0	70.0	70.8	70.5	68.2	67.4	67.7	65.5					
2003	47.5	57.3	67.9	71.2	68.0	66.4	65.4	64.7	66.1	63.4				
2004	48.0	57.8	70.9	71.8	70.8	67.7	65.0	69.3	64.6	66.1				
2005	47.0	58.2	70.0	69.3	72.3	69.2	65.6	68.2	65.6	64.6				
2006	45.3	57.3	69.7	72.7	68.4	72.4	69.0	62.4	62.3	66.7				
2007	44.4	54.2	73.0	73.3	73.2	69.7	69.0	67.7	66.9	64.0				
2008	43.1	53.4	72.5	73.3	71.4	70.2	73.3	64.5	67.4	67.1	64.4			
2009	43.5	52.2	71.8	77.5	75.6	69.8	71.0	64.3	70.2	67.5	64.8			
2010	41.2	49.7	69.8	72.8	72.8	70.2	68.2	66.5	72.3	67.7	66.4			
2011	40.0	52.4	67.8	73.6	74.5	73.4	69.2	71.0	66.1	65.0	67.7			
2012	41.5	52.4	68.0	71.2	76.2	73.5	68.4	68.0	68.0	71.1	65.3			
2013	39.2	48.9	69.8	71.3	73.7	72.1	70.9	68.9	69.4	67.4	65.6	62.7		
2014	37.4	48.2	68.1	68.6	71.5	76.9	73.2	72.1	66.0	70.6	67.4	64.2		
2015	35.3	48.3	67.9	71.7	69.6	72.8	73.4	71.0	64.7	67.5	68.5	65.5		
2016	33.2	49.0	70.9	73.0	68.7	69.4	75.0	68.7	69.1	68.0	67.4	68.0		
2017	33.2	45.9	71.2	72.1	69.3	68.7	70.6	72.1	69.8	70.3	70.2	67.1		
2018	30.2	43.0	65.6	72.8	71.8	67.7	70.6	72.8	69.1	70.2	63.7	66.5	61.4	
2019	29.3	43.1	68.3	71.9	72.4	70.8	71.7	73.3	71.1	67.5	72.3	65.3	64.6	
2020	33.6	41.7	63.4	66.1	72.2	70.6	69.3	72.5	70.8	66.2	67.2	63.0	61.3	
2021	25.8	46.9	63.2	70.4	73.8	72.3	67.6	72.7	73.1	71.4	65.3	66.6	65.1	
2022	28.4	41.2	65.2	70.0	70.3	68.0	75.0	72.5	73.3	69.2	70.6	70.2	65.5	
2023	24.3	40.9	66.1	67.9	68.2	69.2	69.0	70.0	68.1	71.0	67.1	64.0	62.1	59.1
2024	21.7	38.2	61.3	64.4	67.2	66.0	66.3	64.1	67.1	64.6	63.0	66.5	61.4	61.6

MONITORING THE FUTURE

TABLE/FIGURE 23

ALCOHOL

Trends in 30-Day Prevalence of Daily Use among Respondents of Modal Ages 19 through 65, by Age Group



(Age-specific data provided in the following table.)

TABLE/FIGURE 24

ALCOHOL

Trends in 30-Day Prevalence of Daily Use among Respondents of Modal Ages 18 through 65, by Age Group

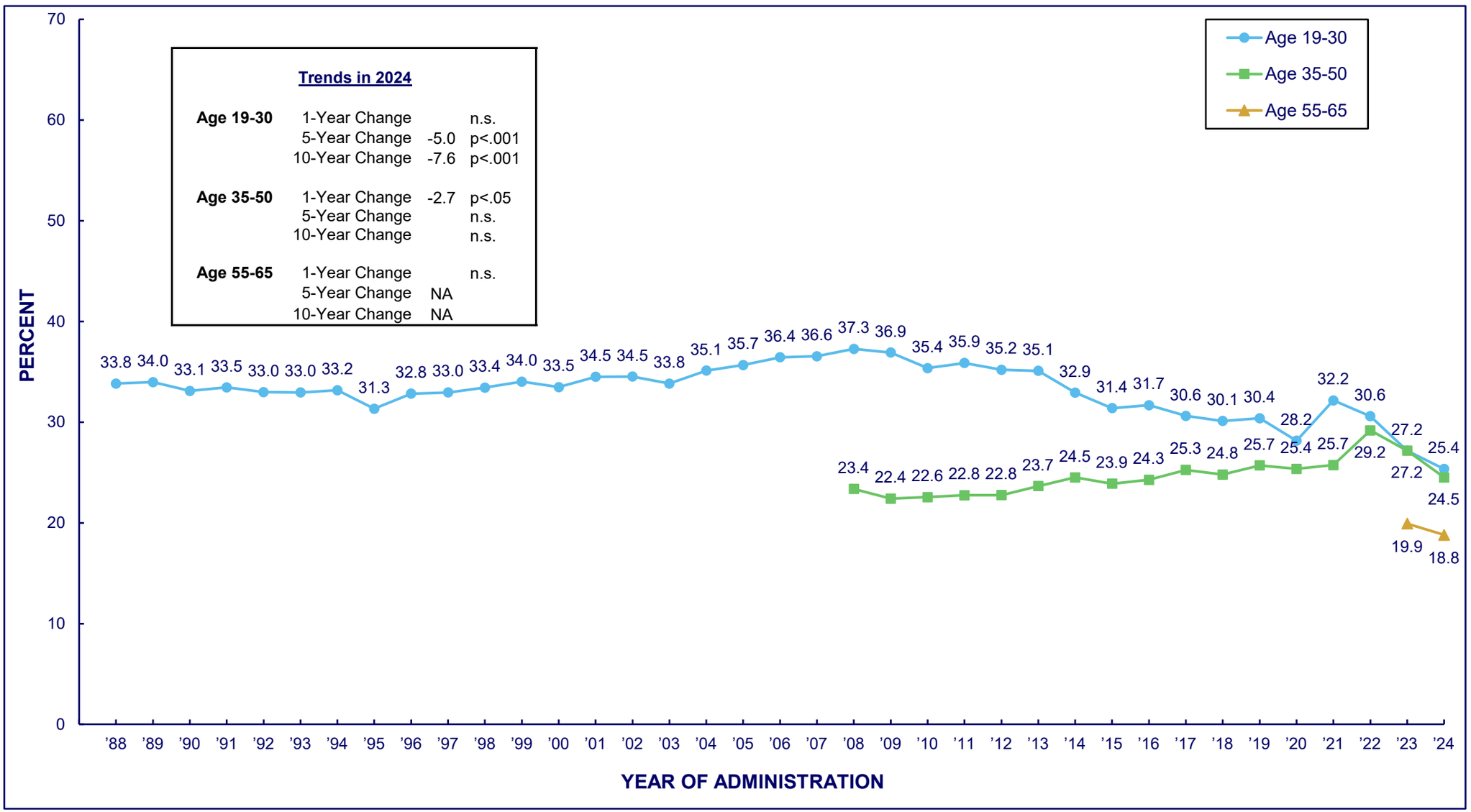
Year	Age 18	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
1976	5.6													
1977	6.1													
1978	5.7	7.8												
1979	6.9	7.5												
1980	6.0	7.3	8.6											
1981	6.0	7.4	7.9											
1982	5.7	7.9	8.1	8.5										
1983	5.5	5.7	8.3	8.8										
1984	4.8	5.9	8.3	7.4	7.9									
1985	5.0	5.9	6.9	7.4	7.9									
1986	4.8	5.2	6.6	6.7	5.7	7.7								
1987	4.8	6.0	7.2	6.4	7.1	7.4								
1988	4.2	4.9	7.5	6.6	6.8	6.0	8.2							
1989	4.2	4.7	5.2	5.8	6.3	7.0	5.8							
1990	3.7	4.4	4.9	5.9	5.3	4.9	6.2							
1991	3.6	4.1	5.0	5.7	5.1	6.6	6.6							
1992	3.4	3.7	4.5	4.6	6.7	4.7	6.1							
1993	2.5	3.1	4.8	4.8	5.6	5.3	5.0							
1994	2.9	3.6	4.2	4.2	3.4	5.6	5.2	7.9						
1995	3.5	3.1	3.5	4.3	4.1	4.5	4.4	5.9						
1996	3.7	3.0	5.0	6.1	4.3	3.9	5.3	7.8						
1997	3.9	4.9	4.4	4.3	5.4	4.4	6.0	4.9						
1998	3.9	3.5	5.7	4.0	3.9	4.0	3.9	6.5	7.3					
1999	3.4	4.3	6.2	4.9	5.7	4.3	5.1	5.3	7.9					
2000	2.9	3.8	5.9	4.2	3.8	4.5	4.5	5.5	6.9					
2001	3.6	3.8	6.0	4.6	5.6	3.2	3.9	6.2	7.7					
2002	3.5	3.7	5.4	5.3	5.8	4.6	4.1	5.1	7.1					
2003	3.2	4.3	6.0	6.7	4.9	5.5	3.9	4.2	7.9	8.2				
2004	2.8	4.9	6.4	5.7	4.8	3.4	4.3	6.6	6.5	9.0				
2005	3.1	3.6	6.9	5.8	6.4	5.2	6.3	6.4	7.8	8.7				
2006	3.0	4.5	6.2	6.0	5.3	6.2	4.9	4.9	7.8	9.5				
2007	3.1	3.4	7.0	6.8	7.3	6.2	5.6	8.7	6.9	8.9				
2008	2.8	2.3	5.5	6.5	7.1	6.6	4.9	5.5	7.5	10.4	10.6			
2009	2.5	2.4	5.9	7.2	8.6	6.9	7.0	7.0	9.2	9.7	9.3			
2010	2.7	1.7	5.4	4.9	5.2	6.6	7.0	6.5	8.1	7.5	10.5			
2011	2.1	2.4	6.0	5.0	6.7	7.7	5.7	8.7	7.5	8.1	11.2			
2012	2.5	2.3	4.8	7.0	5.5	8.6	8.1	7.0	8.3	9.7	11.0			
2013	2.2	3.0	4.6	5.0	6.3	6.8	7.3	7.0	9.4	8.1	11.3	10.7		
2014	1.9	2.6	4.4	4.7	6.2	5.4	7.8	7.6	7.1	9.1	10.4	10.5		
2015	1.9	2.0	3.7	5.1	5.3	7.1	8.1	9.8	9.0	9.9	9.7	11.2		
2016	1.3	1.7	6.2	3.9	6.0	7.3	7.2	7.8	8.0	7.7	10.0	14.4		
2017	1.6	1.4	6.0	7.0	5.0	7.1	5.4	9.9	9.5	9.6	9.9	11.1		
2018	1.2	1.2	4.1	5.4	5.5	5.5	6.7	9.2	8.8	9.6	10.1	11.0	12.8	
2019	1.7	0.5	4.7	3.8	6.6	4.7	6.2	9.2	7.1	8.2	9.8	11.5	11.9	
2020	2.7	2.2	2.8	5.3	8.2	5.8	8.0	13.3	11.6	12.7	10.6	12.9	12.2	
2021	0.9	1.2	4.2	4.6	5.1	6.0	6.1	8.5	7.7	9.9	8.1	10.2	14.7	
2022	1.5	0.8	2.0	5.2	5.5	5.6	5.9	7.5	9.4	6.6	10.5	10.8	13.0	
2023	0.9	0.9	3.8	2.5	3.3	4.2	5.8	6.6	6.6	8.6	8.6	12.1	11.0	11.0
2024	0.9	0.4	2.0	2.1	3.6	3.5	5.4	5.3	7.9	7.5	6.4	9.8	9.3	11.9

MONITORING THE FUTURE

TABLE/FIGURE 25

ALCOHOL

Trends in 2-Week Prevalence of Binge Drinking (5+ Drinks in a Row) among Respondents of Modal Ages 19 through 65, by Age Group



(Age-specific data provided in the following table.)

TABLE/FIGURE 26

ALCOHOL

Trends in 2-Week Prevalence of Binge Drinking (5+ Drinks in a Row) among Respondents of Modal Ages 18 through 65, by Age Group

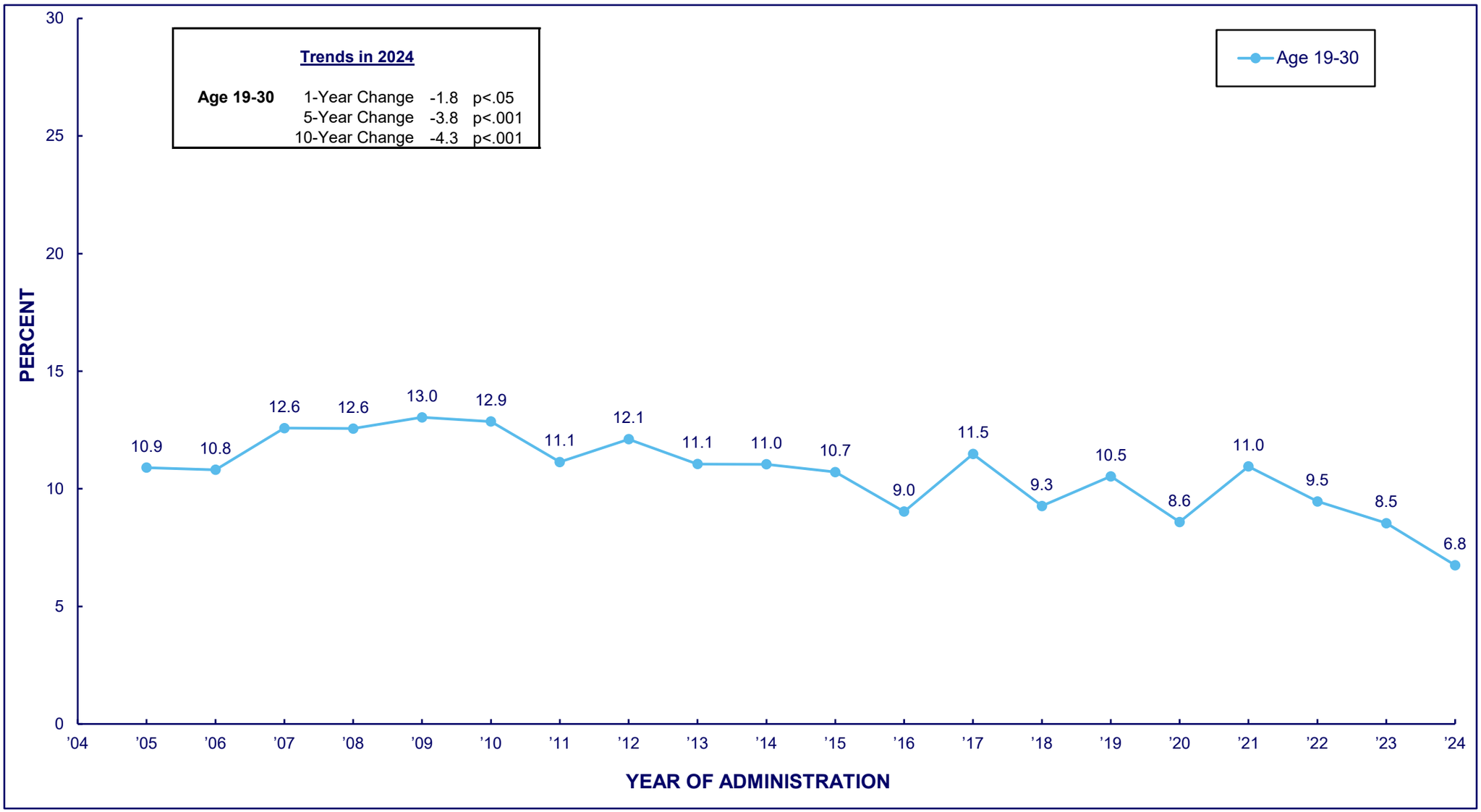
Year	Age 18	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
1976	37.1													
1977	39.4													
1978	40.3	41.6												
1979	41.2	42.1												
1980	41.2	43.1	41.6											
1981	41.4	43.6	43.9											
1982	40.5	42.3	41.8	38.2										
1983	40.8	41.6	43.1	40.0										
1984	38.7	41.5	41.9	36.0	34.0									
1985	36.7	43.0	41.1	38.4	34.5									
1986	36.8	40.8	40.7	36.3	32.2	30.9								
1987	37.5	37.8	42.4	37.6	33.9	32.4								
1988	34.7	36.5	41.7	36.8	31.6	28.9	27.3							
1989	33.0	36.1	40.9	36.6	33.4	30.4	27.0							
1990	32.2	35.7	37.7	36.3	32.8	30.1	26.7							
1991	29.8	37.1	39.4	35.8	32.8	30.4	25.5							
1992	27.9	35.0	39.2	34.8	32.4	30.2	26.7							
1993	27.5	33.6	39.9	34.7	33.7	30.2	26.4							
1994	28.2	35.2	41.9	33.0	31.8	29.2	28.8	22.5						
1995	29.8	31.4	37.8	34.6	28.3	28.8	27.5	21.1						
1996	30.2	32.8	38.1	37.8	31.4	31.2	26.0	23.0						
1997	31.3	36.9	38.5	32.9	31.9	29.6	28.3	22.6						
1998	31.5	35.0	39.4	35.6	33.3	30.1	27.6	21.7	20.7					
1999	30.8	35.9	40.2	37.5	32.0	32.0	27.0	22.5	21.3					
2000	30.0	34.7	40.9	37.0	33.2	31.1	24.9	24.1	19.1					
2001	29.7	36.4	41.3	39.5	34.0	29.6	27.2	22.5	22.1					
2002	28.6	35.9	39.3	39.0	35.1	29.8	28.7	25.1	21.0					
2003	27.9	34.3	38.7	38.6	35.7	30.5	26.2	25.3	22.2	21.8				
2004	29.2	37.1	39.9	40.0	35.7	31.6	28.0	22.3	21.9	20.6				
2005	27.1	35.5	39.2	39.0	38.9	32.3	30.2	23.5	23.6	20.7				
2006	25.4	34.4	42.5	43.2	36.6	33.5	29.8	22.9	21.5	20.9				
2007	25.9	30.5	45.8	40.8	39.3	33.3	30.1	24.7	22.1	19.6				
2008	24.6	30.8	41.9	44.1	38.8	36.0	32.4	26.2	24.3	22.5	20.5			
2009	25.2	27.6	40.4	42.9	41.4	35.7	33.4	22.6	25.1	23.0	18.7			
2010	23.2	26.7	38.0	39.8	37.8	35.9	33.6	25.0	23.7	23.6	18.4			
2011	21.6	30.7	38.4	39.1	39.3	36.2	31.2	27.0	22.5	21.5	20.1			
2012	23.7	27.5	37.5	38.6	35.9	36.8	35.0	26.2	23.4	21.4	20.2			
2013	22.1	27.4	39.1	36.9	37.7	35.4	33.8	25.2	26.5	21.4	21.9	17.5		
2014	19.4	27.5	34.9	33.8	33.5	35.7	31.8	25.5	23.5	25.5	23.7	18.4		
2015	17.2	23.5	34.0	36.0	33.9	31.4	28.9	30.6	20.3	21.2	23.9	20.0		
2016	15.5	22.3	37.9	33.4	34.7	30.8	30.4	26.1	23.7	24.3	23.2	20.5		
2017	16.6	21.6	39.0	29.8	32.5	32.3	28.6	28.8	26.7	25.0	21.2	18.1		
2018	13.8	18.9	32.7	35.1	32.5	29.0	31.6	30.3	23.2	24.8	21.3	20.0	17.3	
2019	14.4	18.4	34.3	33.8	34.2	31.0	30.9	31.8	22.5	23.5	26.2	23.9	18.2	
2020	16.8	17.7	30.3	30.6	31.5	29.6	27.3	29.1	26.4	24.0	22.3	20.7	17.0	
2021	11.8	25.1	31.3	34.8	35.0	33.1	31.3	27.6	28.9	23.8	23.1	22.8	18.5	
2022	12.6	19.0	28.6	29.7	32.6	34.2	32.9	31.6	31.2	26.9	27.3	21.5	18.3	
2023	10.2	15.0	27.7	28.0	29.8	30.5	28.1	27.8	27.9	25.9	27.1	22.3	20.0	17.4
2024	8.8	17.5	28.2	24.2	29.4	23.5	27.7	24.7	29.9	23.8	20.5	21.9	19.4	14.9

MONITORING THE FUTURE

TABLE/FIGURE 27

ALCOHOL

Trends in Two-Week Prevalence of High-Intensity Drinking (10+ Drinks in a Row) among Respondents of Modal Ages 19 through 30



(Age-specific data provided in the following table.)

TABLE/FIGURE 28

ALCOHOL

Trends in 2-Week Prevalence of High Intensity Drinking (10+ Drinks in a Row) among Respondents of Modal Ages 18 through 30, by Age Group

Year	Age 18	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30
2005	10.6	13.1	12.6	11.2	14.7	9.1	5.0
2006	12.9	13.4	15.5	11.4	10.3	8.3	6.3
2007	11.1	12.2	19.8	15.2	9.3	11.6	7.4
2008	10.4	12.5	12.5	16.3	13.1	11.7	9.3
2009	10.6	10.8	16.5	15.2	14.5	9.2	11.8
2010	9.9	8.7	13.9	14.1	15.2	11.2	13.9
2011	9.8	10.3	12.5	11.9	13.7	12.0	6.3
2012	10.4	10.5	15.8	13.8	8.0	9.8	15.0
2013	8.1	6.9	11.9	8.7	14.1	10.8	13.6
2014	7.1	13.7	10.3	9.6	10.4	10.8	11.5
2015	6.1	7.3	15.3	10.2	10.8	11.3	8.9
2016	4.4	7.5	11.5	8.5	9.4	6.8	10.6
2017	6.0	8.9	15.2	11.4	11.1	14.5	7.9
2018	4.6	7.1	8.5	10.9	11.7	8.9	8.4
2019	5.3	8.0	11.7	11.9	10.4	9.0	12.4
2020	—	8.2	9.8	8.3	11.0	7.7	6.7
2021	3.2	10.0	10.2	11.7	12.3	10.0	11.2
2022	4.3	5.9	7.0	11.9	8.7	11.1	10.4
2023	2.2	3.6	10.5	7.3	7.5	12.7	8.9
2024	3.0	4.8	7.6	7.7	8.5	5.7	6.1

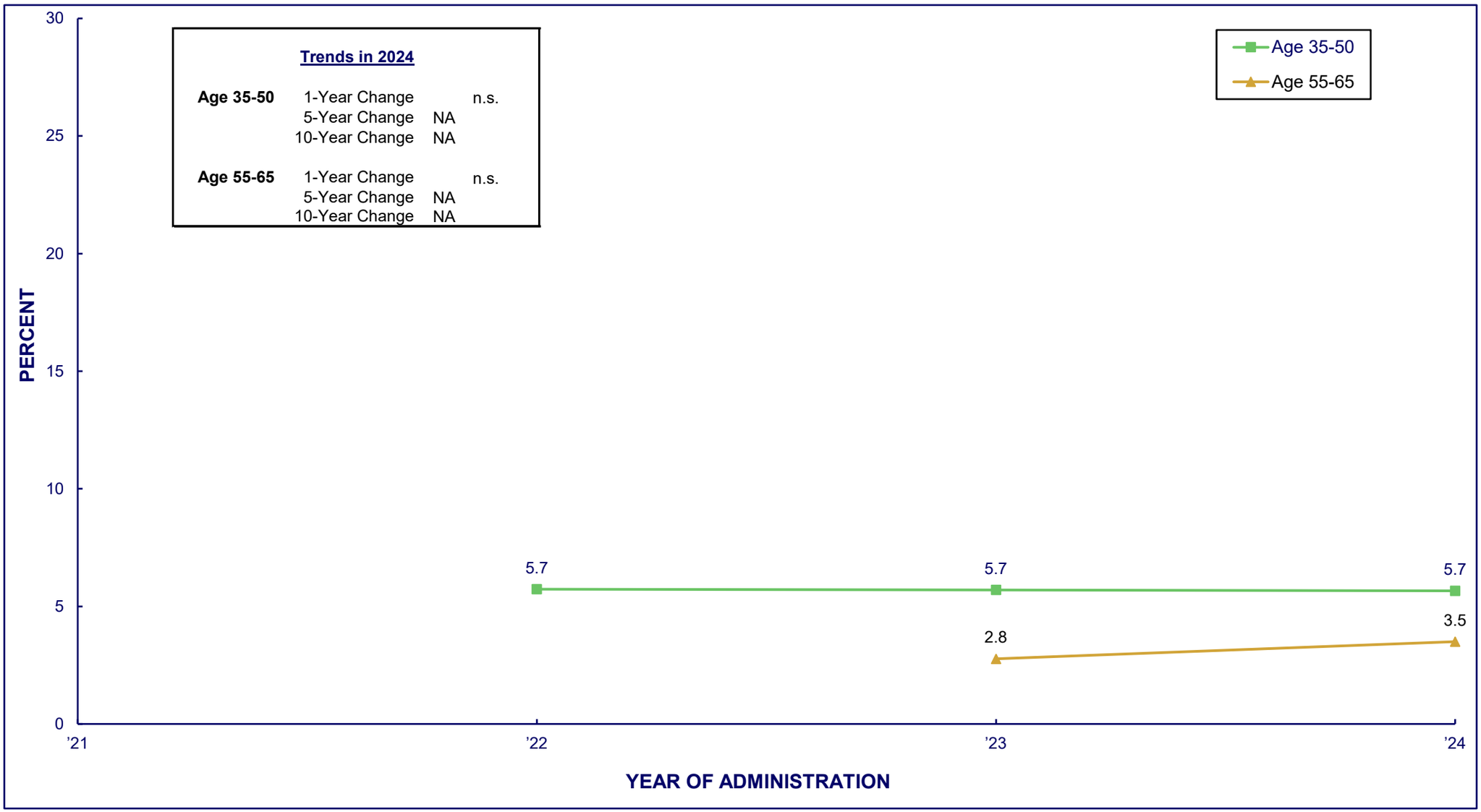
Notes. **' — ' indicates data not available.**

MONITORING THE FUTURE

TABLE/FIGURE 29

ALCOHOL

Trends in 30-Day Prevalence of High-Intensity Drinking (10+ Drinks in a Row) among Respondents of Modal Ages 35 through 65



(Age-specific data provided in the following table.)

TABLE/FIGURE 30

ALCOHOL

Trends in 30-Day Prevalence of High Intensity Drinking (10+ Drinks in a Row) among Respondents of Modal Ages 35 through 65, by Age Group

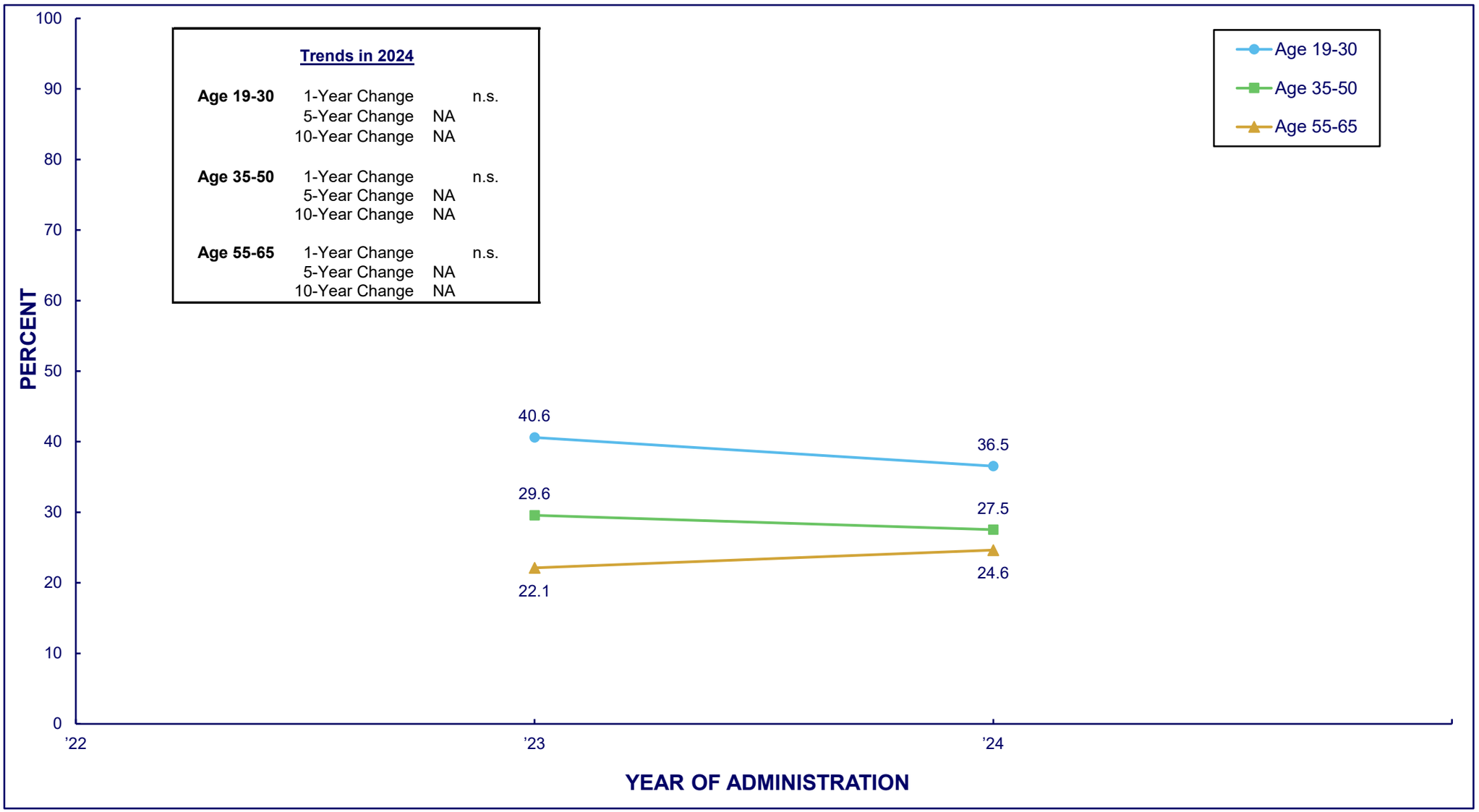
Year	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
2022	6.4	6.9	5.0	4.7	5.0	3.2	
2023	4.9	7.0	4.8	6.2	4.0	2.7	1.7
2024	7.0	6.2	5.5	4.3	5.2	3.1	2.2

TABLE/FIGURE 31

ANY NICOTINE USE[1]

Trends in 12-Month Prevalence among Respondents of Modal Ages 19 through 65, by Age Group

MONITORING THE FUTURE



[1]Includes use of cigarettes, large cigars, small cigars, tobacco using a hookah, smokeless tobacco, or vaping nicotine.

(Age-specific data provided in the following table.)

TABLE/FIGURE 32

ANY NICOTINE USE[1]

Trends in 12-Month Prevalence

among Respondents of Modal Ages 19 through 65, by Age Group

Year	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
2023	37.7	37.0	38.2	47.6	42.1	39.7	30.0	34.0	26.8	27.9	24.2	20.9	21.4
2024	30.4	36.5	40.9	43.0	30.8	35.5	30.9	29.5	25.0	25.3	27.1	24.5	22.1

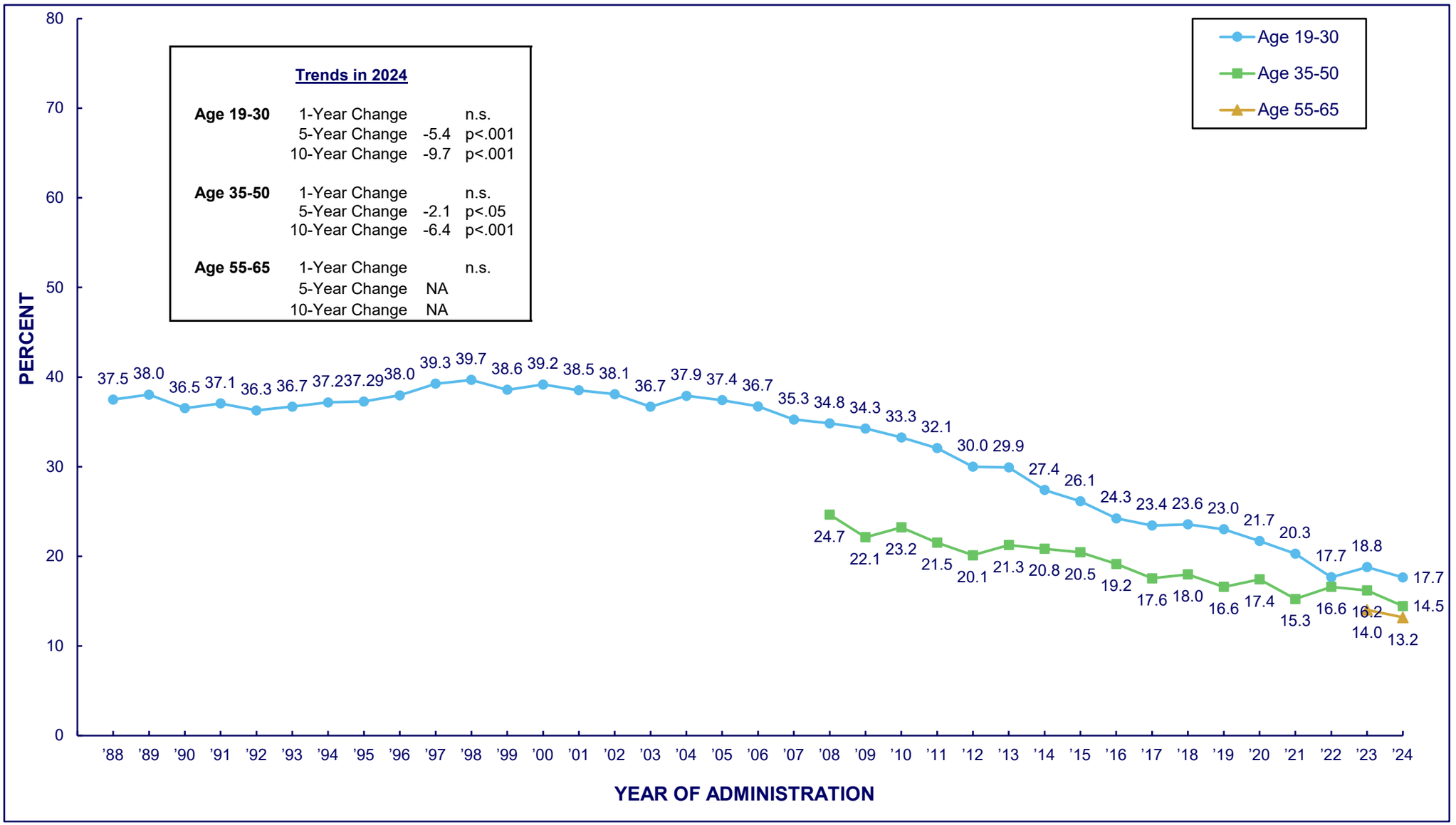
[1]Includes use of cigarettes, large cigars, small cigars, tobacco using a hookah, smokeless tobacco, or vaping nicotine

MONITORING THE FUTURE

TABLE/FIGURE 33

CIGARETTES

Trends in 12-Month Prevalence among Respondents of Modal Ages 19 through 65, by Age Group



(Age-specific data provided in the following table.)

TABLE/FIGURE 34

CIGARETTES

Trends in 12-Month Prevalence among Respondents of Modal Ages 18 through 65, by Age Group

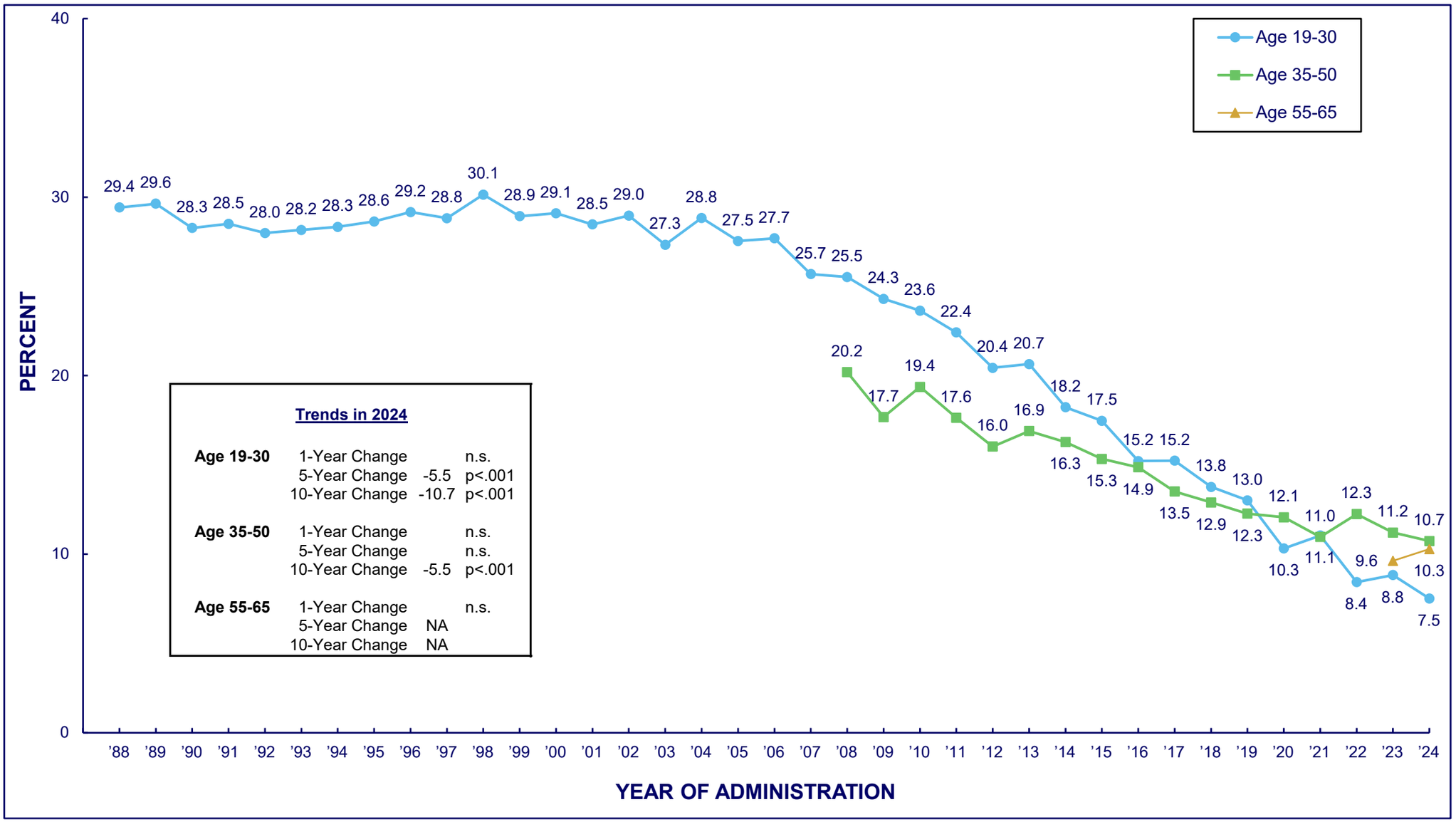
Year	Age 18	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
1978		49.7	.	.	.	.	.	.	.	.	.	.	.	.
1979		51.3	.	.	.	.	.	.	.	.	.	.	.	.
1980		47.9	47.3	.	.	.	.	.	.	.	.	.	.	.
1981		45.1	47.6	.	.	.	.	.	.	.	.	.	.	.
1982		45.1	46.0	44.5	.	.	.	.	.	.	.	.	.	.
1983		45.1	43.7	45.2	.	.	.	.	.	.	.	.	.	.
1984		43.9	42.2	41.8	41.4	.	.	.	.	.	.	.	.	.
1985		43.6	43.8	39.7	42.1	.	.	.	.	.	.	.	.	.
1986		43.3	41.2	39.6	39.5	39.7	.	.	.	.	.	.	.	.
1987		43.4	43.4	41.3	36.0	38.2	.	.	.	.	.	.	.	.
1988		41.6	40.6	36.9	35.6	35.3	35.1	.	.	.	.	.	.	.
1989		42.0	39.4	39.5	37.9	33.7	35.8	.	.	.	.	.	.	.
1990		40.4	39.4	37.7	36.1	32.7	33.3	.	.	.	.	.	.	.
1991		42.0	39.4	37.4	36.5	35.6	31.7	.	.	.	.	.	.	.
1992		41.5	40.4	37.4	34.0	34.6	30.4	.	.	.	.	.	.	.
1993		42.4	41.5	36.0	35.2	32.7	33.0	.	.	.	.	.	.	.
1994		45.2	41.2	37.8	34.8	33.3	31.4	29.7	.	.	.	.	.	.
1995		44.3	41.9	37.3	35.7	33.0	31.7	29.5	.	.	.	.	.	.
1996		45.9	44.5	39.8	35.5	32.6	29.9	32.0	.	.	.	.	.	.
1997		48.1	44.0	38.6	39.0	34.3	32.1	28.3	.	.	.	.	.	.
1998		47.0	45.5	42.8	38.6	33.9	31.0	29.7	27.4	.	.	.	.	.
1999		47.7	43.9	42.8	34.5	31.9	31.4	29.5	27.8	.	.	.	.	.
2000		45.0	45.1	41.6	38.0	35.6	30.6	29.1	27.5	.	.	.	.	.
2001		43.2	45.8	41.5	39.7	32.7	29.3	27.3	27.3	.	.	.	.	.
2002		42.0	42.7	41.3	37.3	34.0	32.0	30.1	23.5	.	.	.	.	.
2003		40.1	39.7	40.0	35.5	35.2	30.7	27.2	27.4	26.2	.	.	.	.
2004		41.7	43.3	42.1	39.0	33.1	29.8	27.0	25.8	24.3	.	.	.	.
2005		39.4	39.8	39.2	40.9	35.3	30.9	27.0	25.3	25.8	.	.	.	.
2006		36.3	39.7	38.7	38.4	35.6	32.2	25.4	23.2	22.9	.	.	.	.
2007		34.4	38.1	38.0	36.5	34.6	30.4	25.0	23.8	21.7	.	.	.	.
2008		32.3	37.0	38.6	33.6	35.6	31.9	29.4	24.2	22.5	22.9	.	.	.
2009		32.2	36.7	36.3	34.5	32.4	33.2	23.9	20.3	23.3	20.9	.	.	.
2010		30.6	35.2	34.8	34.9	32.1	31.8	26.2	20.9	23.3	22.7	.	.	.
2011		31.1	35.3	34.7	33.4	29.5	28.0	28.8	17.6	19.0	21.0	.	.	.
2012		26.7	29.9	32.3	32.9	30.8	26.9	24.6	16.7	20.0	19.2	.	.	.
2013		28.2	32.4	31.7	30.8	29.2	26.9	23.0	23.2	19.2	19.9	17.8	.	.
2014		25.9	27.6	28.9	25.7	28.8	27.4	27.2	18.5	18.9	19.2	18.5	.	.
2015		26.9	27.9	27.7	28.5	25.9	20.3	26.9	19.7	15.5	20.3	18.4	.	.
2016		17.4	27.5	25.9	25.6	23.1	25.4	24.1	20.1	15.5	17.6	16.9	.	.
2017		17.9	27.1	25.6	26.6	24.1	19.0	20.3	20.4	13.0	16.7	16.5	.	.
2018		19.0	23.4	29.1	23.1	24.2	22.6	21.6	18.9	17.5	14.3	18.4	15.9	.
2019		17.1	25.9	22.8	26.1	23.8	22.4	19.6	18.0	13.8	15.6	16.4	14.6	.
2020		18.9	21.7	23.4	25.0	21.9	19.1	20.7	18.0	18.7	12.6	15.9	16.1	.
2021		17.0	18.3	20.2	21.5	22.8	20.6	16.7	15.8	14.0	14.6	15.2	13.7	.
2022		12.3	18.4	20.4	17.2	17.6	17.5	19.6	18.1	16.6	12.2	13.9	14.8	.
2023		14.5	21.9	18.5	19.5	18.8	19.2	18.3	15.3	14.3	16.8	14.3	13.9	13.8
2024	7.1	14.7	20.2	18.5	18.5	17.9	16.5	15.3	15.1	14.2	13.5	13.1	14.2	12.2

MONITORING THE FUTURE

TABLE/FIGURE 35

CIGARETTES

Trends in 30-Day Prevalence among Respondents of Modal Ages 19 through 65, by Age Group



(Age-specific data provided in the following table.)

TABLE/FIGURE 36

CIGARETTES

Trends in 30-Day Prevalence among Respondents of Modal Ages 18 through 65, by Age Group

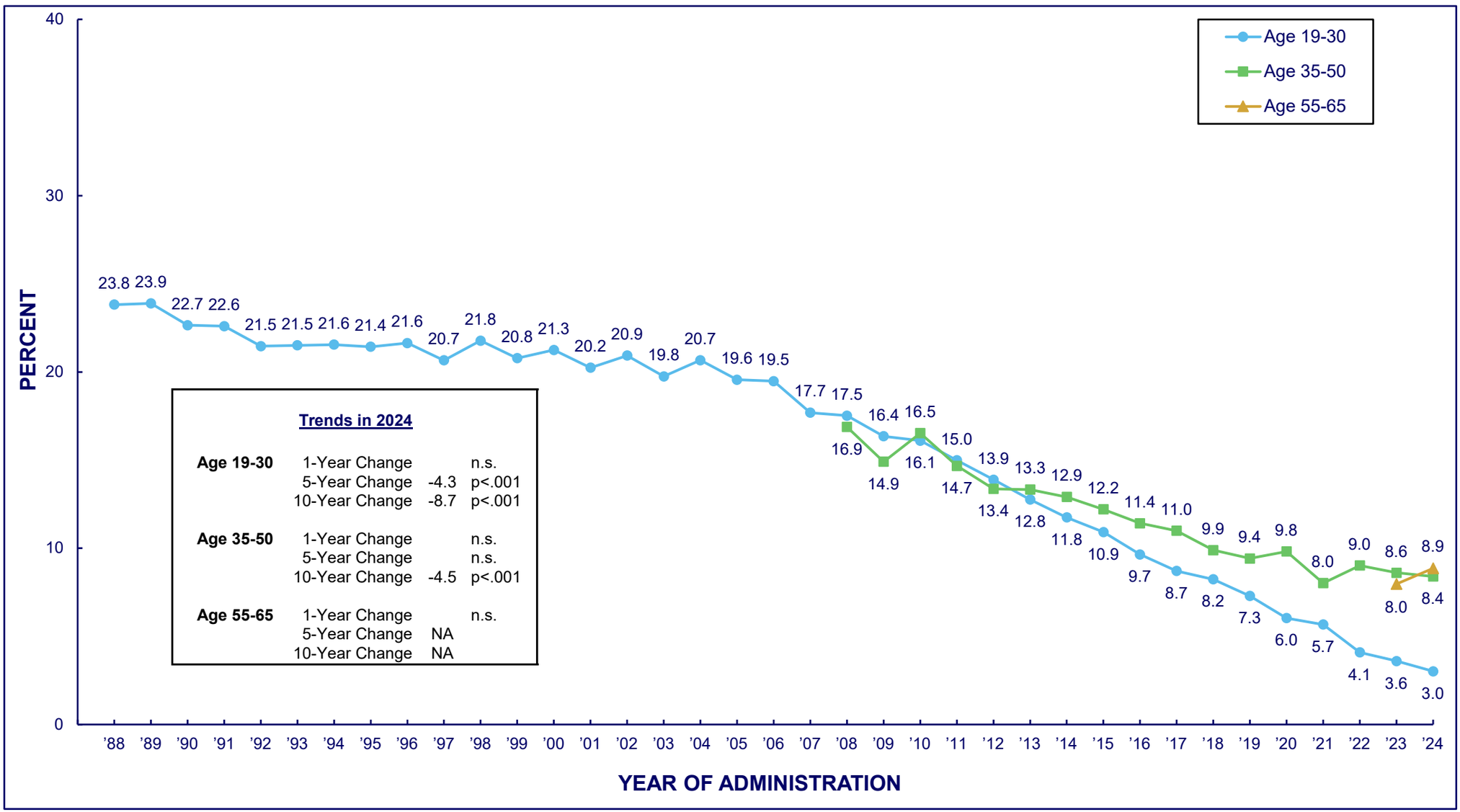
Year	Age 18	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
1976	38.8													
1977	38.4													
1978	36.7	39.3												
1979	34.4	39.1												
1980	30.5	37.0	38.0											
1981	29.4	34.6	37.0											
1982	30.0	33.7	36.7	37.5										
1983	30.3	33.4	33.8	35.9										
1984	29.3	32.4	33.6	34.6	33.8									
1985	30.1	31.4	33.3	32.5	34.9									
1986	29.6	30.6	32.1	31.2	31.7	33.7								
1987	29.4	30.1	32.7	32.7	28.8	32.0								
1988	28.7	28.3	30.3	30.2	28.6	29.5	29.7							
1989	28.6	28.2	29.9	30.3	30.8	28.2	30.2							
1990	29.4	27.1	28.7	28.8	29.1	27.5	28.4							
1991	28.3	28.2	28.5	28.7	30.1	29.8	25.5							
1992	27.8	30.1	28.8	28.6	27.6	28.5	24.5							
1993	29.9	29.0	29.8	27.8	28.4	26.5	27.6							
1994	31.2	32.6	30.2	27.4	27.2	26.6	26.2	25.9						
1995	33.5	32.7	31.2	28.6	26.3	27.6	25.6	26.2						
1996	34.0	34.3	32.9	30.4	27.2	26.4	24.1	27.0						
1997	36.5	33.9	31.4	28.3	28.5	25.4	25.7	22.9						
1998	35.1	34.0	33.3	32.2	30.8	26.1	24.9	25.1	24.1					
1999	34.6	36.0	32.8	32.6	25.9	23.3	23.6	23.7	24.5					
2000	31.4	32.0	34.5	30.6	29.1	26.6	22.4	24.9	23.5					
2001	29.5	31.9	33.6	31.4	28.8	24.8	21.1	21.3	24.1					
2002	26.7	30.4	32.4	32.9	27.8	25.4	25.3	24.1	19.7					
2003	24.4	28.3	29.4	29.9	27.4	26.5	23.0	20.4	24.1	22.0				
2004	25.0	29.0	31.8	33.3	31.1	26.0	22.6	20.4	21.1	21.0				
2005	23.2	26.5	29.4	28.4	31.2	27.0	23.2	21.1	21.6	22.5				
2006	21.6	26.1	29.0	28.4	30.3	27.4	25.2	18.3	18.6	19.8				
2007	21.6	21.6	28.2	28.4	26.9	26.2	23.1	18.6	19.4	18.4				
2008	20.4	21.2	26.5	28.2	24.5	27.8	24.9	22.2	19.1	19.7	19.8			
2009	20.1	20.9	25.3	24.8	25.4	24.4	24.9	17.9	16.1	19.0	17.6			
2010	19.2	20.6	23.1	24.3	24.4	23.2	26.0	20.0	17.7	19.6	20.0			
2011	18.7	19.5	24.2	22.9	24.6	21.9	21.1	21.8	15.3	16.2	17.4			
2012	17.1	16.9	20.3	20.5	22.3	22.9	19.7	18.9	12.9	16.4	15.8			
2013	16.3	18.7	22.3	21.6	20.4	21.4	19.2	18.1	19.0	13.9	16.8	14.7		
2014	13.6	15.9	18.2	18.8	16.5	20.2	19.7	19.4	14.2	16.2	15.5	15.2		
2015	11.4	17.0	18.8	19.3	19.3	15.6	14.9	19.0	14.7	11.5	16.5	15.6		
2016	10.5	9.7	16.1	16.0	16.4	15.6	16.9	17.3	14.8	12.8	15.0	14.5		
2017	9.7	9.7	17.8	17.5	18.2	15.9	12.0	15.5	14.5	9.9	14.1	13.1		
2018	7.6	11.2	12.4	16.8	14.2	13.9	13.9	12.3	13.2	14.4	11.6	15.3	13.9	
2019	5.7	8.4	13.3	10.8	15.2	15.4	14.7	13.0	13.8	11.5	11.0	13.2	12.2	
2020	7.5	8.1	7.8	11.4	11.7	10.9	11.5	12.0	13.0	13.4	9.9	12.1	13.1	
2021	4.1	7.2	8.3	9.4	11.2	15.0	13.2	12.4	11.1	9.0	11.4	11.4	10.0	
2022	4.0	5.1	7.8	10.6	8.8	8.2	8.4	13.8	13.8	13.2	8.3	10.5	12.0	
2023	2.9	7.0	8.0	7.9	8.6	9.9	10.6	14.2	10.0	9.6	12.0	8.5	10.1	10.2
2024	2.5	6.2	8.5	6.7	8.7	7.4	7.8	14.2	9.6	9.9	10.7	9.6	11.8	9.2

MONITORING THE FUTURE

TABLE/FIGURE 37

CIGARETTES

Trends in 30-Day Prevalence of Daily Use among Respondents of Modal Ages 19 through 65, by Age Group



(Age-specific data provided in the following table.)

TABLE/FIGURE 38

CIGARETTES

Trends in 30-Day Prevalence of Daily Use among Respondents of Modal Ages 18 through 65, by Age Group

Year	Age 18	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
1976	28.8													
1977	28.8													
1978	27.5	31.0												
1979	25.4	30.7												
1980	21.3	30.0	31.3											
1981	20.3	25.7	30.7											
1982	21.1	25.1	29.1	30.7										
1983	21.2	25.2	26.4	29.8										
1984	18.7	25.1	26.6	29.0	28.9									
1985	19.5	23.7	26.1	25.7	29.9									
1986	18.7	22.3	25.2	26.3	27.8	28.9								
1987	18.7	22.7	24.8	27.0	24.3	27.7								
1988	18.1	19.6	22.8	24.6	24.0	25.6	26.3							
1989	18.9	19.5	22.9	24.2	26.3	23.9	26.3							
1990	19.1	19.3	20.5	23.2	24.4	23.2	25.0							
1991	18.5	20.2	20.7	22.6	24.4	25.4	21.9							
1992	17.2	21.0	21.3	21.3	21.5	22.8	20.9							
1993	19.0	21.1	20.7	20.3	22.2	21.1	23.4							
1994	19.4	23.0	22.4	20.0	20.6	22.0	21.4	23.5						
1995	21.6	21.8	24.0	20.7	20.0	21.7	20.5	23.2						
1996	22.2	22.8	23.5	23.0	21.3	19.9	19.4	23.4						
1997	24.6	22.9	21.4	21.0	20.2	18.2	20.5	19.0						
1998	22.4	24.1	22.9	22.0	22.6	20.2	19.1	21.9	21.6					
1999	23.1	25.3	23.3	21.6	20.0	16.5	18.5	20.8	21.8					
2000	20.6	22.5	26.0	21.7	20.8	20.1	16.9	20.9	20.8					
2001	19.0	21.4	23.1	22.9	21.3	17.7	15.4	17.4	21.2					
2002	16.9	21.0	24.0	24.6	20.2	18.0	18.0	20.1	17.5					
2003	15.8	19.5	20.9	20.6	21.1	19.5	17.1	16.8	21.1	20.2				
2004	15.6	18.9	21.3	24.9	23.8	18.5	17.2	15.3	17.4	18.5				
2005	13.6	16.8	20.1	19.5	23.3	19.1	18.6	16.4	18.2	20.1				
2006	12.2	15.3	18.7	20.0	23.0	21.2	18.9	13.9	15.8	17.4				
2007	12.3	12.1	18.9	19.4	19.4	19.7	16.8	14.2	16.7	16.4				
2008	11.4	13.8	16.9	18.7	17.1	20.3	18.2	17.4	15.8	16.8	17.6			
2009	11.2	12.3	15.2	17.1	18.3	17.6	17.7	14.2	12.4	17.0	16.0			
2010	10.7	11.8	15.9	16.4	16.1	17.8	18.5	15.7	14.9	17.3	18.1			
2011	10.3	11.6	15.9	13.3	18.8	14.8	15.5	16.9	12.3	14.2	15.4			
2012	9.3	9.6	12.5	12.9	15.7	16.9	15.8	14.3	10.7	14.2	14.1			
2013	8.5	12.1	12.5	13.1	11.0	14.6	13.2	12.7	14.7	11.3	14.5	13.9		
2014	6.7	8.4	10.9	11.4	11.8	13.9	13.8	15.0	10.5	12.3	13.9	13.5		
2015	5.5	8.2	11.6	12.2	12.0	10.0	11.1	13.1	12.2	9.7	14.0	13.6		
2016	4.8	4.2	9.0	10.1	10.3	10.3	13.1	12.5	10.5	10.7	12.2	12.7		
2017	4.2	5.0	8.7	9.9	10.2	11.0	7.1	11.7	11.6	7.9	12.6	11.6		
2018	3.6	6.8	5.4	8.8	8.3	9.9	9.8	8.5	10.2	11.0	9.7	13.3	12.7	
2019	2.4	3.2	5.9	6.1	10.4	8.5	9.1	9.5	9.4	9.6	9.3	11.9	10.0	
2020	3.1	4.1	3.9	6.4	6.7	6.9	7.6	10.0	10.7	11.0	7.7	11.1	12.2	
2021	2.0	3.4	3.1	3.9	5.8	8.1	8.4	7.7	8.1	6.8	9.4	10.7	9.3	
2022	1.6	1.3	3.4	4.0	4.8	4.0	5.4	9.8	9.8	9.2	7.3	9.7	10.5	
2023	0.7	1.7	3.1	2.2	4.3	3.2	6.1	9.6	7.7	6.8	10.6	7.0	8.2	8.8
2024	0.4	1.3	3.4	2.2	3.5	3.2	4.1	8.0	7.5	8.4	9.4	8.3	10.4	7.7

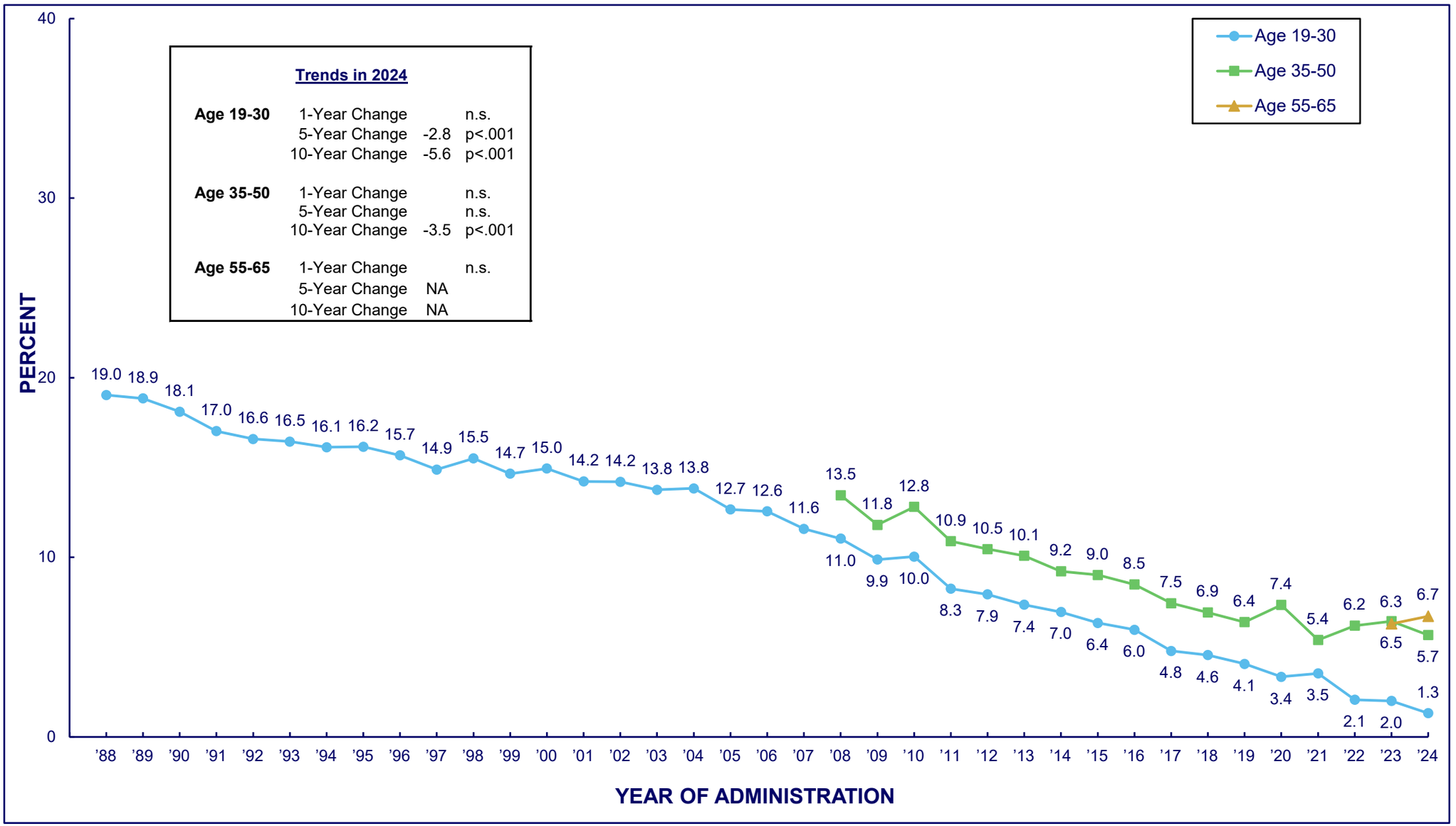
MONITORING THE FUTURE

TABLE/FIGURE 39

CIGARETTES

Trends in 30-Day Prevalence of Smoking a Half Pack or More per Day among Respondents of Modal Ages 19 through 65, by Age Group

MONITORING THE FUTURE



(Age-specific data provided in the following table.)

TABLE/FIGURE 40

CIGARETTES

Trends in 30-Day Prevalence of Smoking a Half Pack or More per Day among Respondents of Modal Ages 18 through 65, by Age Group

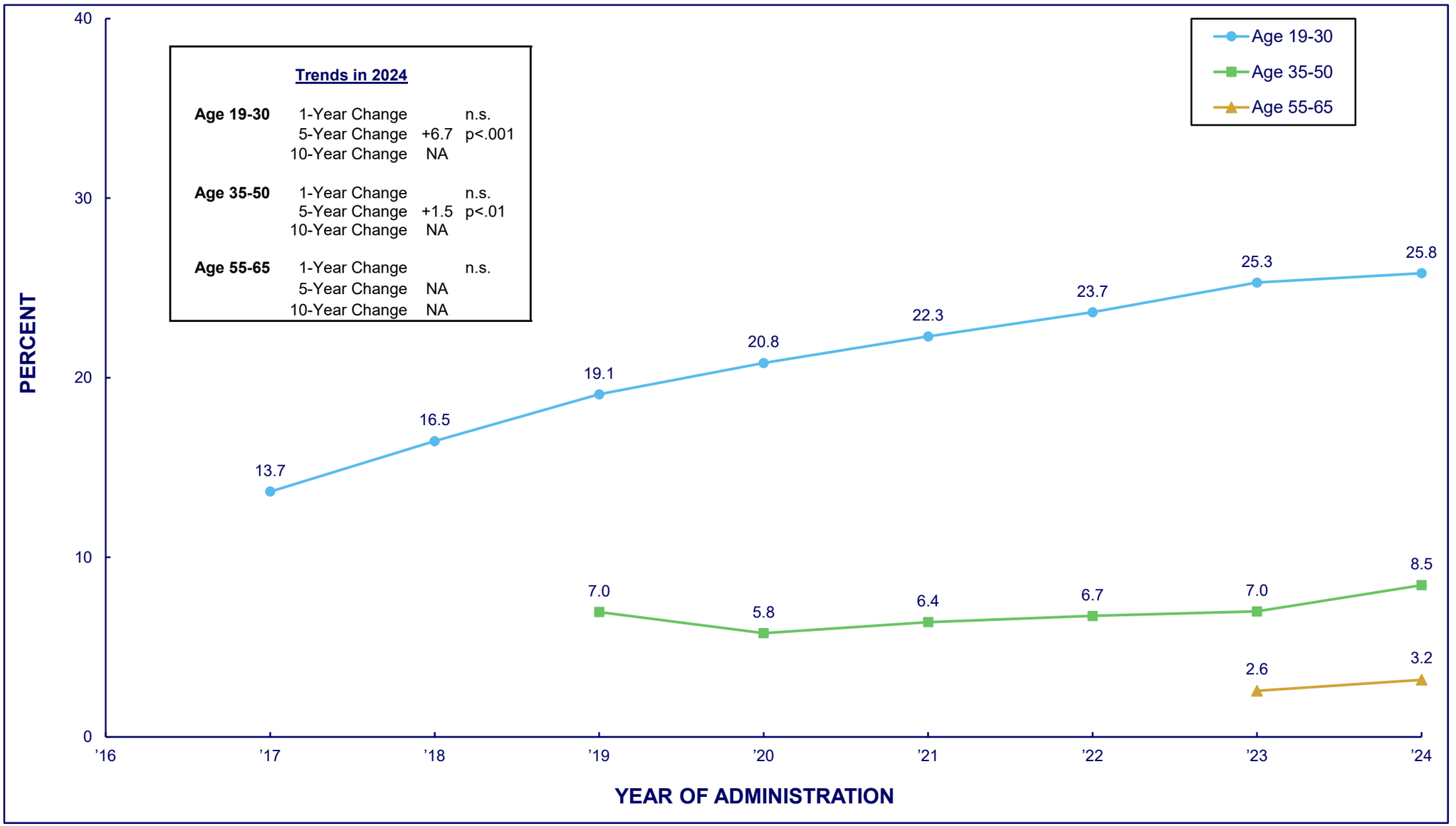
Year	Age 18	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
1976	19.2													
1977	19.4													
1978	18.8	23.5												
1979	16.5	24.3												
1980	14.3	22.4	25.2											
1981	13.5	19.6	24.7											
1982	14.2	18.8	23.2	25.0										
1983	13.8	17.8	20.2	24.6										
1984	12.3	18.2	22.0	23.6	24.2									
1985	12.5	17.2	20.9	21.3	24.4									
1986	11.4	16.5	20.1	21.8	22.2	24.1								
1987	11.4	15.9	19.6	22.4	20.3	22.9								
1988	10.6	13.7	17.8	19.1	19.4	21.0	23.3							
1989	11.2	13.3	16.7	19.4	21.7	19.9	21.7							
1990	11.3	14.7	15.0	18.4	20.5	18.8	21.0							
1991	10.7	13.1	14.4	17.4	19.3	20.0	17.7							
1992	10.0	14.8	15.6	16.0	16.6	18.7	17.5							
1993	10.9	14.7	14.7	15.2	17.4	17.2	19.2							
1994	11.2	15.1	16.4	14.9	15.7	16.8	17.8	19.7						
1995	12.4	14.9	18.2	15.6	15.0	16.4	17.0	19.2						
1996	13.0	14.6	16.6	16.8	15.3	15.2	15.6	19.3						
1997	14.3	15.5	14.7	16.0	13.6	13.4	16.2	16.0						
1998	12.6	17.3	16.1	15.2	15.9	15.3	13.4	17.6	18.1					
1999	13.2	15.7	15.9	14.4	15.1	12.9	14.1	18.1	17.6					
2000	11.3	14.3	17.9	14.4	15.0	15.1	13.1	15.6	17.2					
2001	10.3	13.9	14.9	16.2	15.6	12.9	11.9	14.1	16.9					
2002	9.1	12.4	13.5	16.6	14.2	14.1	14.3	14.4	14.5					
2003	8.4	11.8	14.2	14.7	14.0	14.6	13.0	13.3	16.7	17.8				
2004	8.0	11.7	12.6	16.2	16.6	12.7	13.1	11.1	14.8	15.9				
2005	6.9	9.5	12.0	13.4	14.5	13.1	13.4	12.9	16.0	16.5				
2006	5.9	8.7	11.2	13.0	14.7	14.3	13.4	10.9	12.9	14.8				
2007	5.7	6.8	11.0	11.3	14.8	13.4	12.3	10.5	12.6	13.2				
2008	5.4	7.3	9.8	12.4	10.9	12.3	13.4	12.8	12.4	14.1	14.5			
2009	5.0	7.4	8.7	9.3	11.3	12.3	10.6	11.7	8.5	14.2	12.7			
2010	4.7	6.2	9.5	10.2	10.8	11.6	11.8	11.9	11.0	13.9	14.3			
2011	4.3	4.6	8.6	8.0	10.9	7.6	9.7	11.8	8.6	11.3	12.0			
2012	4.0	4.2	7.4	7.9	8.0	11.0	9.1	11.1	7.7	11.1	11.8			
2013	3.4	6.4	6.4	8.3	5.9	9.5	7.6	9.3	10.6	9.0	11.3	11.4		
2014	2.6	4.5	6.1	7.4	7.2	8.6	7.7	9.9	7.1	9.1	10.7	10.6		
2015	2.1	4.0	5.6	7.5	6.9	5.8	8.0	8.0	9.5	7.3	11.3	11.2		
2016	1.8	2.7	4.3	6.7	6.6	6.7	8.1	9.5	6.6	8.2	9.8	9.6		
2017	1.7	2.9	4.6	6.8	4.9	5.3	4.0	6.4	7.6	5.6	9.8	9.2		
2018	1.5	3.1	3.2	4.8	4.3	6.3	5.5	5.8	6.9	8.2	6.7	10.7	10.1	
2019	0.9	2.1	2.1	3.7	6.5	4.0	5.6	5.1	5.6	7.5	7.1	9.5	7.7	
2020	1.4	1.4	1.3	4.1	4.2	4.9	3.6	7.7	7.2	9.0	5.5	9.1	9.4	
2021	0.8	2.6	2.6	2.4	2.7	5.5	4.8	4.5	5.2	4.8	7.0	8.2	7.0	
2022	0.9	1.1	0.9	2.1	2.9	1.9	2.9	6.5	7.2	6.5	4.7	7.7	8.1	
2023	0.5	0.8	2.0	1.0	1.3	1.7	4.6	7.6	5.3	4.6	8.5	5.8	6.3	6.9
2024	0.2	0.5	0.2	1.1	1.0	1.6	2.5	6.8	3.9	5.6	6.6	5.7	8.8	5.4

MONITORING THE FUTURE

TABLE/FIGURE 41

VAPING NICOTINE

Trends in 12-Month Prevalence among Respondents of Modal Ages 19 through 65, by Age Group



(Age-specific data provided in the following table.)

TABLE/FIGURE 42

VAPING NICOTINE

Trends in 12-Month Prevalence

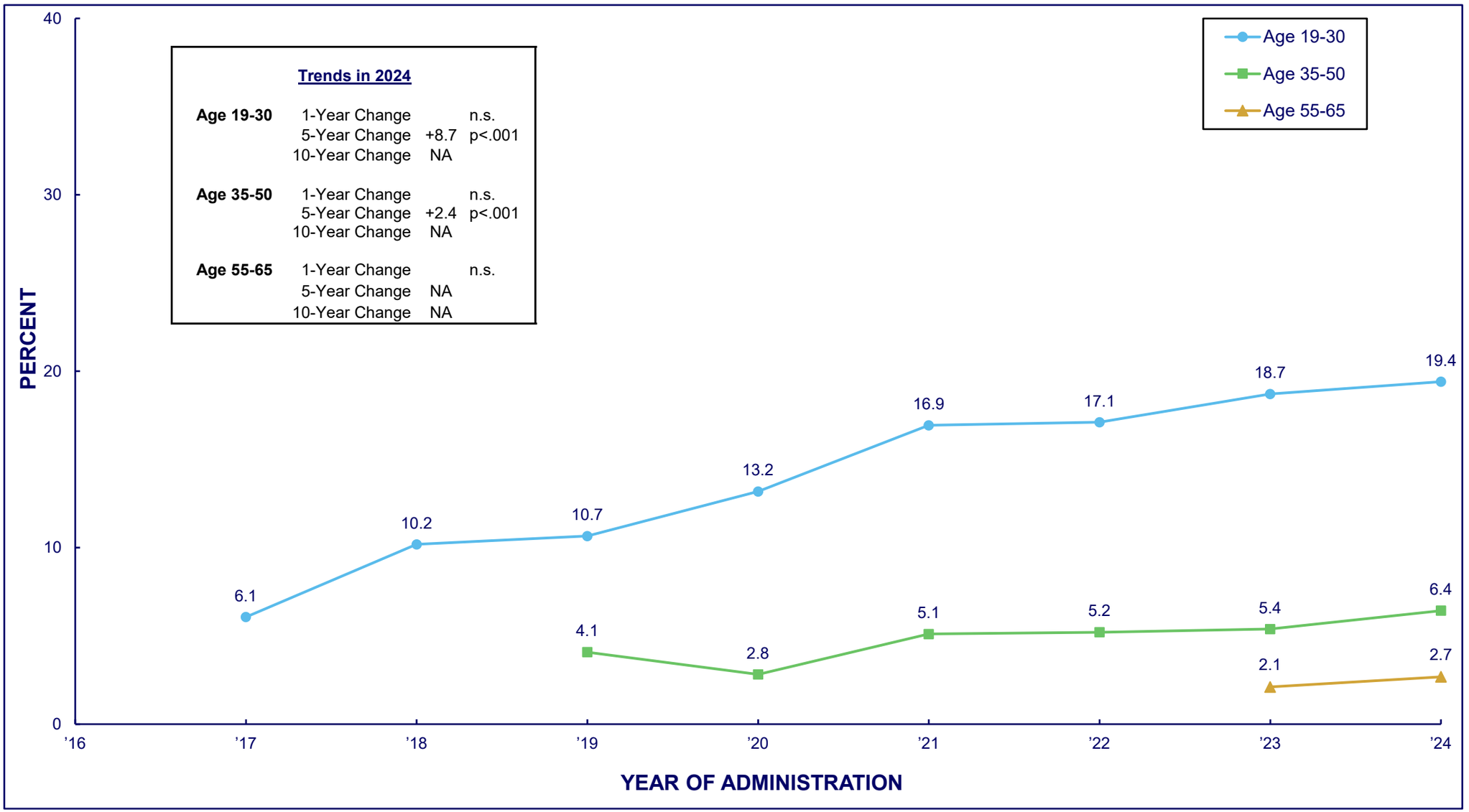
among Respondents of Modal Ages 18 through 65, by Age Group

Year	Age 18	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
2017	18.8	13.3	18.4	16.7	12.7	14.5	7.1							
2018	29.7	24.0	20.0	18.0	17.8	10.8	9.8							
2019	35.3	24.6	26.5	21.1	16.5	12.6	14.7	11.9	6.6	5.1	5.3	4.4	2.8	
2020	34.5	29.4	30.4	19.6	20.6	17.2	10.8	7.7	7.3	4.2	4.3	2.7	2.6	
2021	26.6	26.6	30.9	26.2	22.0	16.1	14.8	9.4	6.9	4.8	4.8	3.3	1.7	
2022	27.3	26.2	29.6	30.9	21.4	18.9	17.1	11.8	6.4	5.8	2.9	2.9	1.4	
2023	23.2	30.5	30.4	28.7	27.1	22.5	16.7	10.6	6.8	6.4	4.3	3.5	2.0	2.2
2024	21.0	23.4	25.8	33.3	28.4	22.9	19.8	12.0	9.6	6.3	6.3	3.3	3.7	2.5

TABLE/FIGURE 43

VAPING NICOTINE

Trends in 30-Day Prevalence among Respondents of Modal Ages 19 through 65, by Age Group



(Age-specific data provided in the following table.)

TABLE/FIGURE 44

VAPING NICOTINE

Trends in 30-Day Prevalence

among Respondents of Modal Ages 18 through 65, by Age Group

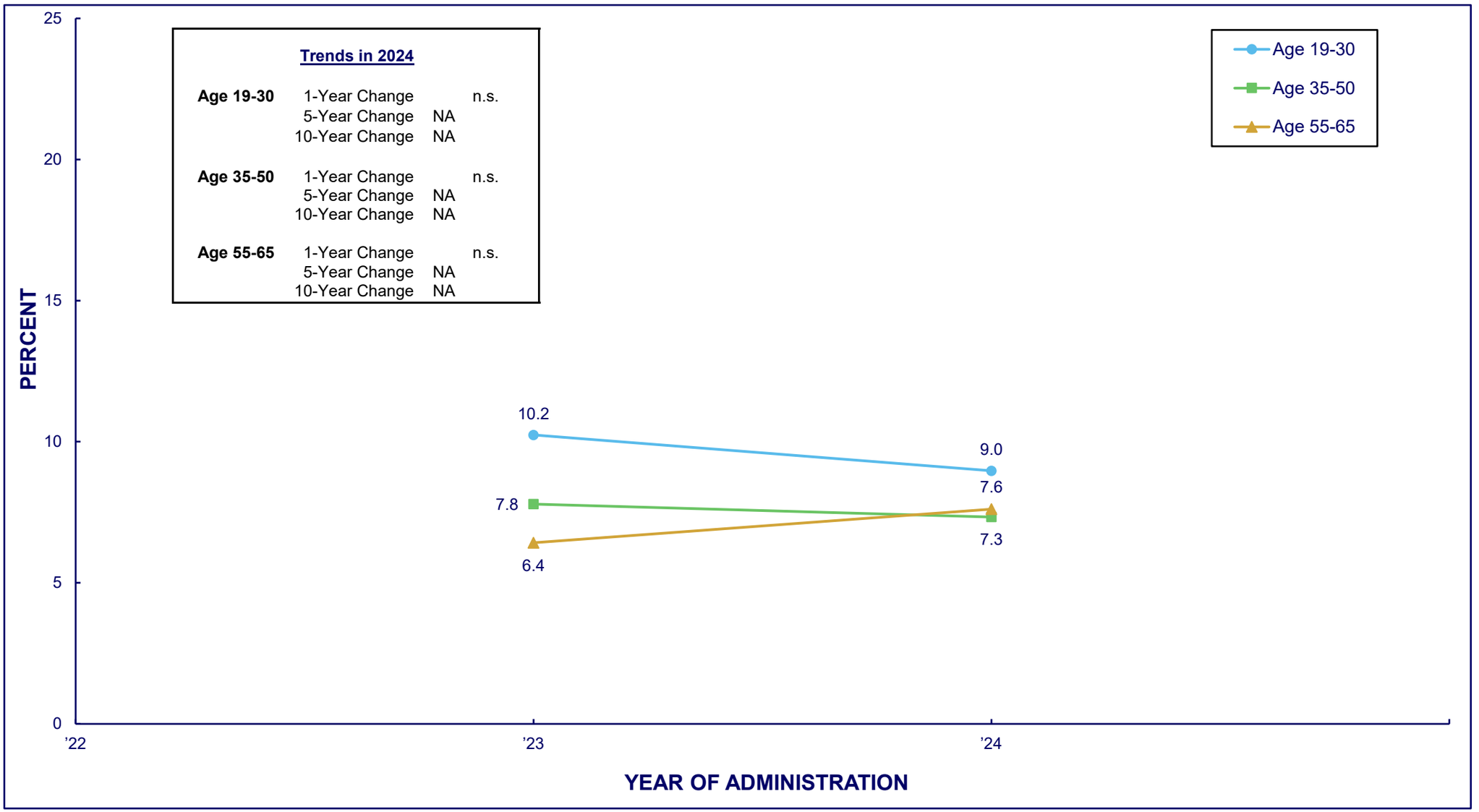
Year	Age 18	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
2017	11.0	5.9	6.2	7.7	5.4	7.3	4.0							
2018	20.9	13.6	14.6	11.4	9.7	5.8	7.0							
2019	25.5	16.4	13.5	12.5	8.4	6.8	7.3	6.5	4.2	3.1	3.0	3.7	1.7	
2020	24.7	18.9	19.9	12.9	13.7	9.1	6.9	3.3	3.0	2.3	2.8	1.6	1.7	
2021	19.6	21.0	24.2	19.4	17.4	11.5	10.6	7.5	5.7	4.0	3.5	2.3	0.7	
2022	20.7	18.7	22.1	22.2	14.5	14.0	12.7	8.7	5.1	4.5	2.5	2.0	1.0	
2023	16.9	22.0	24.2	21.4	20.4	15.8	12.0	7.6	5.4	4.9	3.7	2.8	1.6	2.0
2024	15.0	19.0	19.3	26.7	21.7	16.1	13.1	8.8	6.8	5.3	5.0	2.4	3.5	2.1

MONITORING THE FUTURE

TABLE/FIGURE 45

LARGE CIGARS

Trends in 12-Month Prevalence among Respondents of Modal Ages 19 through 65, by Age Group



(Age-specific data provided in the following table.)

TABLE/FIGURE 46

LARGE CIGARS

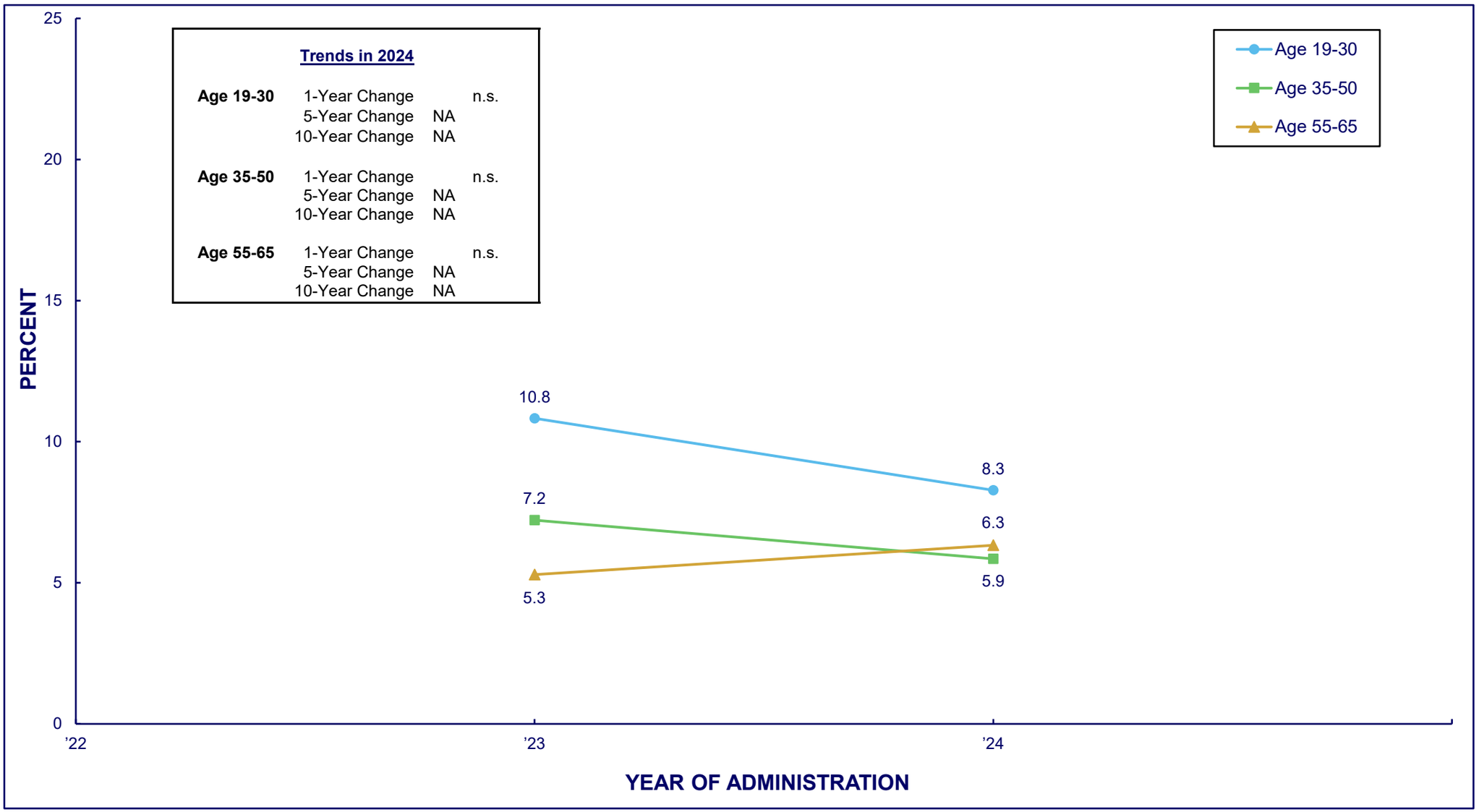
Trends in 12-Month Prevalence among Respondents of Modal Ages 19 through 65, by Age Group

Year	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
2023	6.2	8.2	7.8	11.4	11.8	14.1	8.1	10.7	6.7	6.1	7.0	6.6	5.6
2024	4.6	11.2	9.3	7.3	10.3	10.5	6.3	9.3	7.0	7.0	9.0	6.4	7.5

TABLE/FIGURE 47

SMALL CIGARS

Trends in 12-Month Prevalence among Respondents of Modal Ages 19 through 65, by Age Group



(Age-specific data provided in the following table.)

TABLE/FIGURE 48

SMALL CIGARS

Trends in 12-Month Prevalence

among Respondents of Modal Ages 18 through 65, by Age Group

Year	Age 18	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
2010	23.1													
2011	19.5													
2012	19.9													
2013	20.4													
2014	18.9													
2015	15.9													
2016	15.6													
2017	13.3													
2018	9.2													
2019	7.8													
2020	—													
2021	3.4													
2022	5.6													
2023	4.4	10.4	4.7	10.4	7.2	16.1	13.6	7.9	10.8	5.5	5.1	6.2	5.6	3.9
2024	3.1	4.5	10.6	8.4	7.2	8.1	10.6	6.4	5.8	6.2	5.1	7.9	5.6	5.5

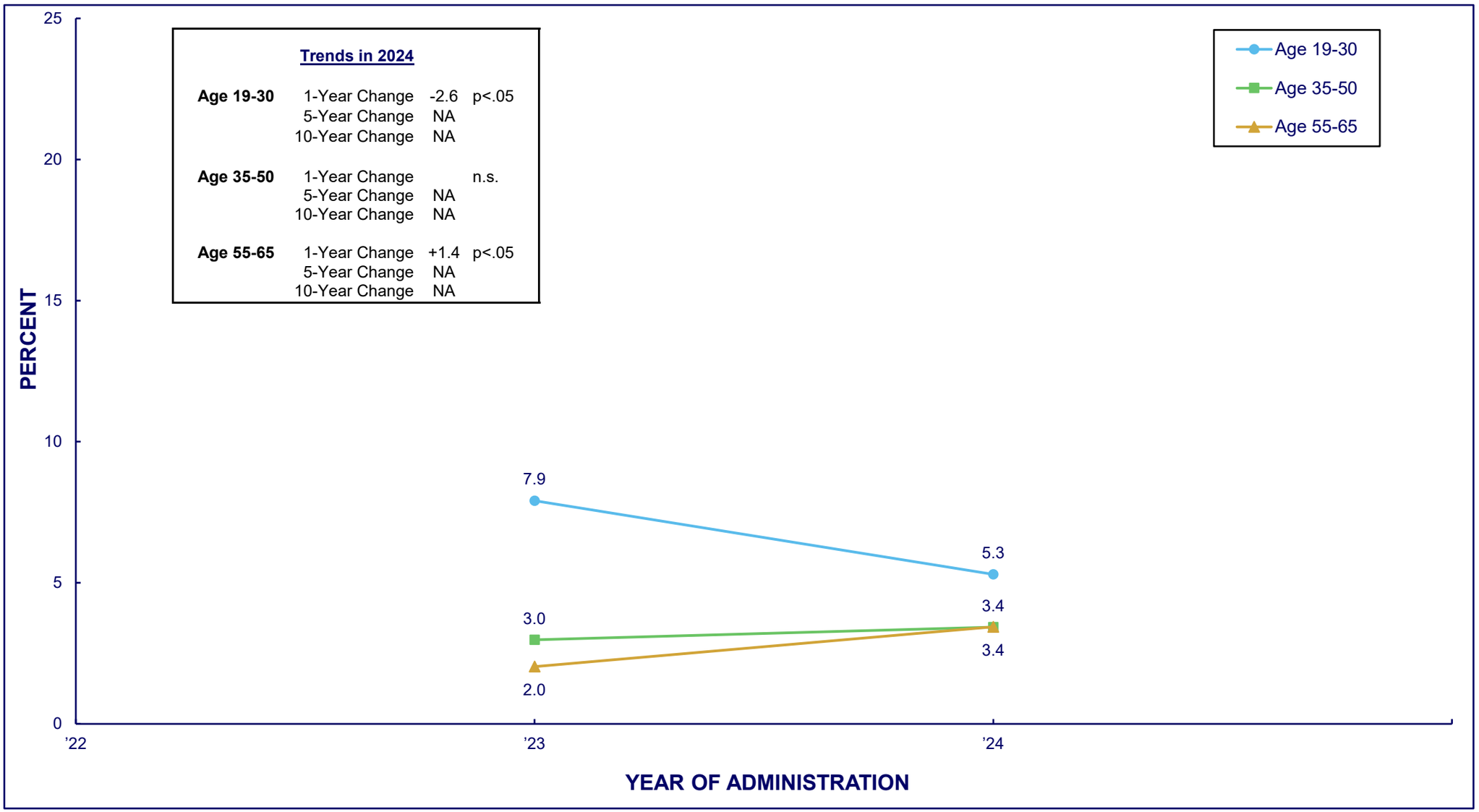
Notes. ' — ' indicates data not available.

MONITORING THE FUTURE

TABLE/FIGURE 49

TOBACCO USING A HOOKAH

Trends in 12-Month Prevalence among Respondents of Modal Ages 19 through 65, by Age Group



(Age-specific data provided in the following table.)

TABLE/FIGURE 50

TOBACCO USING A HOOKAH

Trends in 12-Month Prevalence

among Respondents of Modal Ages 18 through 65, by Age Group

Year	Age 18	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
2010	17.1													
2011	18.5													
2012	18.3													
2013	21.4													
2014	22.9													
2015	19.8													
2016	13.0													
2017	10.1													
2018	7.8													
2019	5.6													
2020	—													
2021	2.1													
2022	3.3													
2023	2.7	3.6	4.6	8.0	12.0	9.2	7.7	3.5	4.6	3.0	1.0	2.2	2.4	1.4
2024	2.0	3.4	3.9	4.4	7.9	5.2	5.8	5.0	2.3	3.3	3.1	4.6	2.3	3.4

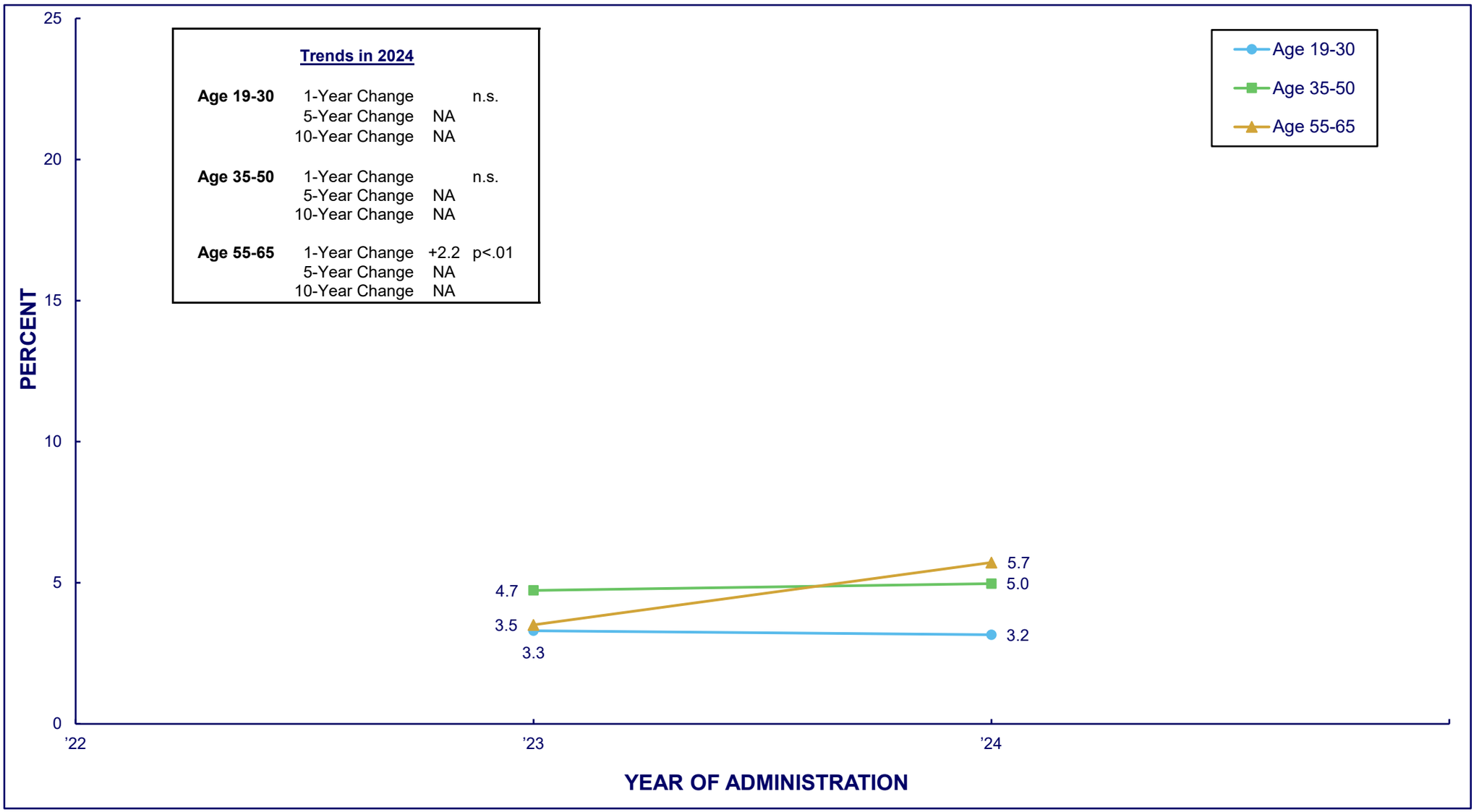
Notes. ' — ' indicates data not available.

MONITORING THE FUTURE

TABLE/FIGURE 51

SMOKELESS TOBACCO

Trends in 12-Month Prevalence among Respondents of Modal Ages 19 through 65, by Age Group



(Age-specific data provided in the following table.)

TABLE/FIGURE 52

SMOKELESS TOBACCO

Trends in 12-Month Prevalence

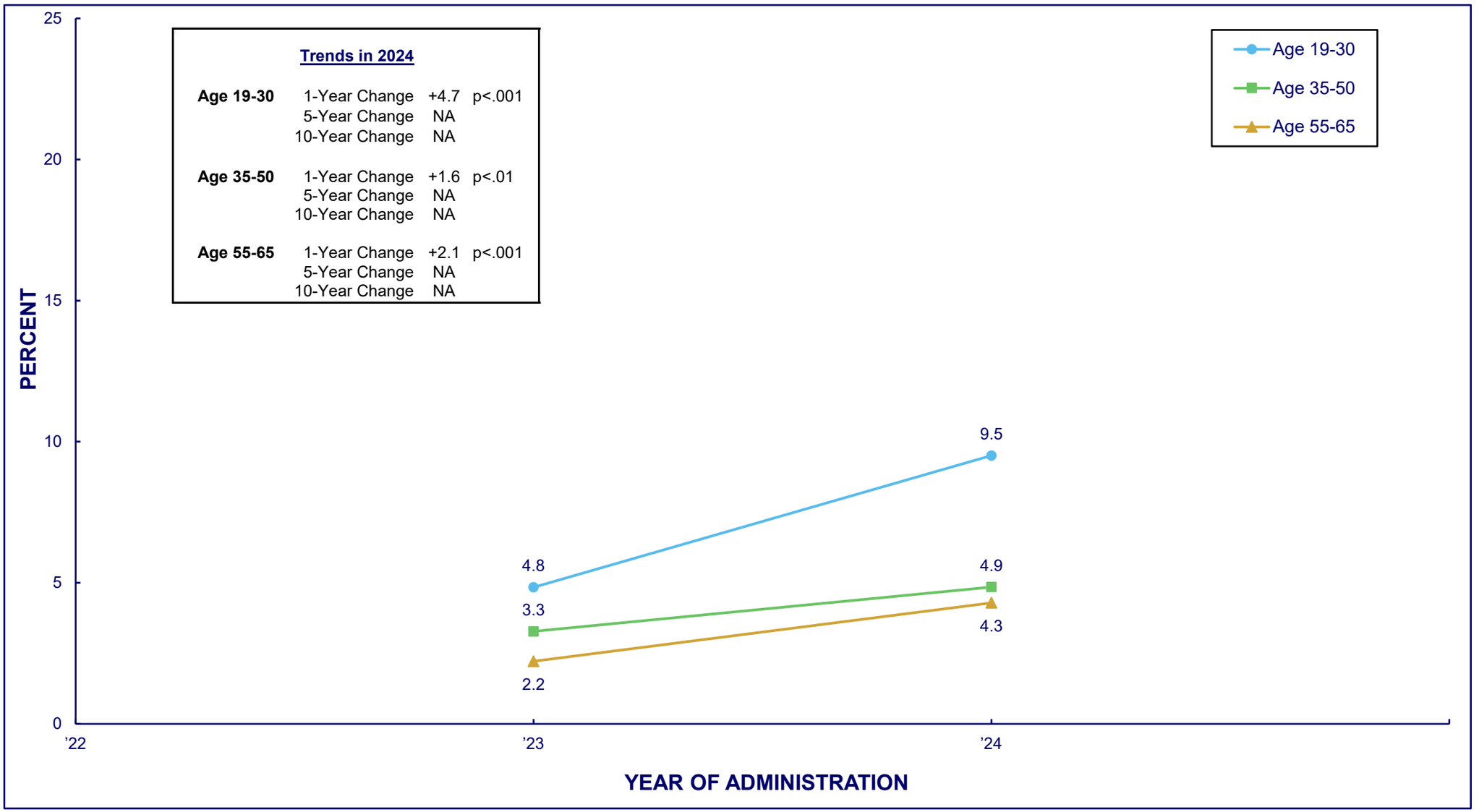
among Respondents of Modal Ages 19 through 65, by Age Group

Year	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
2023	0.6	2.4	6.7	2.7	4.6	1.4	5.5	4.7	4.2	4.5	3.8	4.1	2.5
2024	1.2	4.6	2.1	2.9	2.2	6.1	5.2	4.7	4.4	5.5	7.9	4.3	4.9

TABLE/FIGURE 53

NICOTINE POUCHES

Trends in 12-Month Prevalence among Respondents of Modal Ages 19 through 65, by Age Group



(Age-specific data provided in the following table.)

TABLE/FIGURE 54

NICOTINE POUCHES

Trends in 12-Month Prevalence among Respondents of Modal Ages 18 through 65, by Age Group

Year	Age 18	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
2023	2.9	3.9	6.0	5.7	4.5	6.2	3.0	4.1	4.8	3.2	1.3	2.4	2.6	1.7
2024	5.9	5.3	12.2	9.5	12.4	8.6	9.1	5.8	6.0	3.5	4.3	5.0	3.8	4.1

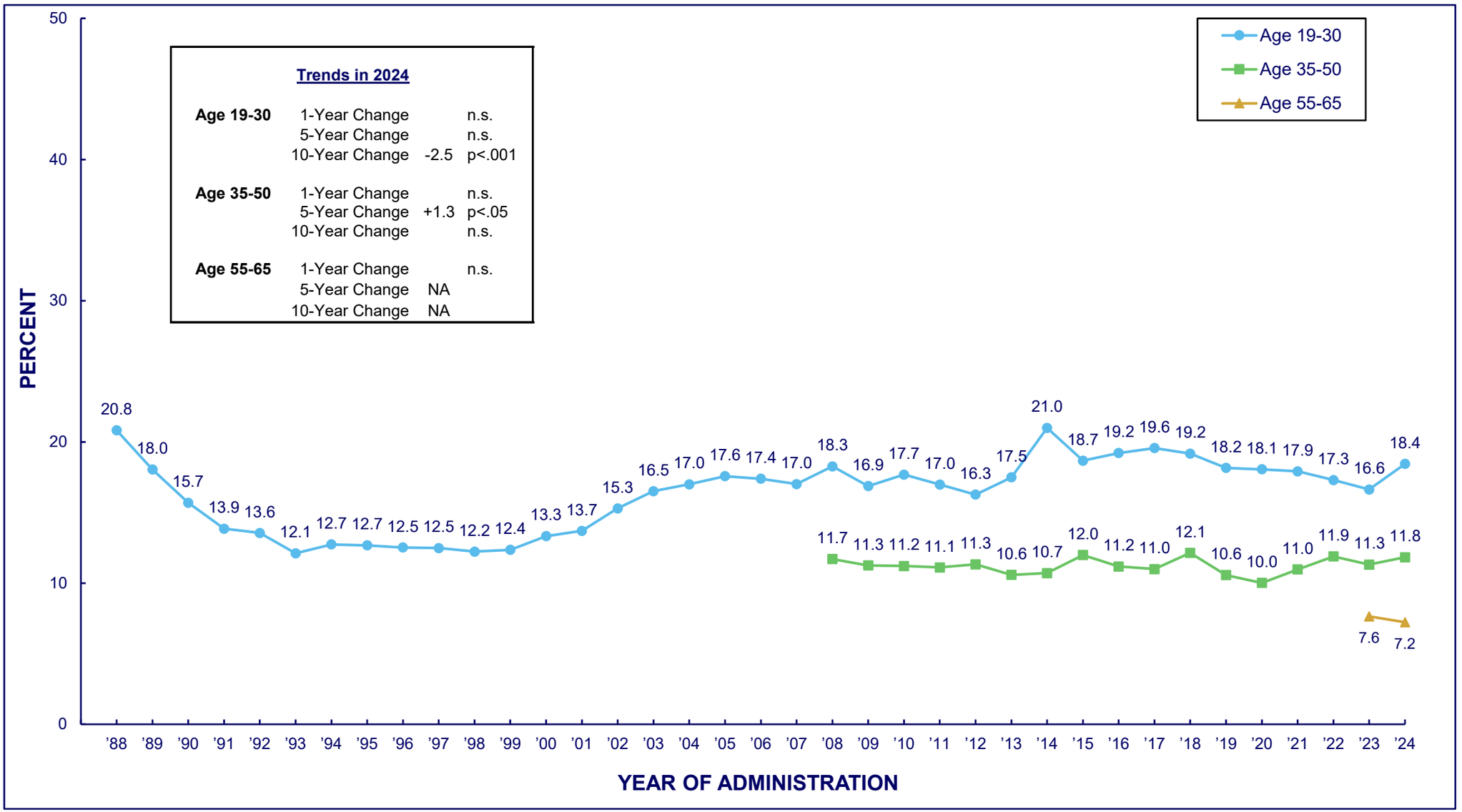
MONITORING THE FUTURE

TABLE/FIGURE 55

ANY DRUG OTHER THAN CANNABIS[1,2]

Trends in 12-Month Prevalence among Respondents of Modal Ages 19 through 65, by Age Group

MONITORING THE FUTURE



[1]An index of non-medical use of any drugs other than cannabis includes hallucinogens (including LSD), cocaine, amphetamines, sedatives (barbiturates), tranquilizers, and narcotics (opioids, including heroin). Prior to 2024, the use of hallucinogens was not measured for those ages 55 and older; beginning in 2024, hallucinogens are included for all ages.

[2]In 2024, the text for many of the questions in this category were changed on half of the survey forms. Reported trends are based on the 2024 estimates from the original version of the question text.

(Age-specific data provided in the following table.)

TABLE/FIGURE 56

ANY DRUG OTHER THAN CANNABIS[1]

Trends in 12-Month Prevalence

among Respondents of Modal Ages 18 through 65, by Age Group

Year	Age 18	Ages 19–20		Ages 21–22		Ages 23–24		Ages 25–26		Ages 27–28		Ages 29–30	
		Original	Revised	Original	Revised	Original	Revised	Original	Revised	Original	Revised	Original	Revised
1976	25.4												
1977	26.0												
1978	27.1	27.7											
1979	28.2	29.3											
1980	30.4	33.2		35.4									
1981	34.0	34.1		36.0									
1982	30.1	32.3		33.8		34.9							
1983	28.4	29.4		33.3		32.8							
1984	28.0	27.5		31.6		29.2		30.1					
1985	27.4	28.3		29.4		33.0		30.0					
1986	25.9	24.9		28.9		29.8		25.6		26.6			
1987	24.1	22.8		26.0		23.1		25.4		23.1			
1988	21.1	20.4		22.6		21.1		21.1		20.7		18.9	
1989	20.0	17.0		19.9		19.4		17.4		18.5		16.2	
1990	17.9	15.9		16.8		17.5		17.0		15.6		11.5	
1991	16.2	14.0		14.3		14.7		15.0		13.8		11.3	
1992	14.9	13.9		14.7		14.6		13.6		13.9		10.6	
1993	17.1	13.4		13.4		12.4		13.3		11.9		8.7	
1994	18.0	15.4		14.7		12.7		12.4		11.1		10.3	
1995	19.4	18.0		14.5		11.6		11.2		11.6		9.2	
1996	19.8	17.4		14.3		13.7		10.1		11.0		9.0	
1997	20.7	17.4		17.0		11.7		10.5		8.6		9.9	
1998	20.2	16.1		15.2		14.3		11.2		9.7		7.2	
1999	20.7	18.5		14.3		14.7		11.7		8.5		7.0	
2000	20.4	19.4		16.4		14.1		13.6		10.3		6.9	
2001	21.6	17.3		19.4		14.2		13.3		11.6		7.1	
2002	20.9	18.9		18.5		17.4		14.6		13.3		9.6	
2003	19.8	19.8		20.8		20.1		14.2		15.1		10.1	
2004	20.5	19.5		20.4		21.0		16.0		14.9		11.2	
2005	19.7	19.5		20.5		17.5		19.6		14.2		14.6	
2006	19.2	18.0		21.8		18.6		17.3		15.5		13.6	
2007	18.5	16.9		19.9		19.3		17.2		16.9		12.2	
2008	18.3	17.2		19.4		20.8		18.9		19.0		14.6	
2009	17.0	14.0		22.0		17.3		18.1		14.4		15.4	
2010	17.3	16.7		20.1		20.2		19.3		16.6		13.0	
2011	17.6	17.7		17.5		18.6		17.8		16.3		13.5	
2012	17.0	15.9		17.6		18.9		15.5		16.9		12.6	
2013	17.8	17.7		21.3		17.6		17.9		16.6		13.5	
2014	15.9	22.0		23.0		21.7		22.3		19.3		17.8	
2015	15.2	17.9		21.8		22.1		18.8		17.8		13.6	
2016	14.3	17.2		24.5		19.6		18.8		19.3		16.0	
2017	13.3	16.7		20.9		23.2		21.5		18.2		16.6	
2018	12.4	13.3		22.0		22.3		20.5		19.2		17.4	
2019	11.5	11.5		20.5		19.5		19.3		19.4		18.7	
2020	11.4	14.5		19.4		19.2		21.3		18.2		15.2	
2021	7.2	15.2		15.0		20.1		21.7		18.3		16.6	
2022	8.0	9.4		13.8		20.0		21.3		19.0		16.3	
2023	7.4	13.8		14.8		13.6		18.2		19.5		18.2	
2024	6.5	11.6	15.9	16.3	13.8	14.9	14.5	22.3	18.5	24.4	16.3	17.2	18.4

(Table continued on next page.)

TABLE/FIGURE 56 (cont.)

ANY DRUG OTHER THAN CANNABIS[1]

Trends in 12-Month Prevalence

among Respondents of Modal Ages 18 through 65, by Age Group

Year	Age 35		Age 40		Age 45		Age 50		Age 55		Age 60		Age 65	
	Original	Revised	Original	Revised	Original	Revised	Original	Revised	Original	Revised	Original	Revised	Original	Revised
1976														
1977														
1978														
1979														
1980														
1981														
1982														
1983														
1984														
1985														
1986														
1987														
1988														
1989														
1990														
1991														
1992														
1993														
1994	11.6													
1995	10.3													
1996	11.3													
1997	10.1													
1998	7.8		9.3											
1999	9.5		8.4											
2000	9.3		7.7											
2001	8.9		7.2											
2002	10.3		9.3											
2003	10.6		6.8		9.6									
2004	10.6		9.2		10.1									
2005	11.0		10.1		8.5									
2006	10.7		10.1		10.0									
2007	11.2		12.0		10.9									
2008	13.8		11.8		10.6		10.7							
2009	13.2		10.4		10.4		11.1							
2010	12.6		9.6		11.9		10.8							
2011	14.7		9.2		10.3		10.3							
2012	12.8		10.6		11.4		10.5							
2013	13.2		11.3		10.4		8.1		6.9					
2014	16.1		9.1		8.6		9.3		7.9					
2015	16.0		10.6		10.4		11.4		8.6					
2016	14.8		12.3		8.7		9.6		9.0					
2017	13.6		11.2		9.7		9.9		8.2					
2018	15.0		10.7		11.2		11.9		9.8		7.6			
2019	14.3		11.2		9.4		8.1		9.2		7.0			
2020	13.7		10.8		8.8		7.1		9.3		7.2			
2021	13.2		10.2		12.0		8.6		7.1		8.3			
2022	14.6		13.4		10.7		9.0		8.4		7.5			
2023	16.7		11.3		10.0		7.5		9.9		7.1		6.0	
2024	12.9	15.6	14.1	13.4	12.8	14.5	7.3	12.8	11.8	8.8	5.1	10.0	4.2	8.7

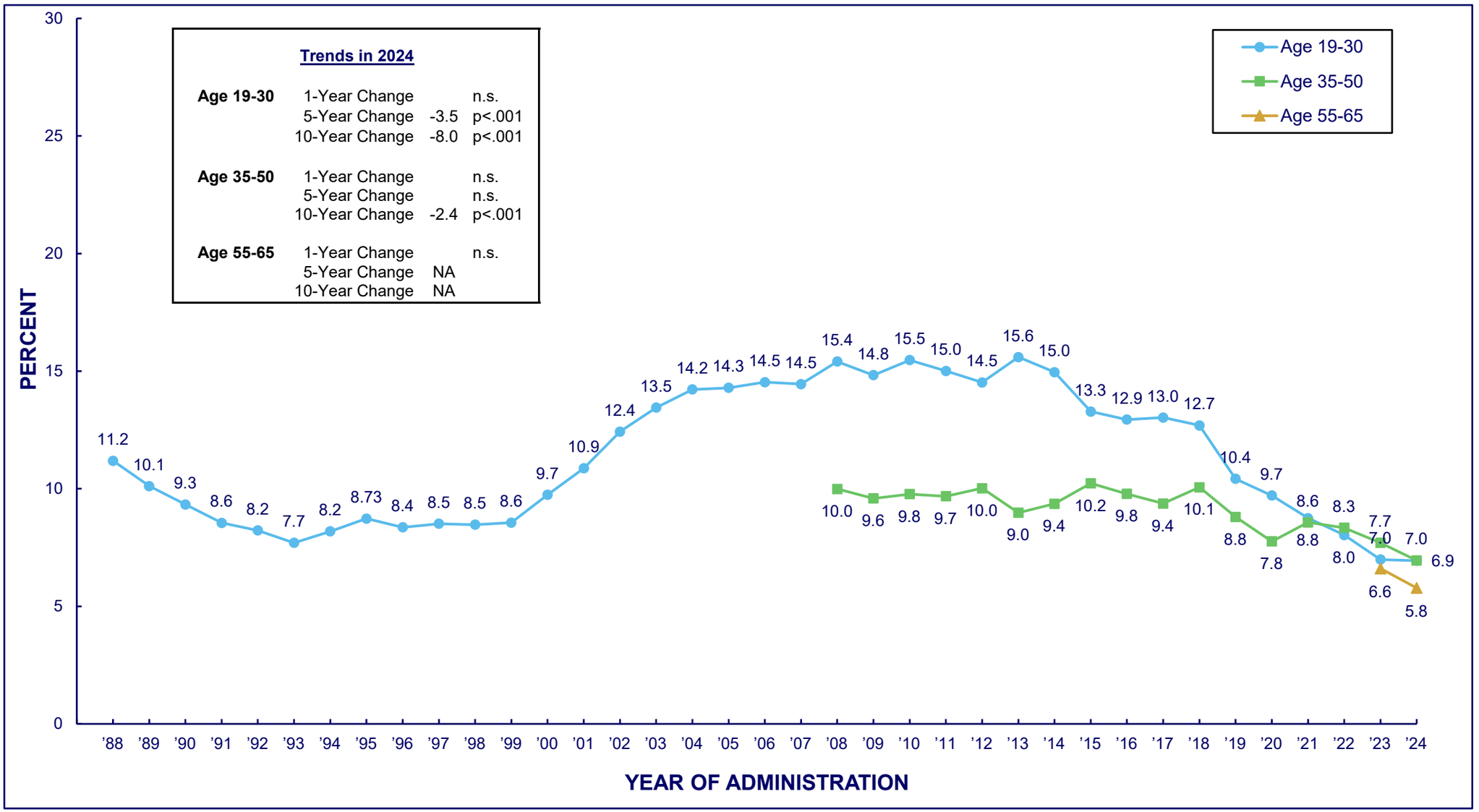
[1]In 2024, the text for this question was changed on half of the survey forms. Estimates for both the original version and the new version of the question are presented here. For details on the survey items, please refer to Table/Figure 91.

TABLE/FIGURE 57

ANY PRESCRIPTION DRUG (NONMEDICAL USE)[1,2]

Trends in 12-Month Prevalence among Respondents of Modal Ages 19 through 65, by Age Group

MONITORING THE FUTURE



[1]An index of non-medical use of any prescription drug includes amphetamines, sedatives (barbiturates), tranquilizers, and narcotics other than heroin.

[2]In 2024, the text for many of the questions in this category were changed on half of the survey forms. Reported trends are based on the 2024 estimates from the original version of the question text.

(Age-specific data provided in the following table.)

TABLE/FIGURE 58

ANY PRESCRIPTION DRUG (NONMEDICAL USE)[1]

Trends in 12-Month Prevalence

among Respondents of Modal Ages 18 through 65, by Age Group

Year	Age 18	Ages 19–20		Ages 21–22		Ages 23–24		Ages 25–26		Ages 27–28		Ages 29–30	
		Original	Revised	Original	Revised	Original	Revised	Original	Revised	Original	Revised	Original	Revised
1976													
1977													
1978		23.7											
1979		25.5											
1980		28.2		29.6									
1981		29.8		30.2									
1982		27.0		26.4		26.2							
1983		24.5		23.6		23.5							
1984		20.1		21.3		19.0		18.6					
1985		18.7		17.9		19.1		18.9					
1986		15.2		17.1		16.7		13.0		13.7			
1987		13.3		15.2		12.6		13.2		13.2			
1988		13.0		12.7		11.6		10.2		9.9		9.9	
1989		10.9		11.4		10.3		9.9		9.5		8.7	
1990		11.1		9.9		10.0		10.0		7.7		7.4	
1991		9.3		9.2		8.5		8.2		8.2		7.9	
1992		8.8		9.2		8.4		8.5		8.0		6.6	
1993		8.6		8.9		8.0		7.8		7.0		6.1	
1994		10.0		9.4		8.4		8.2		7.0		6.4	
1995		12.4		10.3		7.4		7.2		7.8		7.4	
1996		12.1		9.5		8.8		6.1		6.9		6.9	
1997		11.6		12.8		7.3		6.4		5.6		7.6	
1998		11.7		9.8		9.9		7.6		6.7		5.3	
1999		13.5		9.3		9.7		8.0		5.9		5.3	
2000		15.7		11.3		10.1		9.5		6.8		5.6	
2001		13.7		14.9		11.6		9.8		8.7		7.1	
2002		15.5		14.9		13.8		12.0		10.6		8.3	
2003		17.1		16.5		16.4		11.8		11.4		8.5	
2004		17.4		16.1		17.0		12.9		12.3		10.6	
2005	17.1	15.6		17.1		13.9		15.0		10.8		13.7	
2006	16.8	14.3		18.6		15.6		14.0		12.7		12.3	
2007	15.8	14.6		17.3		16.9		13.6		13.5		11.1	
2008	15.4	14.8		15.3		17.9		15.7		15.5		13.5	
2009	14.4	12.3		19.0		14.1		16.4		12.0		15.2	
2010	15.0	14.7		17.6		17.3		17.2		13.5		12.3	
2011	15.2	15.7		15.3		15.8		15.6		14.4		13.1	
2012	14.8	13.7		16.0		16.0		14.0		15.2		12.1	
2013	15.9	16.5		19.0		15.0		15.0		14.6		13.2	
2014	13.9	16.0		16.6		14.0		15.4		13.3		14.6	
2015	12.9	13.1		14.9		15.2		12.5		12.3		11.7	
2016	12.0	12.1		18.1		11.7		12.1		11.6		12.3	
2017	10.9	10.8		13.8		14.7		13.7		12.2		12.7	
2018	9.9	8.3		14.3		14.8		12.6		12.4		13.5	
2019	8.6	6.6		12.0		11.0		9.9		11.4		11.6	
2020	7.6	7.9		9.3		9.6		11.6		10.0		9.4	
2021	4.4	5.8		8.2		8.7		10.7		8.5		9.4	
2022	5.0	5.5		5.2		8.6		9.9		9.0		8.8	
2023	4.2	5.3		5.6		5.8		6.2		10.9		7.3	
2024	3.3	4.1	8.5	5.3	5.2	3.6	6.2	7.0	6.2	9.6	9.3	9.9	12.2

(Table continued on next page.)

TABLE/FIGURE 58 (cont.)

ANY PRESCRIPTION DRUG (NONMEDICAL USE)[1]

Trends in 12-Month Prevalence

among Respondents of Modal Ages 18 through 65, by Age Group

Year	Age 35		Age 40		Age 45		Age 50		Age 55		Age 60		Age 65	
	Original	Revised	Original	Revised	Original	Revised	Original	Revised	Original	Revised	Original	Revised	Original	Revised
1976														
1977														
1978														
1979														
1980														
1981														
1982														
1983														
1984														
1985														
1986														
1987														
1988														
1989														
1990														
1991														
1992														
1993														
1994	7.5													
1995	6.9													
1996	6.9													
1997	6.5													
1998	4.4		5.6											
1999	6.3		4.7											
2000	5.6		5.3											
2001	7.2		5.4											
2002	8.3		6.8											
2003	8.9		4.1		6.1									
2004	8.5		6.4		7.1									
2005	9.4		7.2		6.4									
2006	9.3		8.4		7.8									
2007	9.5		10.2		8.8									
2008	12.5		10.4		8.5		8.8							
2009	11.4		9.5		8.5		9.1							
2010	11.0		8.4		10.3		9.4							
2011	12.4		8.3		8.7		9.5							
2012	11.0		9.3		10.4		9.3							
2013	10.7		9.7		8.7		7.1		6.0					
2014	14.1		7.8		7.8		8.1		6.4					
2015	12.3		10.0		9.3		9.5		7.9					
2016	13.0		10.8		8.0		8.0		7.9					
2017	11.4		9.5		8.6		8.3		6.9					
2018	12.9		8.2		8.5		11.0		8.0		6.2			
2019	10.9		8.9		8.0		7.8		8.2		6.0			
2020	10.4		7.7		7.4		5.8		7.3		6.7			
2021	8.6		8.2		9.6		7.8		6.4		7.7			
2022	9.8		9.1		7.2		7.3		7.6		7.0			
2023	10.1		7.6		7.5		5.7		8.5		6.1		5.2	
2024	6.6	10.2	9.0	7.4	7.2	10.1	4.9	10.6	9.5	7.7	4.0	9.2	3.4	8.0

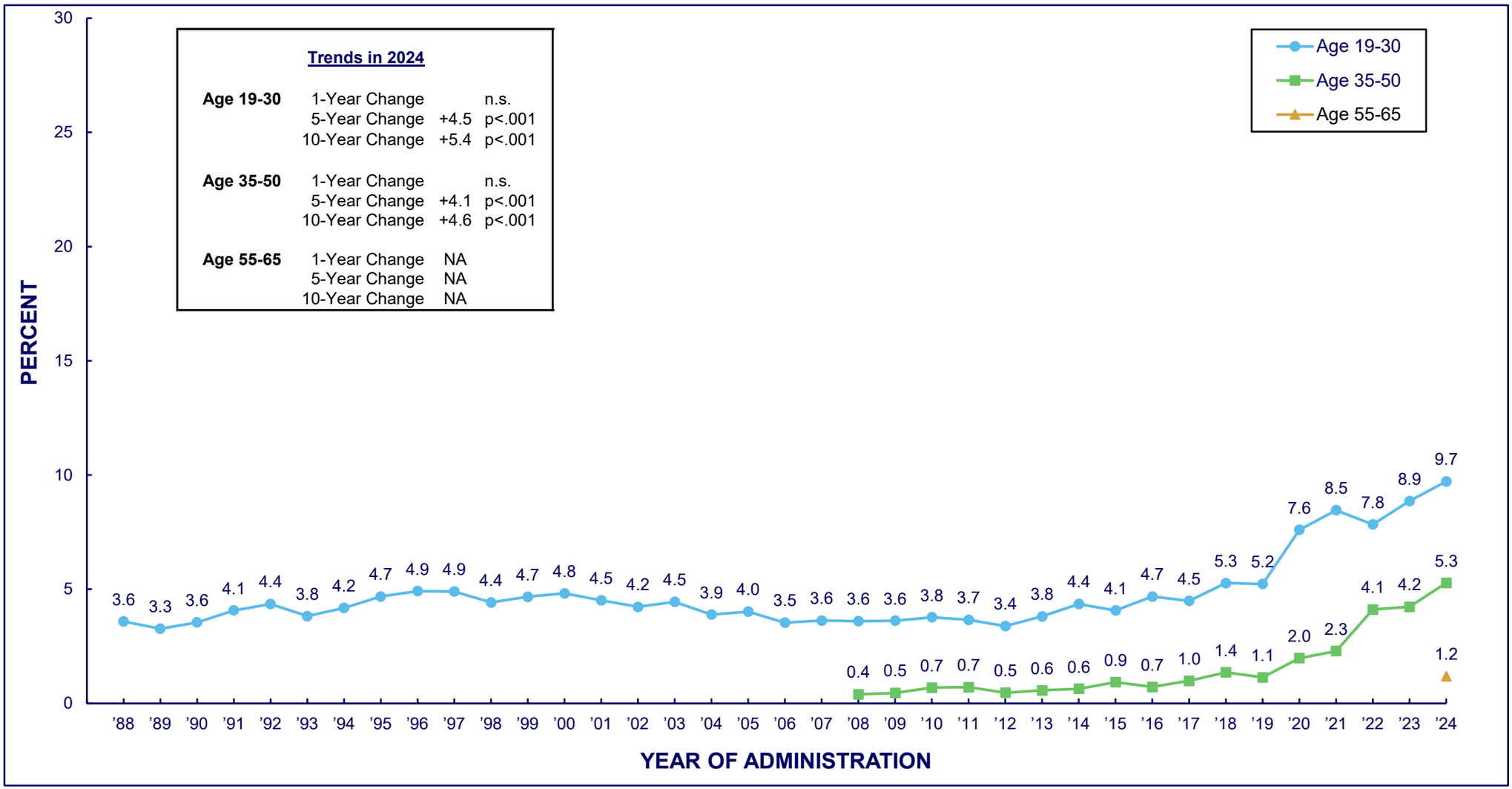
[1]In 2024, the text for this question was changed on half of the survey forms. Estimates for both the original version and the new version of the question are presented here. For details on the survey items, please refer to Table/Figure 91.

TABLE/FIGURE 59

HALLUCINOGENS/PSYCHEDELICS[1]

Trends in 12-Month Prevalence among Respondents of Modal Ages 19 through 65, by Age Group

MONITORING THE FUTURE



[1]Question text changed in 2024 as detailed below:

New question text: On how many occasions (if any) have you used hallucinogens or psychedelic drugs (like mescaline, peyote, "shrooms" or psilocybin, PCP)...

Previous question text: On how many occasions (if any) have you used LSD ("acid") or other hallucinogens (like mescaline, peyote, "shrooms" or psilocybin, PCP)…

(Age-specific data provided in the following table.)

TABLE/FIGURE 60

HALLUCINOGENS/PSYCHEDELICS

Trends in 12-Month Prevalence

among Respondents of Modal Ages 18 through 65, by Age Group

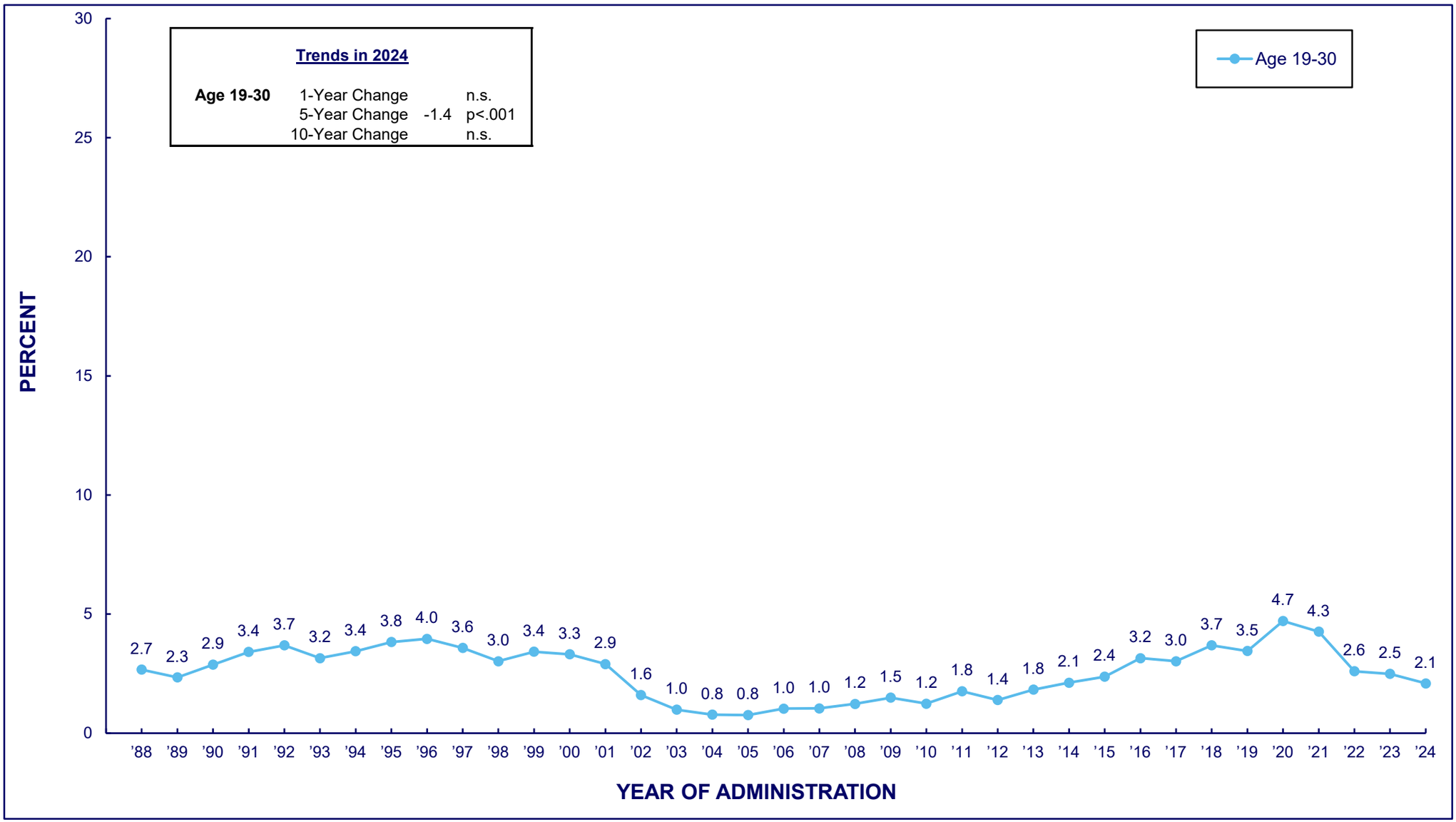
Year	Age 18	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
1976	9.4													
1977	8.8													
1978	9.6	9.1												
1979	9.9	10.8												
1980	9.3	9.8	9.8											
1981	9.0	9.2	11.0											
1982	8.1	10.2	9.2	7.9										
1983	7.3	7.6	7.6	7.5										
1984	6.5	6.1	7.5	5.5	4.7									
1985	6.3	5.9	6.0	4.8	5.0									
1986	6.0	7.1	5.5	4.7	3.1	2.5								
1987	6.4	6.3	5.4	4.1	2.5	2.8								
1988	5.5	5.8	6.0	3.8	2.7	1.4	2.1							
1989	5.6	5.9	4.6	3.9	2.1	1.7	1.6							
1990	5.9	6.3	5.3	4.5	2.3	1.9	1.3							
1991	5.8	6.5	5.9	4.7	3.3	2.6	1.5							
1992	5.9	7.1	6.9	4.2	3.9	2.3	2.0							
1993	7.4	7.1	4.9	4.6	3.2	2.1	1.4							
1994	7.6	7.5	7.0	4.3	2.7	2.5	1.5	0.7						
1995	9.3	9.5	5.9	4.8	3.6	2.4	1.9	0.6						
1996	10.1	10.6	6.8	5.6	3.3	2.1	1.3	0.6						
1997	9.8	10.1	7.6	5.0	3.8	1.7	1.6	1.1						
1998	9.0	7.6	6.6	5.7	3.5	2.2	1.2	0.4	0.8					
1999	9.4	9.4	7.1	6.0	2.7	1.5	1.5	0.8	0.4					
2000	8.1	8.5	7.4	4.6	4.2	2.8	1.9	0.5	1.1					
2001	9.1	8.7	8.0	4.6	3.2	1.8	1.5	0.7	0.1					
2002	6.6	7.0	5.9	5.3	3.0	2.3	2.4	0.2	0.6					
2003	5.9	7.8	7.1	5.7	3.0	2.4	1.5	0.6	0.5	0.6				
2004	6.2	6.1	6.5	4.2	3.2	2.3	1.6	0.9	0.5	0.3				
2005	5.5	6.2	5.6	3.8	4.1	2.2	2.4	0.3	0.4	0.1				
2006	4.9	5.8	5.5	4.4	2.3	2.1	1.4	0.3	0.1	0.1				
2007	5.4	5.4	4.7	4.0	3.3	2.9	1.5	0.4	0.5	0.3				
2008	5.9	5.3	5.0	3.5	3.2	1.9	2.7	1.2	0.1	0.1	0.2			
2009	4.7	4.7	5.3	4.0	3.5	2.2	2.0	0.9	0.4	0.3	0.3			
2010	5.5	5.3	5.0	4.8	3.5	2.0	1.9	1.9	0.5	0.3	0.2			
2011	5.2	5.0	5.4	3.4	3.1	2.8	2.2	1.5	0.6	0.6	0.1			
2012	4.8	5.4	4.1	3.5	2.7	2.2	2.4	1.0	0.2	0.5	0.2			
2013	4.5	5.4	4.6	4.2	3.0	2.9	2.7	1.4	0.7	0.2	0.0			
2014	4.0	7.0	5.9	4.8	3.3	2.7	2.7	1.3	0.3	0.6	0.4			
2015	4.2	5.7	6.2	3.5	4.6	2.1	2.6	2.8	0.6	0.1	0.4			
2016	4.3	4.7	6.5	4.9	5.6	2.5	4.1	1.4	1.0	0.2	0.4			
2017	4.4	4.7	5.4	5.8	5.4	3.5	2.2	1.7	1.3	0.7	0.3			
2018	4.3	5.6	6.2	5.0	5.1	6.5	3.4	1.7	2.1	1.1	0.6			
2019	4.6	5.1	6.9	5.3	5.3	3.7	5.2	2.9	1.1	0.6	0.2			
2020	5.3	7.5	10.1	8.8	8.7	5.5	5.5	2.9	2.5	1.7	1.0			
2021	4.1	10.9	7.0	9.3	9.6	7.7	7.5	3.5	3.1	2.3	0.5			
2022	4.4	3.6	8.4	8.9	9.5	9.1	5.5	5.9	4.8	3.8	2.0			
2023	4.3	9.4	8.7	6.7	10.5	8.5	9.6	7.1	4.2	2.9	2.8	1.7		
2024	3.7	6.4	8.8	8.2	12.2	10.4	10.6	6.8	6.7	5.4	2.6	1.7	1.5	0.3

MONITORING THE FUTURE

TABLE/FIGURE 61

LSD

Trends in 12-Month Prevalence among Respondents of Modal Ages 19 through 30



(Age-specific data provided in the following table.)

TABLE/FIGURE 62

LSD

Trends in 12-Month Prevalence

among Respondents of Modal Ages 18 through 35 [2], by Age Group

Year	Age 18	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30	Age 35
1976	6.4							
1977	5.5							
1978	6.3	5.9						
1979	6.6	8.0						
1980	6.5	7.4	7.4					
1981	6.5	6.8	8.2					
1982	6.1	7.8	6.8	5.9				
1983	5.4	5.6	5.2	4.7				
1984	4.7	4.3	5.2	3.2	2.7			
1985	4.4	3.9	3.4	2.8	3.1			
1986	4.5	5.0	4.2	2.8	1.5	1.7		
1987	5.2	5.2	3.9	2.4	1.6	2.0		
1988	4.8	4.8	4.3	2.9	1.8	0.9	1.4	
1989	4.9	4.5	3.5	2.7	1.4	1.2	0.8	
1990	5.4	5.4	4.4	3.6	1.8	1.6	0.9	
1991	5.2	5.7	5.1	4.1	2.7	2.0	1.1	
1992	5.6	6.7	5.7	3.5	3.3	1.7	1.5	
1993	6.8	6.2	4.2	3.4	2.6	1.8	1.0	
1994	6.9	6.9	6.0	3.3	2.2	1.6	1.0	0.4
1995	8.4	8.1	5.0	4.1	2.5	1.8	1.5	0.4
1996	8.8	9.2	5.4	4.9	2.1	1.6	0.9	0.5
1997	8.4	8.0	5.2	3.9	2.7	1.3	0.8	0.5
1998	7.6	5.7	4.4	4.1	2.2	1.1	0.9	0.2
1999	8.1	7.9	4.7	4.4	2.0	1.1	0.7	0.6
2000	6.6	6.7	4.8	2.6	3.0	1.8	1.2	0.3
2001	6.6	6.5	4.7	2.7	1.8	1.4	0.9	0.5
2002	3.5	3.3	1.9	2.2	0.9	0.6	1.0	*
2003	1.9	1.7	1.5	1.3	0.7	0.6	0.4	*
2004	2.2	1.4	1.5	0.9	0.6	0.3	0.2	0.3
2005	1.8	1.4	1.0	0.8	0.8	0.2	0.4	0.2
2006	1.7	2.2	1.5	0.9	0.9	0.7	0.2	*
2007	2.1	1.4	1.2	1.4	1.3	0.7	0.4	—
2008	2.7	1.9	2.3	0.9	1.0	0.6	0.6	—
2009	1.9	2.5	2.3	1.7	1.4	1.0	0.3	—
2010	2.6	2.4	1.6	1.5	1.1	0.6	0.3	—
2011	2.7	3.1	3.0	1.6	1.2	0.4	1.2	—
2012	2.4	2.6	1.7	1.6	1.3	0.5	0.5	—
2013	2.2	2.8	2.8	2.2	1.6	0.7	0.9	—
2014	2.5	3.7	3.2	2.4	1.6	1.1	0.7	—
2015	2.9	3.5	4.2	2.0	2.8	0.7	1.1	—
2016	3.0	4.1	4.0	3.7	3.9	1.1	2.3	—
2017	3.3	3.1	4.0	4.1	3.9	2.4	0.8	—
2018	3.2	4.8	5.0	2.6	3.2	4.5	2.2	—
2019	3.6	3.5	4.1	3.7	4.5	1.9	3.1	—
2020	3.9	5.7	7.4	4.9	5.6	2.8	2.4	—
2021	2.5	7.0	4.3	3.9	5.8	3.3	2.6	—
2022	2.5	1.5	2.7	3.8	3.3	2.9	1.1	—
2023	1.2	2.6	1.5	2.3	4.3	1.8	2.2	—
2024	0.8	1.2	1.6	1.4	3.7	1.4	2.7	—

Notes. ' * ' indicates a percentage of less than 0.05%. ' — ' indicates data not available.

[1]Questions about LSD use were not included in the questionnaires for ages 40 and older, or age 35 after 2006.

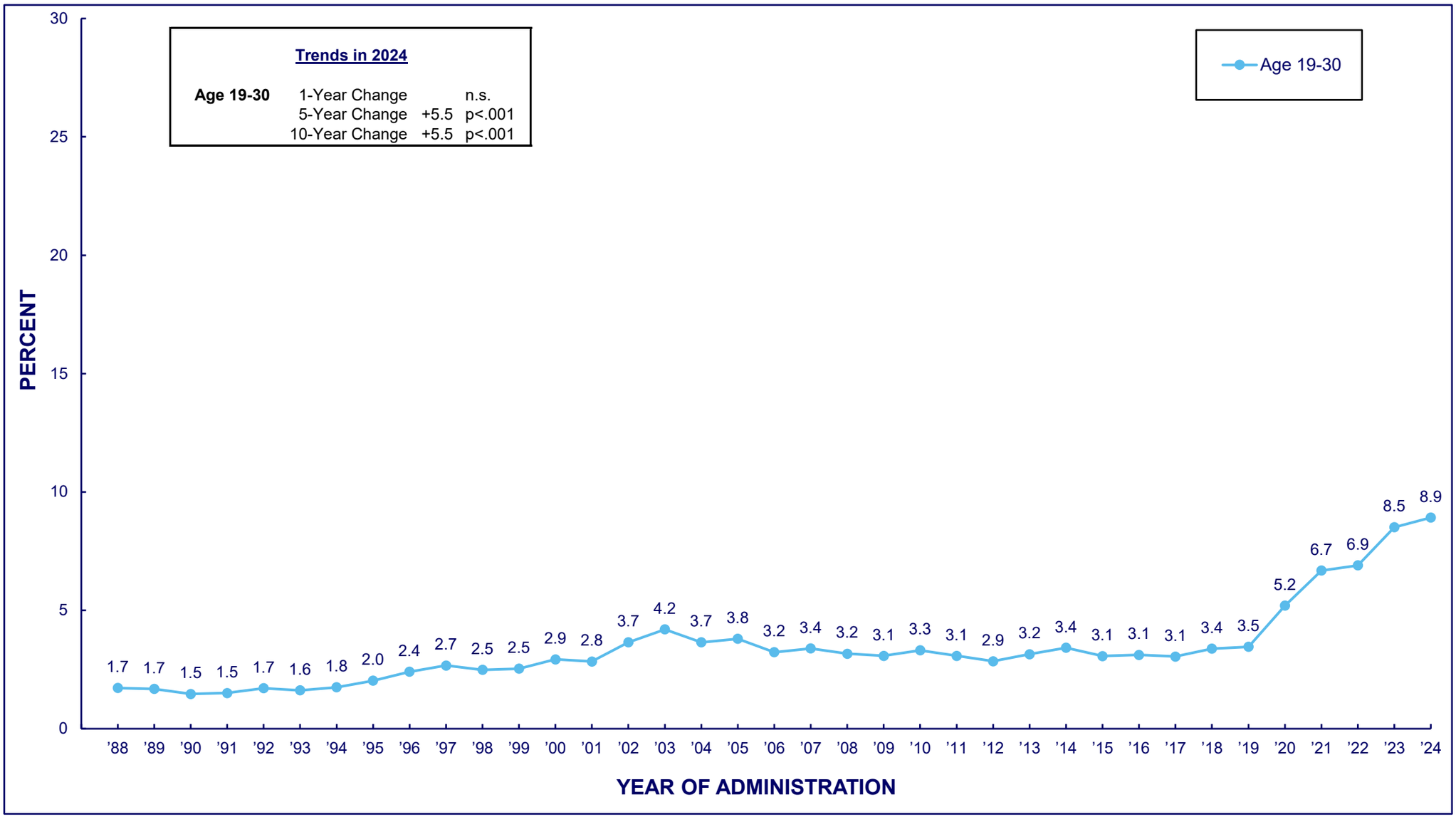
MONITORING THE FUTURE

TABLE/FIGURE 63

HALLUCINOGENS/PSYCHEDELICS OTHER THAN LSD[1]

Trends in 12-Month Prevalence among Respondents of Modal Ages 19 through 30

MONITORING THE FUTURE



[1]Question text changed in 2024 as detailed below:

New question text: On how many occasions (if any) have you used hallucinogens other than LSD (like mescaline, peyote, "shrooms" or psilocybin, PCP)...

Previous question text: On how many occasions (if any) have you used LSD ("acid") or other hallucinogens (like mescaline, peyote, "shrooms" or psilocybin, PCP)…

(Age-specific data provided in the following table.)

TABLE/FIGURE 64

HALLUCINOGENS/PSYCHEDELICS OTHER THAN LSD

Trends in 12-Month Prevalence

among Respondents of Modal Ages 18 through 30, by Age Group

Year	Age 18	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30
1976	7.0						
1977	6.9						
1978	7.3	6.9					
1979	6.8	7.2					
1980	6.2	5.5	5.7				
1981	5.6	4.8	6.5				
1982	4.7	6.2	5.2	3.9			
1983	4.1	4.0	4.3	4.2			
1984	3.8	3.3	4.1	3.6	3.1		
1985	3.6	3.7	3.8	2.9	2.8		
1986	3.0	3.9	2.4	2.7	2.0	1.4	
1987	3.2	2.6	2.7	2.6	1.3	1.5	
1988	2.1	2.4	3.2	1.8	1.2	0.7	1.0
1989	2.2	3.0	2.2	2.0	1.3	0.7	1.0
1990	2.1	2.4	2.7	1.6	0.9	0.8	0.6
1991	2.0	2.5	2.2	1.5	1.2	1.1	0.5
1992	1.7	2.2	3.0	1.8	1.6	0.8	0.9
1993	2.2	2.8	1.8	2.2	1.4	0.8	0.8
1994	3.1	2.4	3.0	2.0	1.1	1.3	0.8
1995	3.8	3.9	3.0	1.8	1.7	1.2	0.6
1996	4.4	4.4	3.9	3.0	1.6	1.0	0.7
1997	4.6	5.3	4.9	2.3	1.6	0.9	1.2
1998	4.6	4.4	3.5	3.2	1.9	1.5	0.6
1999	4.3	4.0	4.4	3.7	1.5	0.7	1.0
2000	4.4	4.8	4.7	3.4	2.1	1.7	1.1
2001	5.9	5.2	5.6	3.0	1.9	0.9	0.9
2002	5.4	6.2	5.4	4.3	2.6	1.9	2.0
2003	5.4	7.4	6.9	5.4	2.7	2.2	1.4
2004	5.6	5.8	6.1	3.8	3.1	2.2	1.5
2005	5.0	6.0	5.2	3.6	3.8	2.2	2.2
2006	4.6	5.3	5.1	4.2	2.0	1.7	1.3
2007	4.8	5.2	4.6	3.5	2.7	2.8	1.5
2008	5.0	4.8	4.3	3.2	2.8	1.7	2.3
2009	4.2	4.0	4.3	3.3	3.1	1.9	1.9
2010	4.8	4.7	4.4	4.1	3.0	1.8	1.8
2011	4.3	3.9	4.2	2.9	3.0	2.7	1.7
2012	4.0	4.5	3.5	2.7	2.1	2.1	2.2
2013	3.7	4.4	3.7	3.5	2.3	2.6	2.4
2014	3.0	5.7	4.7	3.5	2.5	2.2	2.2
2015	2.9	4.3	4.3	2.7	3.3	1.9	2.2
2016	2.7	3.0	4.8	3.4	2.9	1.8	3.0
2017	2.9	3.1	3.3	3.7	4.1	2.4	1.8
2018	2.7	2.8	3.8	3.6	3.4	3.7	2.9
2019	2.7	3.1	4.5	3.4	3.9	2.7	3.3
2020	2.8	5.4	6.8	6.5	5.4	3.8	3.6
2021	2.9	8.3	4.8	6.9	7.8	6.7	6.2
2022	3.4	3.1	7.4	7.3	8.4	8.1	5.2
2023	4.0	9.0	8.6	5.6	10.1	8.4	9.5
2024	3.6	6.3	7.1	7.3	11.1	10.0	9.9

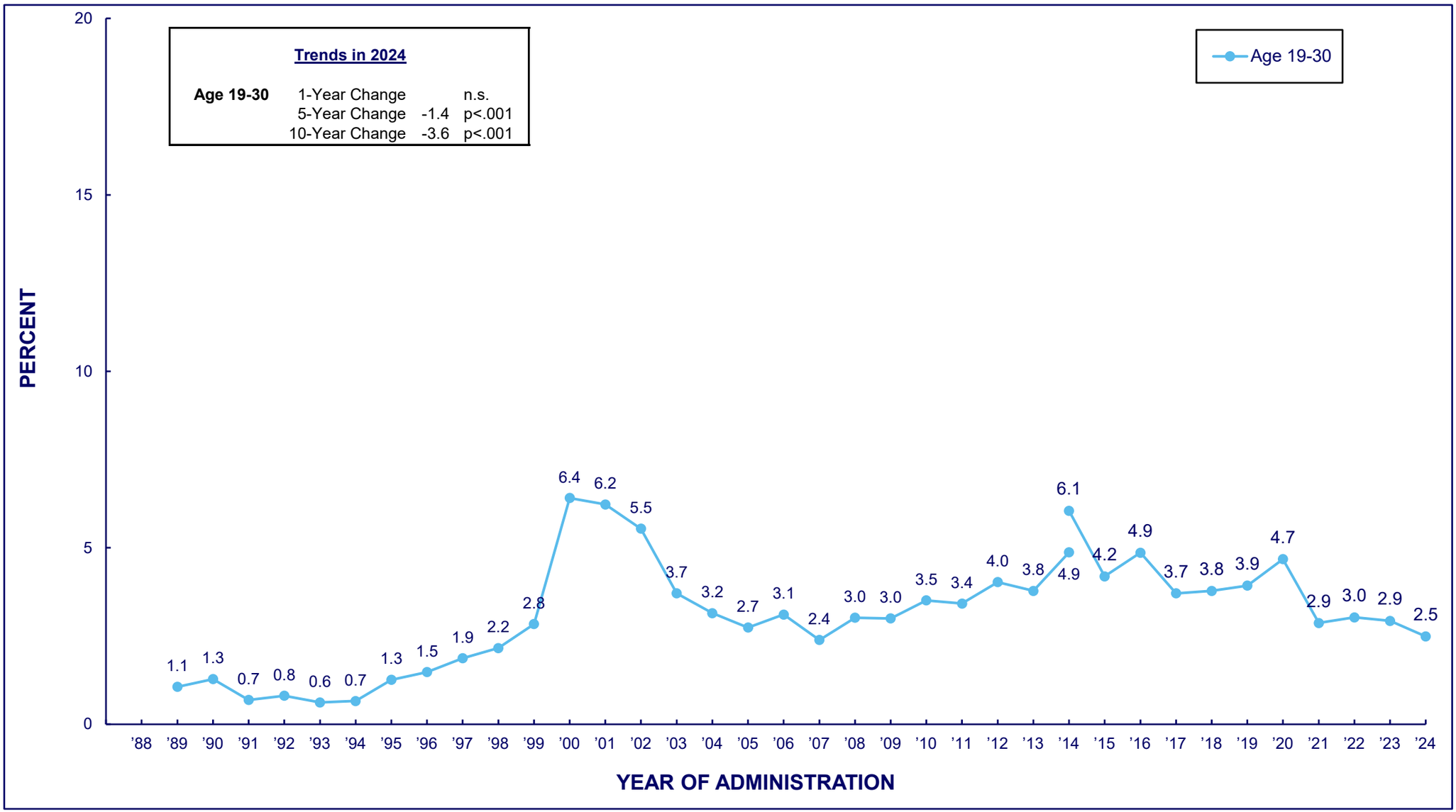
Notes. ' * ' indicates a percentage of less than 0.05%. ' — ' indicates data not available.

MONITORING THE FUTURE

TABLE/FIGURE 65

MDMA (ECSTASY, MOLLY)

Trends in 12-Month Prevalence among Respondents of Modal Ages 19 through 30



(Age-specific data provided in the following table.)

TABLE/FIGURE 66

MDMA (Ecstasy, Molly)

Trends in 12-Month Prevalence

among Respondents of Modal Ages 18 through 30, [1,2] by Age Group

Year	Age 18		Ages 19–20		Ages 21–22		Ages 23–24		Ages 25–26		Ages 27–28		Ages 29–30	
	Original	Revised	Original	Revised	Original	Revised	Original	Revised	Original	Revised	Original	Revised	Original	Revised
1989			1.9		2.1		1.2		0.3		0.9		0.2	
1990			2.1		2.2		1.4		1.1		0.9		0.2	
1991			0.5		1.0		0.9		0.6		0.7		0.6	
1992			2.0		1.7		0.4		0.7		0.4		*	
1993			1.0		0.4		1.2		0.6		0.7		*	
1994			0.7		1.6		1.1		0.3		0.3		0.3	
1995			2.2		1.7		1.2		1.0		1.4		0.3	
1996	4.6		3.9		1.6		1.2		1.3		0.7		0.6	
1997	4.0		3.0		3.5		1.3		1.8		0.5		1.5	
1998	3.6		3.4		3.3		2.5		1.7		2.5		*	
1999	5.6		4.6		4.5		3.2		3.2		1.6		0.6	
2000	8.2		9.8		9.3		6.4		8.1		2.5		3.0	
2001	9.2		10.1		10.4		6.7		4.7		3.8		2.2	
2002	7.4		5.9		9.7		7.8		3.9		3.4		2.9	
2003	4.5		4.7		5.3		4.9		3.9		2.8		1.2	
2004	4.0		4.2		2.8		3.3		3.9		3.7		1.1	
2005	3.0		3.4		3.5		2.6		2.3		2.8		1.9	
2006	4.1		4.4		4.2		4.2		2.0		1.9		2.3	
2007	4.5		3.1		2.5		2.8		2.1		1.8		2.1	
2008	4.3		5.0		4.2		2.6		2.3		2.0		2.1	
2009	4.3		3.2		4.1		3.5		2.7		2.3		2.1	
2010	4.5		5.2		5.5		4.3		1.5		2.1		2.3	
2011	5.3		4.7		5.2		3.4		2.2		3.1		2.0	
2012	3.8		5.9		5.6		4.2		3.1		2.2		3.1	
2013	4.0		5.3		5.7		5.1		3.0		1.9		1.7	
2014	3.6	5.0	6.2	6.0	6.9	6.7	4.7	2.3	4.5	10.6	4.9	6.4	2.0	4.0
2015	—	3.6	—	5.8	—	4.2	—	5.2	—	4.2	—	3.3	—	2.7
2016	—	2.7	—	4.9	—	7.9	—	4.1	—	3.8	—	5.0	—	3.7
2017	—	2.6	—	1.7	—	6.2	—	5.4	—	3.8	—	2.3	—	2.9
2018	—	2.2	—	2.5	—	3.5	—	3.9	—	4.3	—	3.5	—	4.7
2019	—	2.2	—	1.6	—	5.7	—	4.4	—	5.1	—	3.0	—	3.9
2020	—	1.8	—	3.6	—	5.2	—	5.5	—	5.2	—	3.9	—	4.5
2021	—	1.1	—	1.3	—	2.7	—	3.0	—	4.7	—	2.4	—	2.5
2022	—	1.4	—	0.6	—	2.4	—	2.8	—	2.7	—	5.5	—	2.9
2023	—	0.7	—	1.1	—	0.4	—	2.9	—	3.5	—	4.6	—	3.5
2024	—	0.8	—	0.5	—	0.5	—	1.7	—	4.2	—	2.4	—	3.8

Notes. ' * ' indicates a percentage of less than 0.05%. ' — ' indicates data not available.

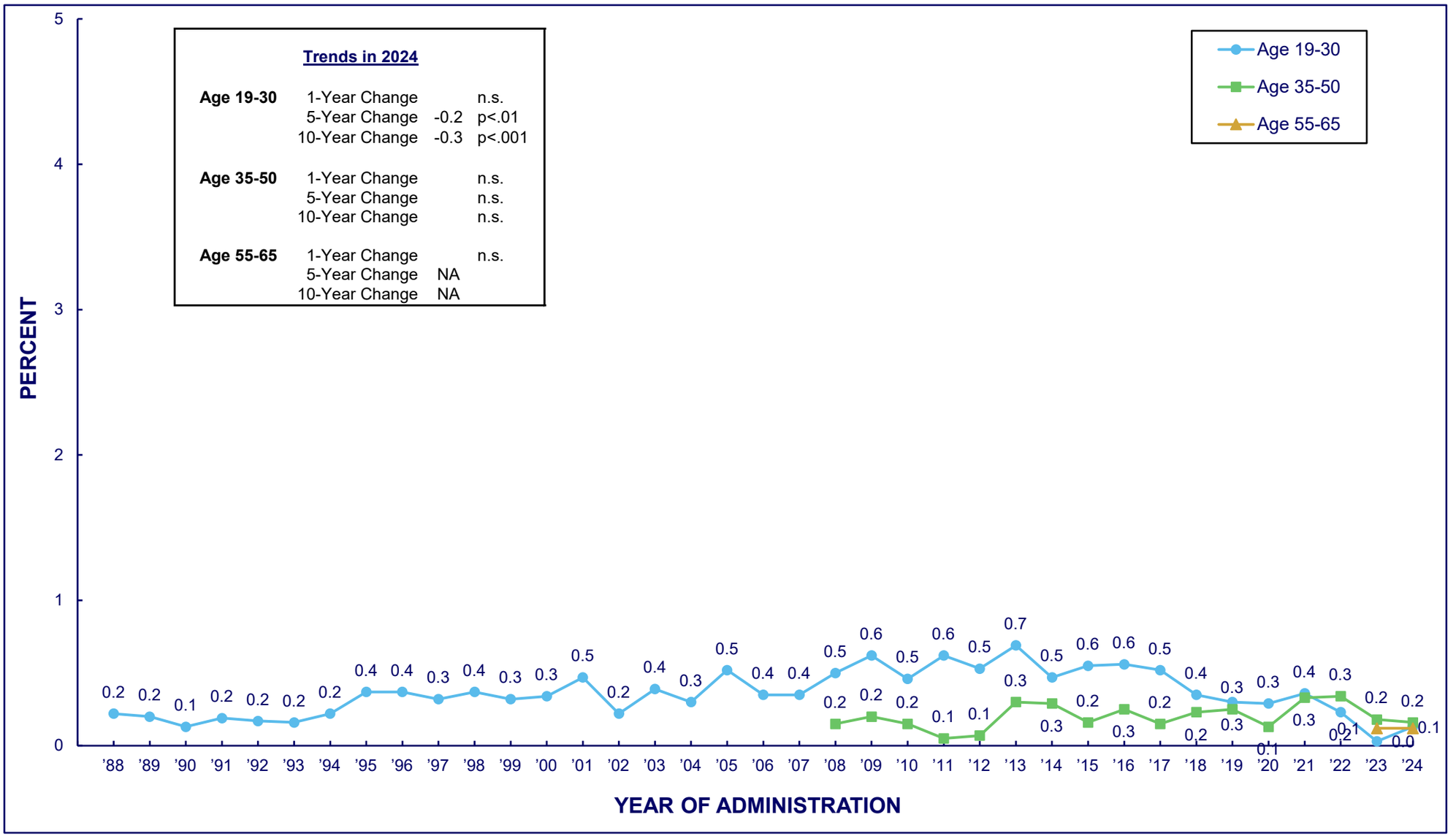
[1]Questions about use of ecstasy (MDMA, Molly) were not included in the questionnaires administered to those ages 35+.

[2]In 2014, a version of the question was added to an additional form that included "molly" in the description. In 2015 the remaining forms changed to this updated wording. Data for both versions of the question are included here.

TABLE/FIGURE 67

HEROIN

Trends in 12-Month Prevalence among Respondents of Modal Ages 19 through 65, by Age Group



(Age-specific data provided in the following table.)

TABLE/FIGURE 68

HEROIN

Trends in 12-Month Prevalence among Respondents of Modal Ages 18 through 65, by Age Group

Year	Age 18	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
1976	0.8													
1977	0.8													
1978	0.8	0.4												
1979	0.5	0.3												
1980	0.5	0.2	0.7											
1981	0.5	0.5	0.4											
1982	0.6	0.2	0.4	0.2										
1983	0.6	0.2	0.3	0.5										
1984	0.5	0.2	0.3	0.2	0.3									
1985	0.6	0.1	0.3	0.3	0.3									
1986	0.5	0.1	0.2	0.1	0.2	0.3								
1987	0.5	0.2	0.3	0.1	0.3	0.3								
1988	0.5	0.1	0.2	0.2	0.1	0.3	0.4							
1989	0.6	0.2	0.2	0.1	0.1	0.3	0.3							
1990	0.5	0.2	0.2	0.2	0.1	*	0.2							
1991	0.4	0.1	0.2	0.2	0.2	0.1	0.3							
1992	0.6	0.1	0.3	0.2	0.1	0.2	0.1							
1993	0.5	0.2	0.2	0.1	0.2	0.2	0.1							
1994	0.6	0.1	0.3	0.1	0.2	0.2	0.4	0.3						
1995	1.1	0.6	0.2	0.8	0.1	0.1	0.4	0.2						
1996	1.0	0.8	0.5	0.4	0.2	0.2	0.1	0.2						
1997	1.2	0.3	0.6	0.2	0.3	0.2	0.4	0.1						
1998	1.0	1.0	0.4	0.3	0.4	0.1	0.2	0.1	0.7					
1999	1.1	0.5	0.4	0.5	0.2	0.2	0.1	0.5	*					
2000	1.5	0.6	0.5	0.4	0.3	0.1	0.1	*	0.1					
2001	0.9	1.1	0.4	0.5	0.3	0.4	0.2	0.0	0.1					
2002	1.0	0.5	0.1	0.3	0.2	0.1	0.2	0.2	0.3					
2003	0.8	0.3	0.4	0.6	0.1	0.7	0.2	0.3	0.4	0.5				
2004	0.9	0.3	0.5	0.3	0.2	0.1	0.4	0.1	0.1	0.3				
2005	0.8	0.5	0.7	0.3	0.2	0.5	0.8	*	*	0.1				
2006	0.8	0.5	0.6	0.2	0.6	*	0.1	0.4	0.2	0.2				
2007	0.9	0.3	0.5	0.4	0.3	0.3	0.4	0.1	0.1	0.1				
2008	0.7	0.6	1.1	0.6	0.3	0.2	0.2	0.1	*	*	0.5			
2009	0.7	0.7	0.8	0.8	0.7	0.3	0.3	0.3	*	0.1	0.4			
2010	0.9	0.5	0.3	0.9	0.7	0.3	0.1	0.3	0.1	*	0.2			
2011	0.8	0.7	0.4	0.7	0.8	0.7	0.4	0.1	*	0.1	*			
2012	0.6	0.4	0.5	0.4	1.0	0.3	0.6	0.1	*	0.0	0.1			
2013	0.6	0.4	1.0	0.6	1.0	0.7	0.4	0.6	0.2	0.3	0.1	0.1		
2014	0.6	0.4	0.3	0.4	0.8	0.7	0.2	0.8	*	0.1	0.3	0.2		
2015	0.5	0.3	0.3	0.8	0.8	0.5	0.6	0.3	0.1	*	0.3	0.1		
2016	0.3	0.1	0.9	0.4	0.6	0.5	0.9	0.7	*	0.0	0.3	0.1		
2017	0.4	*	0.2	0.5	0.8	0.9	0.6	0.1	0.2	0.3	*	0.2		
2018	0.4	0.2	0.3	0.4	0.4	0.5	0.3	0.4	0.3	0.2	0.1	0.2	0.2	
2019	0.4	*	0.1	0.4	0.1	0.4	0.8	0.4	0.4	0.2	*	0.2	0.2	
2020	0.3	*	*	0.1	0.9	0.4	0.2	0.5	*	*	*	*	*	
2021	0.1	1.1	0.4	0.1	0.2	*	0.6	0.9	0.3	*	0.1	0.1	0.2	
2022	0.3	*	0.2	0.1	0.5	0.2	0.2	0.5	0.3	0.3	0.3	*	0.1	
2023	0.1	*	*	*	*	0.1	*	0.4	*	0.2	0.1	0.2	*	0.2
2024	0.2	*	0.1	0.3	*	*	0.4	0.2	0.4	0.1	*	*	*	0.4

Notes. ' * ' indicates a percentage of less than 0.05%.

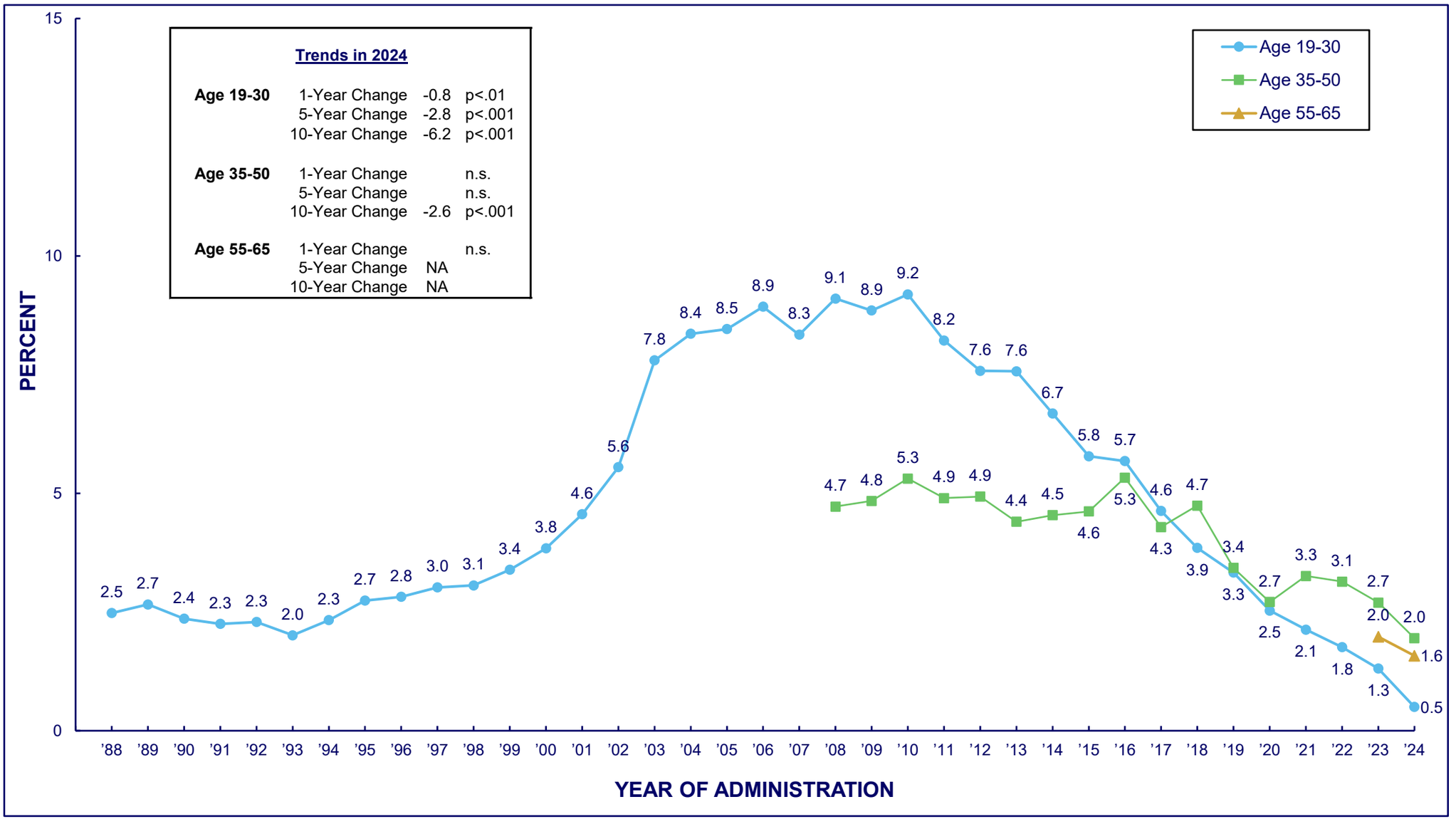
MONITORING THE FUTURE

TABLE/FIGURE 69

NARCOTICS OTHER THAN HEROIN[1]

Trends in 12-Month Prevalence among Respondents of Modal Ages 19 through 65, by Age Group

MONITORING THE FUTURE



[1]In 2024, the text for many of the questions in this category were changed on half of the survey forms. Reported trends are based on the 2024 estimates from the original version of the question text.

(Age-specific data provided in the following table.)

TABLE/FIGURE 70

NARCOTICS OTHER THAN HEROIN [1]

Trends in 12-Month Prevalence

among Respondents of Modal Ages 18 through 65, by Age Group

Year	Age 18	Ages 19–20		Ages 21–22		Ages 23–24		Ages 25–26		Ages 27–28		Ages 29–30	
		Original	Revised	Original	Revised	Original	Revised	Original	Revised	Original	Revised	Original	Revised
1976	5.7												
1977	6.4												
1978	6.0	4.5											
1979	6.2	4.7											
1980	6.3	5.8		4.8									
1981	5.9	5.0		5.0									
1982	5.3	4.4		3.4		4.6							
1983	5.1	4.4		4.1		3.1							
1984	5.2	4.1		3.3		3.6		2.5					
1985	5.9	3.7		3.9		3.8		3.4					
1986	5.2	4.4		3.6		2.7		2.0		2.5			
1987	5.3	3.9		3.7		2.6		2.7		3.0			
1988	4.6	3.1		3.5		2.3		2.4		1.7		1.9	
1989	4.4	3.0		3.4		2.5		2.3		2.9		2.0	
1990	4.5	3.6		2.8		2.7		2.1		1.5		1.7	
1991	3.5	3.2		2.2		2.3		2.3		1.9		1.7	
1992	3.3	2.3		3.3		2.2		2.6		1.7		1.6	
1993	3.6	2.6		2.7		2.0		2.1		1.3		1.4	
1994	3.8	2.7		3.5		2.7		1.5		2.1		1.6	
1995	4.7	4.5		2.8		2.7		1.9		2.7		1.9	
1996	5.4	4.8		2.8		3.3		2.1		1.9		2.1	
1997	6.2	4.5		4.6		2.7		2.1		1.9		2.5	
1998	6.3	4.1		4.0		3.9		3.1		1.9		1.6	
1999	6.7	5.8		4.3		4.0		2.8		1.9		1.7	
2000	7.0	6.8		4.9		4.0		2.9		2.1		2.5	
2001	6.7	7.1		7.1		4.4		3.4		3.1		2.7	
2002	9.4	7.4		7.2		6.7		4.5		4.3		3.5	
2003	9.3	10.4		9.5		10.3		6.1		6.4		4.9	
2004	9.5	10.4		9.0		9.5		7.7		7.9		6.0	
2005	9.0	9.1		10.0		7.7		9.1		6.9		8.0	
2006	9.0	8.5		12.4		9.9		9.2		6.9		7.0	
2007	9.2	8.0		9.3		9.5		8.6		8.0		6.8	
2008	9.1	9.0		8.1		10.9		10.1		9.5		7.3	
2009	9.2	7.0		11.0		8.1		10.5		6.9		9.6	
2010	8.7	8.2		9.6		10.4		10.6		8.9		7.3	
2011	8.7	8.2		7.8		7.3		10.2		8.0		7.7	
2012	7.9	6.7		7.1		8.4		8.4		8.2		6.8	
2013	7.1	8.6		7.5		7.3		7.7		7.7		6.6	
2014	6.1	5.9		6.6		6.4		7.8		6.7		6.6	
2015	5.4	4.6		5.0		6.4		5.8		6.6		6.2	
2016	4.8	4.3		6.1		5.4		6.9		5.7		5.7	
2017	4.2	3.5		3.9		4.1		4.9		4.7		6.5	
2018	3.4	2.0		3.8		3.8		3.6		5.0		4.6	
2019	2.7	1.4		3.3		3.6		2.8		3.8		5.0	
2020	2.1	1.3		2.4		2.1		2.8		3.0		3.2	
2021	1.0	1.4		1.6		1.2		2.5		2.3		3.3	
2022	1.7	1.2		0.8		2.7		1.8		1.5		2.3	
2023	1.0	1.5		0.2		1.1		0.8		2.8		1.2	
2024	0.6	0.7	2.0	0.5	2.6	0.4	0.7	*	2.0	0.2	1.9	1.2	2.9

(Table continued on next page.)

TABLE/FIGURE 70 (cont.)

NARCOTICS OTHER THAN HEROIN [1]

Trends in 12-Month Prevalence

among Respondents of Modal Ages 18 through 65, by Age Group

Year	Age 35		Age 40		Age 45		Age 50		Age 55		Age 60		Age 65	
	Original	Revised	Original	Revised	Original	Revised	Original	Revised	Original	Revised	Original	Revised	Original	Revised
1976														
1977														
1978														
1979														
1980														
1981														
1982														
1983														
1984														
1985														
1986														
1987														
1988														
1989														
1990														
1991														
1992														
1993														
1994	1.6													
1995	1.4													
1996	1.8													
1997	1.9													
1998	1.1		1.6											
1999	2.4		1.6											
2000	1.9		1.8											
2001	2.3		1.4											
2002	4.5		3.3											
2003	3.5		2.2		2.7									
2004	4.3		3.1		3.4									
2005	4.4		3.8		3.1									
2006	4.9		4.3		3.2									
2007	3.9		6.2		4.5									
2008	7.2		5.1		3.2		3.5							
2009	6.2		4.6		4.5		4.1							
2010	6.9		4.2		5.5		4.7							
2011	6.1		4.9		4.2		4.5							
2012	6.3		4.5		4.7		4.3							
2013	6.7		4.9		3.5		2.9		2.3					
2014	7.0		3.7		3.9		3.8		2.8					
2015	5.7		4.5		3.7		4.7		3.5					
2016	7.4		5.6		4.8		3.9		3.6					
2017	4.6		4.9		4.1		3.6		3.2					
2018	5.6		4.6		4.2		4.7		3.3		2.8			
2019	3.3		3.8		2.7		4.0		2.0		1.9			
2020	3.8		2.5		3.0		1.7		2.6		3.1			
2021	2.9		3.4		4.1		2.7		2.6		2.7			
2022	3.8		2.9		3.1		2.7		2.9		2.7			
2023	3.6		2.9		2.2		2.1		2.3		1.9		1.8	
2024	2.2	2.8	2.0	1.3	2.1	2.9	1.4	3.3	2.3	2.6	0.9	4.0	1.5	3.2

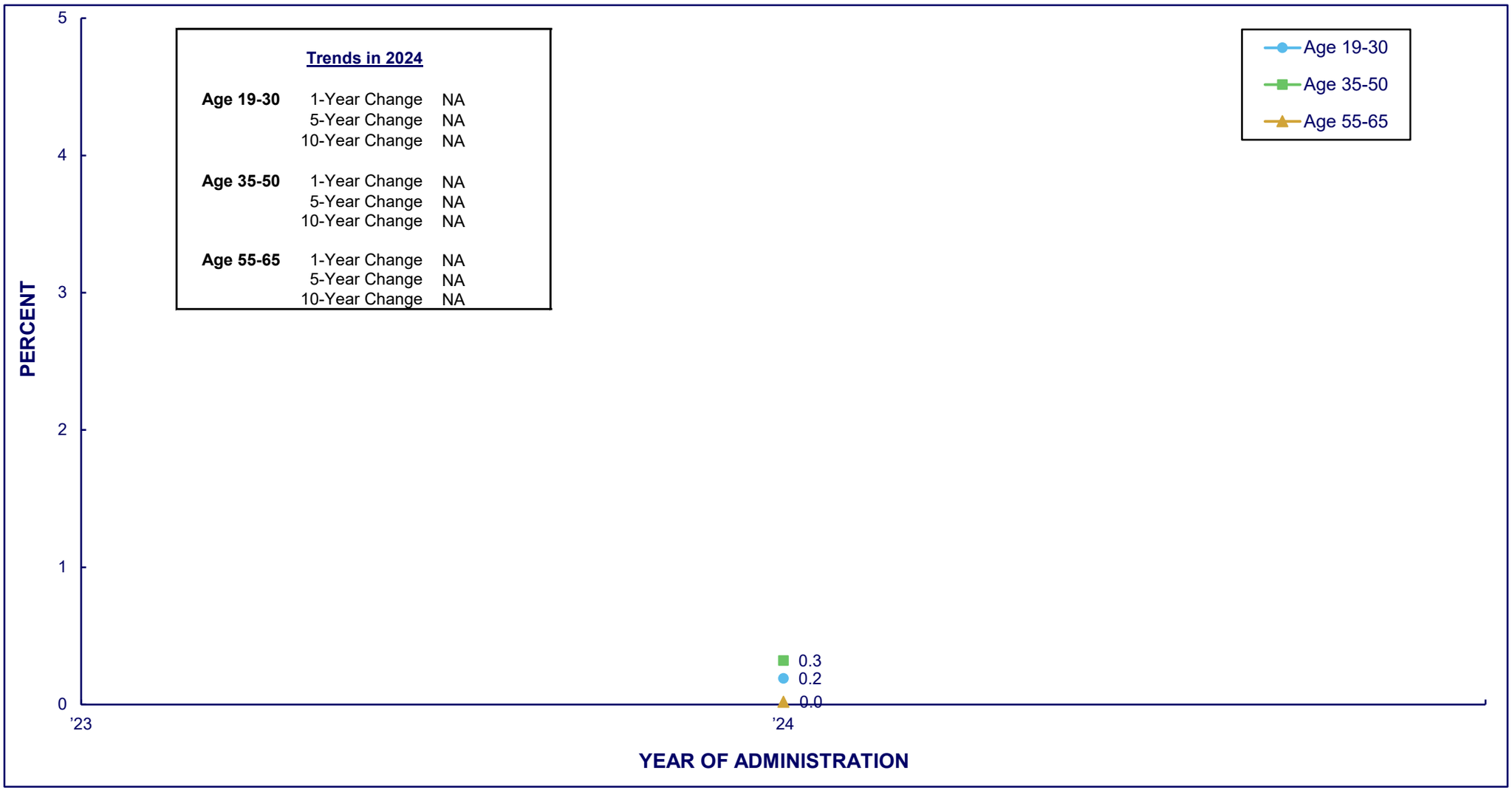
[1]In 2024, the text for this question was changed on half of the survey forms. Estimates for both the original version and the new version of the question are presented here. For details on the survey items, please refer to Table/Figure 91.

MONITORING THE FUTURE

TABLE/FIGURE 71

FENTANYL

Trends in 12-Month Prevalence among Respondents of Modal Ages 19 through 65, by Age Group



(Age-specific data provided in the following table.)

TABLE/FIGURE 72

FENTANYL

Trends in 12-Month Prevalence among Respondents of Modal Ages 18 through 65, by Age Group

Year	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
2024	*	0.3	*	0.8	*	*	0.3	0.2	*	0.7	0.1	*	*

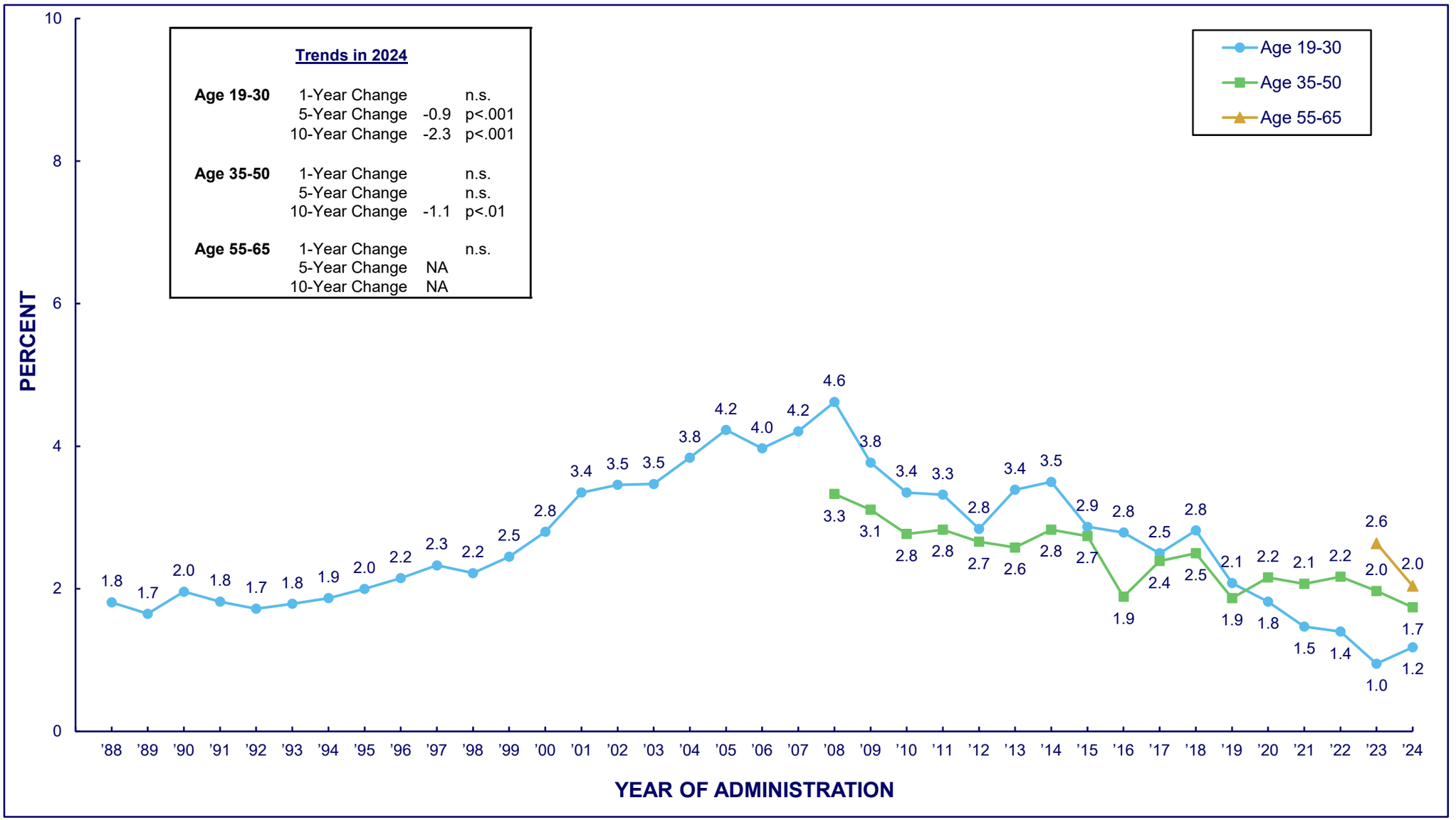
Notes. ' * ' indicates a percentage of less than 0.05%.

TABLE/FIGURE 73

SEDATIVES (BARBITURATES)[1]

Trends in 12-Month Prevalence among Respondents of Modal Ages 19 through 65, by Age Group

MONITORING THE FUTURE



[1]In 2024, the text for many of the questions in this category were changed on half of the survey forms. Reported trends are based on the 2024 estimates from the original version of the question text.

(Age-specific data provided in the following table.)

TABLE/FIGURE 74

SEDATIVES (BARBITURATES) [1]

Trends in 12-Month Prevalence

among Respondents of Modal Ages 18 through 65, by Age Group

Year	Age 18	Ages 19–20		Ages 21–22		Ages 23–24		Ages 25–26		Ages 27–28		Ages 29–30	
		Original	Revised	Original	Revised	Original	Revised	Original	Revised	Original	Revised	Original	Revised
1976	9.6												
1977	9.3												
1978	8.1	6.3		.		.		.		.		.	
1979	7.5	6.9		.		.		.		.		.	
1980	6.8	4.7		5.6		.		.		.		.	
1981	6.6	5.1		5.8		.		.		.		.	
1982	5.5	4.5		4.2		4.1		.		.		.	
1983	5.2	3.7		3.4		3.8		.		.		.	
1984	4.9	3.4		2.5		2.7		3.2		.		.	
1985	4.6	2.2		2.3		3.1		3.5		.		.	
1986	4.2	2.5		2.7		2.3		1.9		2.2		.	
1987	3.6	2.0		2.7		1.6		2.2		2.4		.	
1988	3.2	2.0		2.0		2.2		1.5		1.3		2.0	
1989	3.3	1.5		1.9		1.9		1.4		1.9		1.4	
1990	3.4	1.8		1.9		2.4		2.2		1.8		1.7	
1991	3.4	1.8		1.3		2.2		2.5		1.3		1.9	
1992	2.8	1.7		1.7		1.9		1.5		1.4		2.0	
1993	3.4	1.9		1.8		1.7		2.1		2.2		1.1	
1994	4.1	2.8		2.3		1.7		1.3		1.7		1.4	
1995	4.7	3.3		2.8		1.5		1.3		1.5		1.7	
1996	4.9	3.7		2.5		2.4		1.0		2.0		1.5	
1997	5.1	4.1		3.6		1.7		1.5		1.3		1.9	
1998	5.5	3.4		3.0		2.5		1.6		1.8		1.1	
1999	5.8	5.0		2.6		3.0		2.0		1.0		1.2	
2000	6.2	4.6		3.5		3.8		2.6		1.6		1.1	
2001	5.7	5.4		4.8		4.0		2.6		2.2		1.3	
2002	6.7	5.6		3.8		4.1		2.7		2.8		2.0	
2003	6.0	5.3		4.6		3.9		2.6		3.4		1.5	
2004	6.5	5.8		4.3		4.9		3.3		2.6		2.4	
2005	7.2	5.0		5.2		3.8		4.1		2.7		4.6	
2006	6.6	4.3		5.2		4.8		3.2		2.7		3.8	
2007	6.2	4.5		4.2		4.4		4.2		4.3		3.6	
2008	5.8	5.7		5.2		5.1		4.8		3.9		3.1	
2009	5.2	3.8		5.9		2.7		4.6		3.0		2.8	
2010	4.8	3.0		3.7		3.7		2.7		4.5		2.6	
2011	4.3	3.2		3.0		3.7		4.4		2.7		2.8	
2012	4.5	2.5		3.1		2.8		2.2		3.6		2.9	
2013	4.8	3.0		4.0		3.4		4.5		2.7		2.8	
2014	4.3	3.9		4.6		3.0		2.8		3.7		3.0	
2015	3.6	2.7		3.9		3.0		2.6		2.9		2.2	
2016	3.0	2.4		3.3		2.6		2.5		2.9		3.1	
2017	2.9	2.1		2.3		2.5		2.9		2.7		2.4	
2018	2.7	2.0		3.3		3.2		3.0		3.0		2.4	
2019	2.5	1.5		2.2		2.4		1.8		2.8		1.7	
2020	2.4	1.8		0.9		2.1		2.4		1.7		2.0	
2021	1.8	1.4		1.6		1.5		1.4		1.4		1.6	
2022	2.0	2.9		1.2		1.4		1.4		1.1		1.3	
2023	1.5	0.7		0.6		0.7		1.4		1.1		0.9	
2024	1.0	0.2	3.8	0.9	3.3	0.7	1.8	0.6	1.3	2.4	1.9	1.7	1.0

(Table continued on next page.)

TABLE/FIGURE 74 (cont.)

SEDATIVES (BARBITURATES) [1]

Trends in 12-Month Prevalence

among Respondents of Modal Ages 18 through 65, by Age Group

Year	Age 35		Age 40		Age 45		Age 50		Age 55		Age 60		Age 65	
	Original	Revised	Original	Revised	Original	Revised	Original	Revised	Original	Revised	Original	Revised	Original	Revised
1976														
1977														
1978														
1979														
1980														
1981														
1982														
1983														
1984														
1985														
1986														
1987														
1988														
1989														
1990														
1991														
1992														
1993														
1994	1.7		.		.		.		.		.		.	
1995	1.6		.		.		.		.		.		.	
1996	1.6		.		.		.		.		.		.	
1997	1.4		.		.		.		.		.		.	
1998	1.0		0.9		.		.		.		.		.	
1999	1.5		1.5		.		.		.		.		.	
2000	0.7		1.7		.		.		.		.		.	
2001	1.8		1.4		.		.		.		.		.	
2002	1.9		1.1		.		.		.		.		.	
2003	1.2		0.8		0.9		.		.		.		.	
2004	1.2		1.1		1.0		.		.		.		.	
2005	1.6		1.2		1.5		.		.		.		.	
2006	0.9		1.4		1.4		.		.		.		.	
2007	3.7		2.7		2.7		.		.		.		.	
2008	3.9		3.3		3.2		3.0		.		.		.	
2009	3.1		3.4		2.8		3.2		.		.		.	
2010	3.3		1.9		3.0		3.0		.		.		.	
2011	4.6		1.9		2.0		2.9		.		.		.	
2012	2.7		3.0		2.5		2.4		.		.		.	
2013	2.6		3.2		3.0		1.7		2.1		.		.	
2014	3.8		2.8		2.5		2.3		1.7		.		.	
2015	2.3		2.2		3.0		3.4		2.5		.		.	
2016	2.0		2.0		2.0		1.6		2.4		.		.	
2017	2.9		2.0		2.7		2.0		1.7		.		.	
2018	3.0		2.0		1.9		3.3		1.7		1.8		.	
2019	1.8		1.9		1.3		2.4		3.0		1.9		.	
2020	3.4		1.7		1.9		1.7		2.0		2.0		.	
2021	1.4		1.3		3.1		2.3		2.2		2.7		.	
2022	2.4		3.0		1.8		1.7		3.0		2.8		.	
2023	2.6		1.7		1.5		2.1		3.4		2.5		2.1	
2024	0.8	0.6	2.4	1.2	1.9	1.6	1.9	1.6	3.8	3.1	0.6	1.4	1.6	1.7

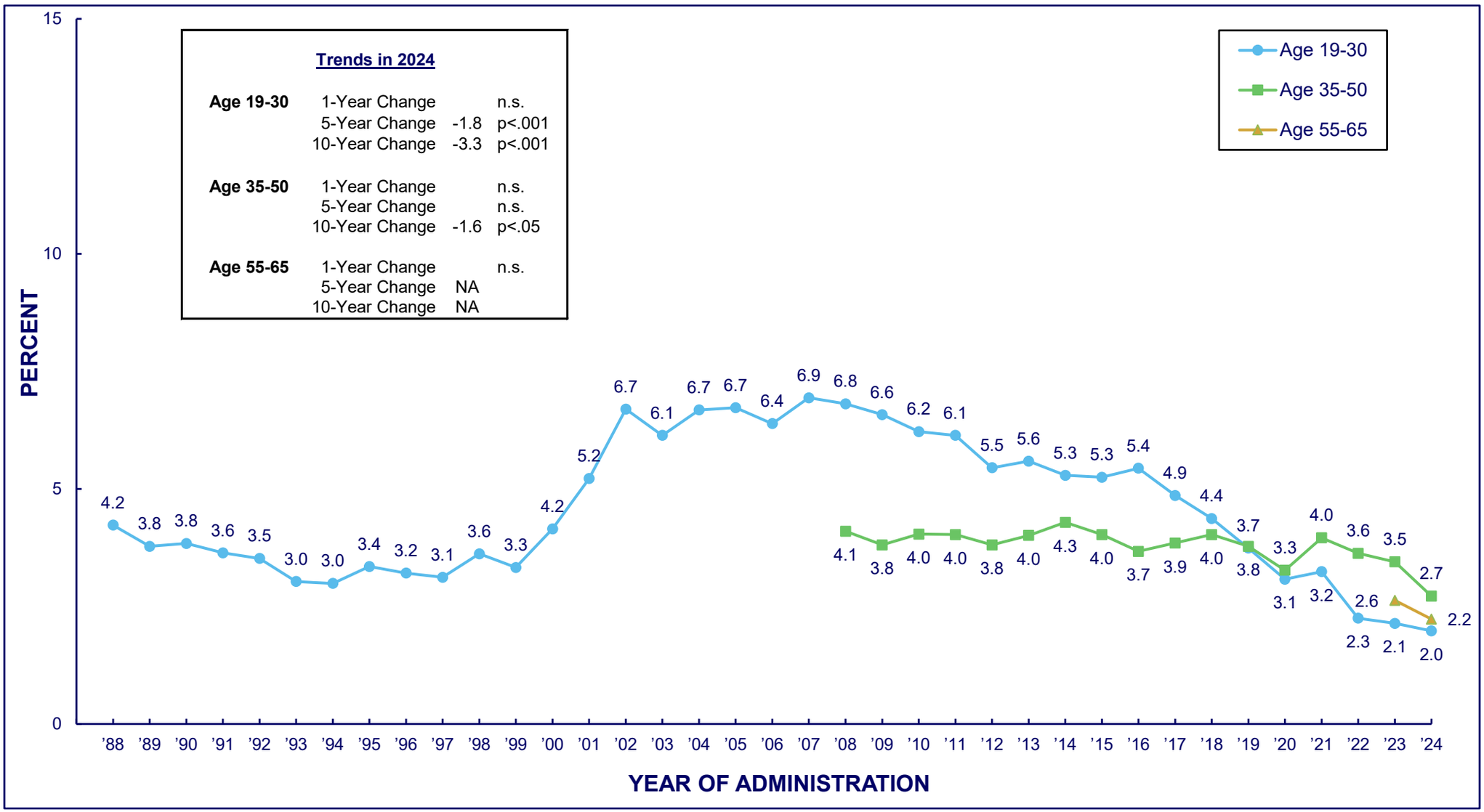
[1]In 2024, the text for this question was changed on half of the survey forms. Estimates for both the original version and the new version of the question are presented here. For details on the survey items, please refer to Table/Figure 91.

TABLE/FIGURE 75

TRANQUILIZERS [1]

Trends in 12-Month Prevalence among Respondents of Modal Ages 19 through 65, by Age Group

MONITORING THE FUTURE



[1]In 2024, the text for many of the questions in this category were changed on half of the survey forms. Reported trends are based on the 2024 estimates from the original version of the question text.

(Age-specific data provided in the following table.)

TABLE/FIGURE 76

TRANQUILIZERS [1]

Trends in 12-Month Prevalence

among Respondents of Modal Ages 18 through 65, by Age Group

Year	Age 18	Ages 19–20		Ages 21–22		Ages 23–24		Ages 25–26		Ages 27–28		Ages 29–30	
		Original	Revised	Original	Revised	Original	Revised	Original	Revised	Original	Revised	Original	Revised
1976	10.3												
1977	10.8												
1978	9.9	9.3											
1979	9.6	9.7											
1980	8.7	8.9		8.7									
1981	8.0	7.6		7.2									
1982	7.0	5.6		7.1		8.4							
1983	6.9	5.3		6.1		6.4							
1984	6.1	5.3		5.5		5.8		6.6					
1985	6.1	4.5		4.8		6.2		6.9					
1986	5.8	4.3		5.5		5.1		5.6		6.5			
1987	5.5	4.2		5.4		4.2		5.9		6.1			
1988	4.8	3.5		4.4		4.1		4.0		5.0		4.4	
1989	3.8	3.4		3.5		4.0		2.9		4.9		4.0	
1990	3.5	3.0		3.7		4.1		4.8		3.2		4.3	
1991	3.6	2.7		3.2		4.0		4.0		3.7		4.3	
1992	2.8	2.3		3.8		3.5		4.6		3.3		3.5	
1993	3.5	2.2		3.0		3.1		3.8		3.6		2.6	
1994	3.7	2.1		3.1		2.9		3.3		3.7		2.9	
1995	4.4	3.6		3.4		3.2		2.9		3.5		3.6	
1996	4.6	3.7		4.1		3.0		2.2		3.2		3.0	
1997	4.7	4.7		3.5		2.7		1.8		2.2		3.9	
1998	5.5	3.8		4.4		4.1		3.4		3.1		2.9	
1999	5.8	4.3		4.1		4.1		3.3		2.3		1.9	
2000	5.7	5.2		5.1		4.9		4.2		2.9		2.9	
2001	6.9	5.7		7.0		5.8		5.1		3.9		4.0	
2002	7.7	8.4		7.6		6.3		7.1		5.9		5.1	
2003	6.7	7.6		6.8		7.1		6.2		5.3		4.2	
2004	7.3	7.6		7.1		8.1		6.3		6.0		5.3	
2005	6.8	6.3		8.2		6.5		7.5		4.3		7.6	
2006	6.6	5.9		7.7		6.8		5.6		6.1		6.3	
2007	6.2	5.7		7.5		7.5		7.7		7.9		5.5	
2008	6.2	7.8		6.1		8.3		6.7		5.8		6.4	
2009	6.3	4.7		7.2		6.9		7.3		6.0		7.3	
2010	5.6	5.0		6.9		7.3		7.1		5.3		5.6	
2011	5.6	6.1		5.3		6.7		7.2		5.4		6.1	
2012	5.3	5.1		4.8		5.8		5.8		7.0		4.2	
2013	4.6	5.4		5.3		6.7		4.1		6.3		5.8	
2014	4.7	6.4		3.8		4.0		5.7		6.0		5.9	
2015	4.7	5.4		5.0		5.4		5.2		4.7		5.8	
2016	4.9	4.1		7.8		5.3		4.9		4.5		6.2	
2017	4.7	3.8		4.8		4.8		5.9		5.0		4.7	
2018	3.9	3.6		3.9		4.6		5.2		3.8		5.1	
2019	3.4	2.3		4.2		3.4		3.9		4.1		4.5	
2020	3.2	2.3		2.5		2.9		4.4		3.2		3.1	
2021	1.2	2.2		3.2		2.6		3.3		3.3		4.3	
2022	1.5	1.0		1.6		1.1		3.2		2.6		3.1	
2023	1.0	1.8		0.9		1.4		1.9		3.4		2.9	
2024	0.4	0.6	1.7	0.9	3.1	0.3	2.1	2.6	1.7	2.3	3.8	3.9	4.0

(Table continued on next page.)

TABLE/FIGURE 76 (cont.)

TRANQUILIZERS [1]

Trends in 12-Month Prevalence

among Respondents of Modal Ages 18 through 65, by Age Group

Year	Age 35		Age 40		Age 45		Age 50		Age 55		Age 60		Age 65	
	Original	Revised	Original	Revised	Original	Revised	Original	Revised	Original	Revised	Original	Revised	Original	Revised
1976														
1977														
1978														
1979														
1980														
1981														
1982														
1983														
1984														
1985														
1986														
1987														
1988														
1989														
1990														
1991														
1992														
1993														
1994	3.0													
1995	3.5													
1996	3.5													
1997	3.1													
1998	1.8		2.8											
1999	3.2		2.2											
2000	3.0		2.9											
2001	4.1		3.4											
2002	4.4		3.9											
2003	4.1		2.1		2.7									
2004	3.6		3.9		3.5									
2005	4.7		4.0		2.8									
2006	3.9		3.5		3.9									
2007	3.6		4.9		4.1									
2008	5.7		2.9		3.8		4.0							
2009	4.8		4.5		3.0		2.9							
2010	4.4		3.6		4.5		3.8							
2011	6.2		3.0		4.0		3.0							
2012	2.9		3.2		4.5		4.5							
2013	4.7		4.3		3.4		3.7		2.5					
2014	6.8		4.0		2.8		3.8		2.7					
2015	5.0		4.2		3.6		3.4		3.5					
2016	3.5		3.5		3.7		4.0		2.9					
2017	4.5		4.2		2.2		4.5		3.0					
2018	5.3		3.0		3.7		4.1		3.3		2.9			
2019	4.7		4.1		3.6		2.9		3.4		2.8			
2020	3.7		3.6		3.3		2.5		3.3		3.2			
2021	4.0		3.4		5.0		3.4		3.1		2.9			
2022	4.5		4.7		2.7		2.8		3.1		3.0			
2023	3.9		3.9		4.0		2.1		3.3		2.4		2.3	
2024	1.7	3.6	3.7	3.9	3.5	7.1	1.9	5.3	3.6	3.3	1.8	4.9	1.2	3.6

[1]In 2024, the text for this question was changed on half of the survey forms. Estimates for both the original version and the new version of the question are presented here. For details on the survey items, please refer to Table/Figure 91.

TABLE/FIGURE 77

AMPHETAMINES

Trends in 12-Month Prevalence among Respondents of Modal Ages 19 through 65, by Age Group

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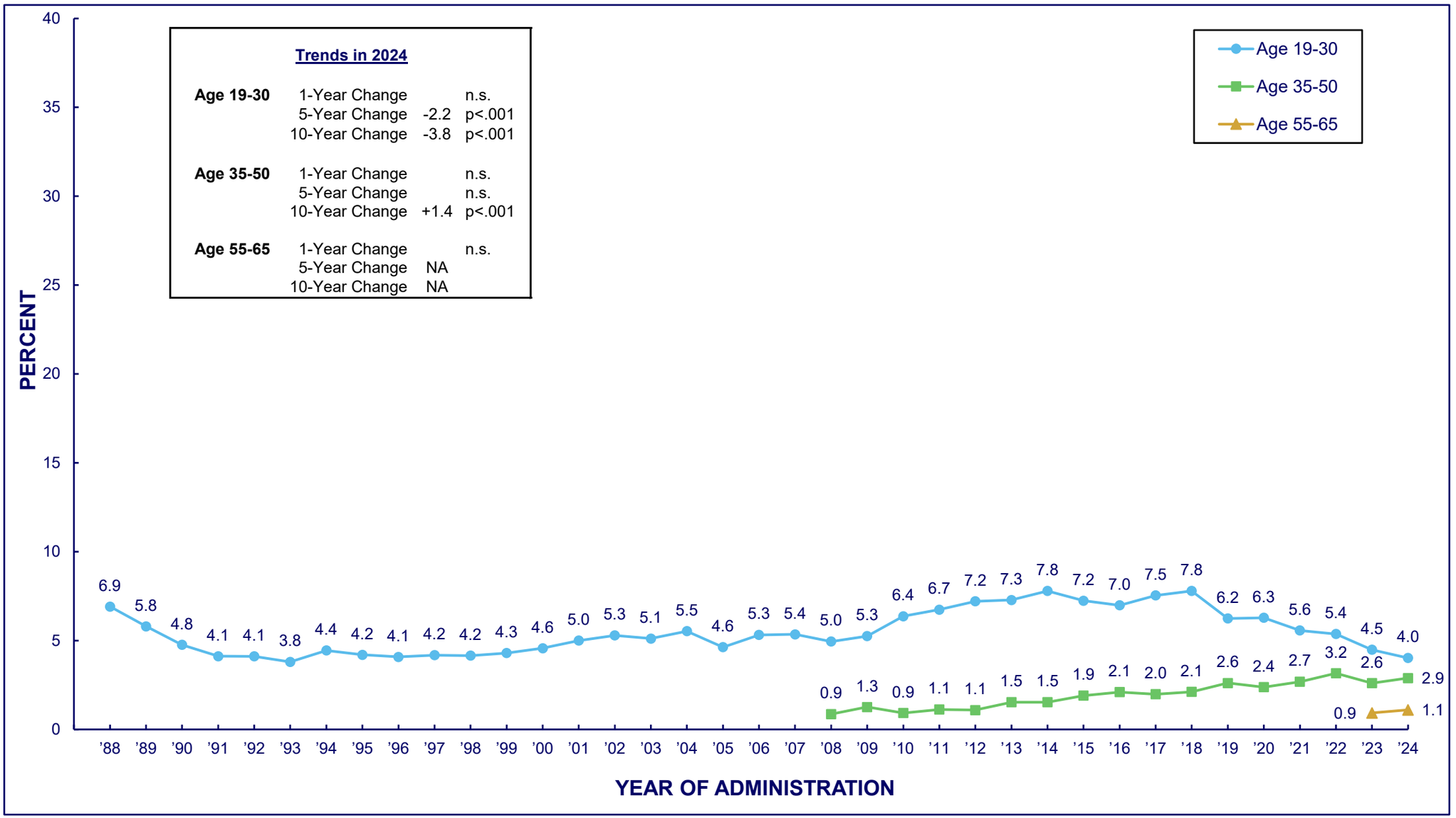


(Age-specific data provided in the following table.)

TABLE/FIGURE 78

AMPHETAMINES

Trends in 12-Month Prevalence among Respondents of Modal Ages 18 through 65, by Age Group

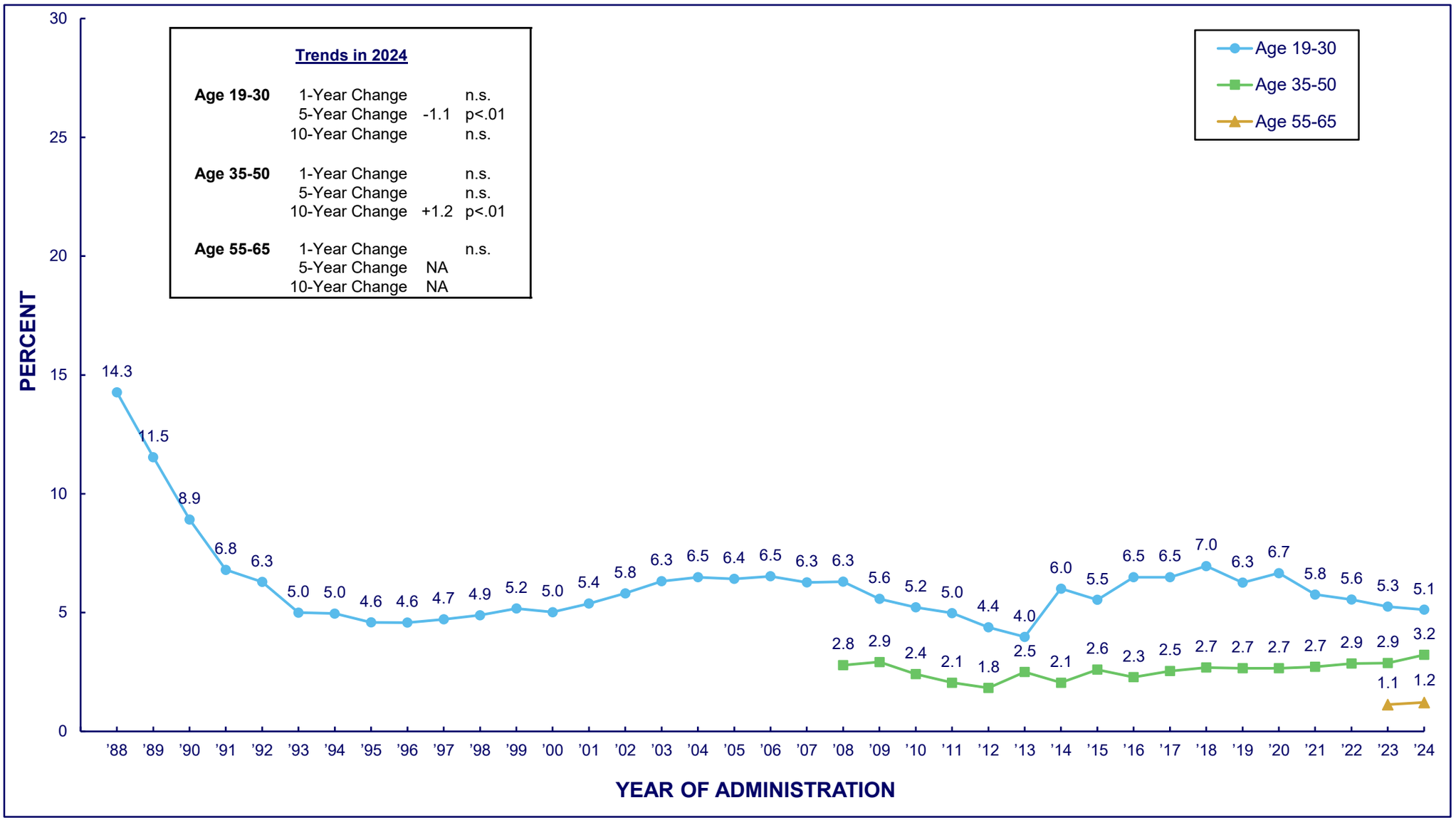
Year	Age 18	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
1976	15.8													
1977	16.3													
1978	17.1	17.7												
1979	18.3	21.5												
1980	20.8	24.1	25.1											
1981	26.0	26.3	26.7											
1982	20.3	24.0	22.5	21.4										
1983	17.9	20.3	20.2	18.6										
1984	17.7	15.7	17.4	14.5	14.6									
1985	15.8	15.2	13.3	14.3	12.9									
1986	13.4	11.1	12.7	11.6	8.8	8.7								
1987	12.2	9.4	10.0	8.3	8.3	8.0								
1988	10.9	9.0	8.0	7.4	6.6	5.0	5.5							
1989	10.8	7.1	7.2	5.4	5.5	4.7	5.1							
1990	9.1	6.7	5.6	5.2	4.0	4.4	2.9							
1991	8.2	5.0	5.1	3.9	3.5	4.0	3.2							
1992	7.1	6.2	4.3	4.1	3.1	3.9	3.3							
1993	8.4	5.5	5.0	3.9	3.2	2.9	2.6							
1994	9.4	6.0	5.9	4.7	4.5	3.0	2.6	2.5						
1995	9.3	7.4	5.8	3.2	3.5	2.8	2.5	2.0						
1996	9.5	7.1	5.1	4.4	2.8	2.5	2.8	1.9						
1997	10.2	6.0	7.2	3.7	3.2	2.1	2.9	1.8						
1998	10.1	7.2	4.8	5.0	3.4	2.6	2.0	1.7	1.6					
1999	10.2	7.9	5.1	4.6	3.4	2.5	2.6	1.8	1.4					
2000	10.5	9.2	5.8	4.5	4.3	2.7	1.5	1.5	1.5					
2001	10.9	8.5	7.8	5.6	3.7	3.4	1.8	1.9	1.1					
2002	11.1	8.2	6.8	6.0	4.5	4.4	2.2	1.5	1.4					
2003	9.9	8.2	7.7	5.7	3.5	3.6	2.7	2.6	1.1	1.5				
2004	10.0	8.7	6.7	7.0	4.9	4.0	2.5	1.9	1.1	1.1				
2005	8.6	6.5	6.9	5.4	3.9	2.5	3.0	1.3	0.8	0.5				
2006	8.1	6.2	8.2	6.3	4.7	3.5	3.3	1.3	1.5	1.4				
2007	7.5	6.7	7.6	6.6	5.1	3.8	2.5	1.3	0.8	1.2				
2008	6.8	6.1	6.5	5.9	3.8	4.7	2.6	0.7	1.3	0.9	0.6			
2009	6.6	6.3	8.0	5.1	5.4	3.9	2.9	1.7	1.5	0.9	1.1			
2010	7.4	8.5	8.7	7.6	6.3	4.0	3.0	1.4	1.0	0.6	0.7			
2011	8.2	9.3	8.8	8.8	4.8	4.6	3.8	1.5	0.4	1.3	1.3			
2012	7.9	9.1	9.0	8.0	6.6	5.6	4.8	1.9	1.2	0.9	0.4			
2013	9.2	9.2	10.9	7.4	6.4	5.1	4.7	2.2	1.9	1.3	0.9	0.7		
2014	8.1	11.2	9.2	6.7	7.9	6.6	5.4	2.9	1.3	1.1	1.0	0.2		
2015	7.7	8.8	10.1	7.9	7.0	4.9	5.0	3.7	2.0	1.1	1.0	0.3		
2016	6.7	7.9	10.9	7.4	6.0	5.2	4.9	3.6	3.0	0.9	1.2	0.7		
2017	5.9	6.0	9.7	9.2	8.0	7.3	5.1	3.7	1.9	2.0	0.6	0.8		
2018	5.5	4.6	8.5	11.4	7.9	6.7	7.4	3.0	1.8	1.4	2.4	1.2	0.7	
2019	4.5	4.3	7.6	7.0	6.8	6.0	5.8	4.9	2.6	1.9	1.4	1.3	0.7	
2020	4.3	5.9	6.6	7.2	7.3	6.4	4.3	3.7	2.8	2.3	0.8	1.0	0.6	
2021	2.3	4.4	5.8	6.2	6.9	4.9	5.0	3.2	3.3	2.1	2.2	0.7	0.6	
2022	2.8	2.3	4.2	5.0	6.1	6.9	6.0	5.0	3.2	2.1	2.4	0.7	0.8	
2023	2.1	3.1	4.3	3.8	3.6	6.2	5.4	4.0	2.1	2.6	1.8	1.7	0.7	0.4
2024	2.3	3.0	2.6	2.9	3.5	4.7	6.2	4.2	3.8	1.7	2.1	1.5	1.5	0.3

MONITORING THE FUTURE

TABLE/FIGURE 79

COCAINE

Trends in 12-Month Prevalence among Respondents of Modal Ages 19 through 65, by Age Group



(Age-specific data provided in the following table.)

TABLE/FIGURE 80

COCAINE

Trends in 12-Month Prevalence among Respondents of Modal Ages 18 through 65, by Age Group

Year	Age 18	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
1976	6.0													
1977	7.2													
1978	9.0	11.9												
1979	12.0	14.9												
1980	12.3	16.7	20.5											
1981	12.4	16.8	20.5											
1982	11.5	16.9	21.8	23.4										
1983	11.4	14.5	21.6	21.0										
1984	11.6	15.3	21.0	20.9	21.9									
1985	13.1	17.2	19.5	24.4	21.9									
1986	12.7	16.8	20.6	23.2	20.2	20.8								
1987	10.3	14.5	16.9	16.8	17.8	16.0								
1988	7.9	10.7	14.7	15.0	15.3	14.9	14.9							
1989	6.5	7.7	12.9	12.9	10.8	12.8	12.2							
1990	5.3	5.6	9.0	9.9	10.4	10.3	8.4							
1991	3.5	4.2	6.2	7.8	8.1	7.2	7.3							
1992	3.1	4.3	5.1	6.7	6.9	7.6	7.0							
1993	3.3	3.2	4.3	4.6	6.8	6.2	4.8							
1994	3.6	3.7	4.4	4.8	4.8	5.6	6.4	5.1						
1995	4.0	4.0	4.1	4.6	4.8	5.3	4.7	4.3						
1996	4.9	4.0	4.8	5.3	4.2	4.7	4.5	5.2						
1997	5.5	4.8	5.4	5.1	4.3	4.1	4.7	4.1						
1998	5.7	4.9	6.0	6.1	4.5	4.0	3.9	4.4	4.5					
1999	6.2	5.8	5.6	6.9	5.1	3.9	3.9	5.1	4.5					
2000	5.0	6.2	5.9	5.7	5.7	3.8	3.0	3.9	3.4					
2001	4.8	6.1	7.6	5.6	5.7	5.0	2.5	3.2	2.8					
2002	5.0	7.0	7.6	5.6	5.6	4.4	5.1	4.1	3.7					
2003	4.8	6.1	7.6	8.1	5.3	5.9	5.1	2.8	3.7	4.1				
2004	5.3	6.1	8.4	8.8	6.3	5.4	4.4	3.3	4.0	4.5				
2005	5.1	5.8	7.0	6.8	8.3	6.0	4.8	2.9	3.3	2.9				
2006	5.7	6.4	8.4	6.5	7.6	5.4	5.0	2.8	3.1	3.5				
2007	5.2	5.9	7.8	6.4	7.2	6.1	4.3	2.5	3.3	3.6				
2008	4.4	5.4	8.1	5.8	6.4	6.5	5.6	3.9	2.0	3.0	2.2			
2009	3.4	3.2	6.7	6.8	5.2	5.2	6.2	2.8	2.2	3.8	2.8			
2010	2.9	3.6	5.6	7.1	5.0	5.4	4.5	2.6	2.3	2.9	1.9			
2011	2.9	4.5	4.5	6.4	6.4	3.9	4.0	3.1	1.1	2.2	1.8			
2012	2.7	4.0	3.7	5.8	4.7	4.5	3.5	2.2	1.6	1.6	1.9			
2013	2.6	2.8	5.1	4.4	4.6	3.4	3.5	3.2	3.0	2.4	1.6	1.1		
2014	2.6	6.5	5.5	5.8	6.9	6.3	5.0	3.1	1.9	1.2	2.0	1.5		
2015	2.5	5.1	5.5	7.7	6.7	5.2	3.0	4.7	1.5	1.9	2.5	1.0		
2016	2.3	3.7	8.7	8.2	5.9	6.4	5.9	3.3	2.2	1.4	2.4	1.2		
2017	2.7	3.6	8.6	7.6	9.3	4.8	4.9	5.0	2.0	1.5	2.0	1.7		
2018	2.3	3.9	6.9	10.1	8.9	5.5	6.2	3.3	3.0	3.0	1.5	1.8	1.5	
2019	2.2	2.9	7.1	7.4	6.7	7.1	6.4	4.7	3.4	2.3	0.6	1.4	0.9	
2020	2.9	4.3	6.0	7.6	10.0	6.4	5.3	4.7	3.2	1.6	1.3	2.1	1.2	
2021	1.2	2.5	4.2	6.5	8.7	6.3	5.2	4.2	2.9	2.1	1.7	1.2	0.6	
2022	1.5	1.7	4.0	7.4	5.5	7.2	5.6	4.2	4.0	2.1	1.3	0.8	0.9	
2023	0.6	2.2	3.0	3.0	6.1	7.0	8.3	4.4	3.2	2.5	1.5	1.1	1.2	1.1
2024	0.9	2.5	2.6	5.2	6.4	5.2	6.4	4.2	3.6	2.8	2.5	1.1	1.6	0.9

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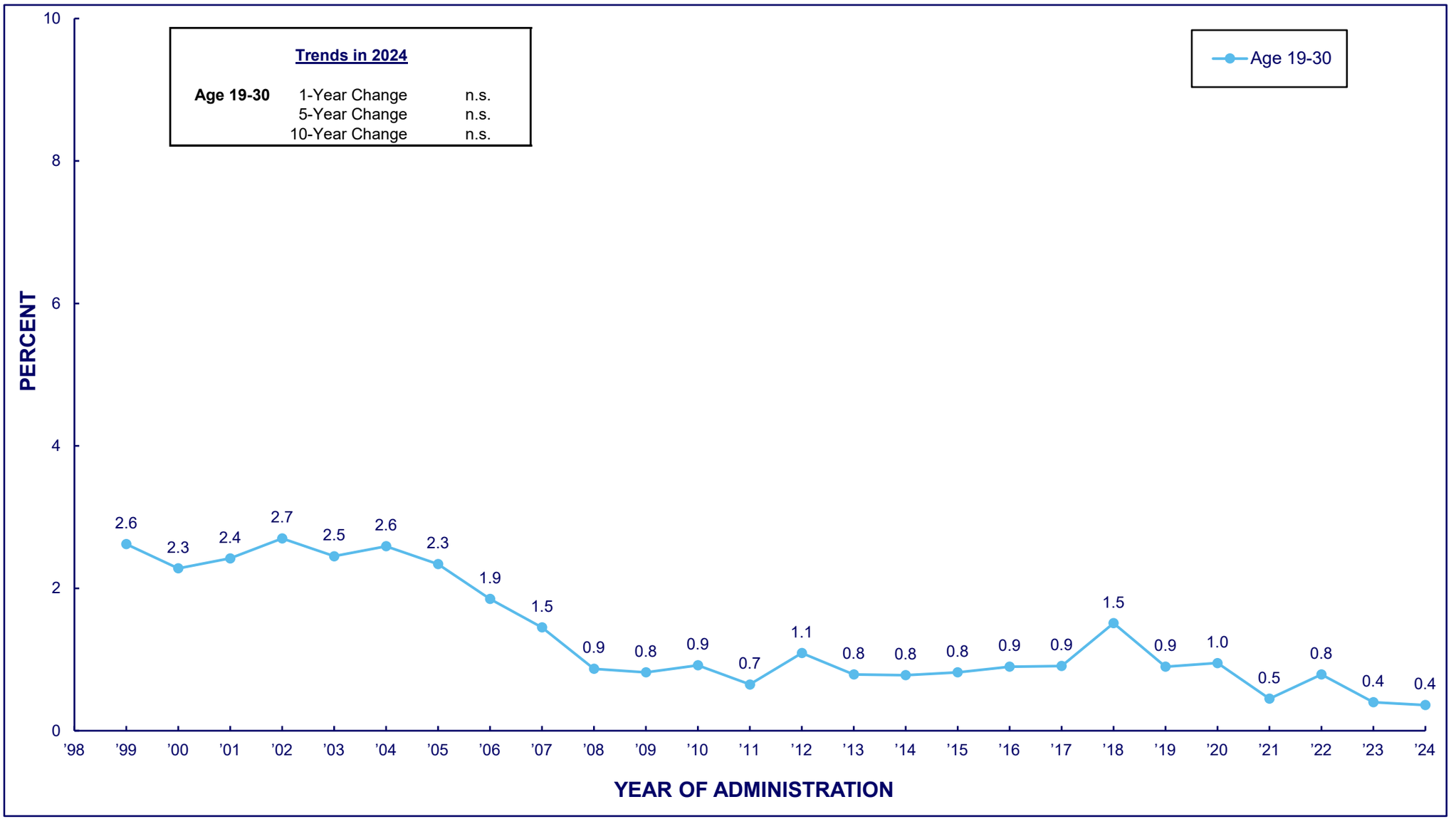
TABLE/FIGURE 81

METHAMPHETAMINE

Trends in 12-Month Prevalence among Respondents of Modal Ages 19 through 30



(Age-specific data provided in the following table.)

TABLE/FIGURE 82

METHAMPHETAMINE

Trends in 12-Month Prevalence

among Respondents of Modal Ages 18 through 30, by Age Group

Year	Age 18	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30
1999	4.7	4.8	2.7	3.2	2.0	0.7	2.0
2000	4.3	3.5	2.9	3.2	1.7	1.4	0.7
2001	3.9	4.2	3.8	1.5	3.3	1.3	0.7
2002	3.6	3.8	1.5	2.1	1.8	4.0	2.9
2003	3.2	2.9	4.0	2.9	1.7	2.1	1.3
2004	3.4	4.0	3.3	3.1	1.8	1.9	1.6
2005	2.5	2.0	4.0	2.3	2.3	2.2	1.5
2006	2.5	2.5	3.0	0.8	3.1	0.5	1.2
2007	1.7	1.2	1.1	3.2	1.2	1.2	1.0
2008	1.2	0.7	0.8	1.4	0.8	1.5	0.1
2009	1.2	0.6	0.6	1.1	1.3	0.8	0.5
2010	1.0	0.2	1.5	0.4	2.5	0.3	0.7
2011	1.4	0.1	0.7	0.9	0.7	0.9	0.6
2012	1.1	0.8	*	1.0	1.7	2.7	0.4
2013	0.9	0.3	0.4	1.3	0.4	0.9	1.4
2014	1.0	0.5	0.5	0.5	0.7	1.0	1.4
2015	0.6	1.3	0.4	1.0	0.8	0.5	0.9
2016	0.6	0.3	1.0	0.9	*	0.4	2.6
2017	0.6	0.5	2.7	0.7	0.9	0.7	0.1
2018	0.5	0.4	0.8	2.4	1.5	3.3	0.6
2019	0.5	0.5	0.7	1.5	1.1	0.7	0.9
2020	1.4	2.1	0.1	0.3	1.3	0.7	1.5
2021	0.2	*	0.7	*	1.6	*	0.3
2022	0.5	0.2	0.2	2.3	*	1.6	0.2
2023	0.4	*	*	*	0.7	0.5	1.0
2024	0.5	*	0.2	*	0.4	*	1.3

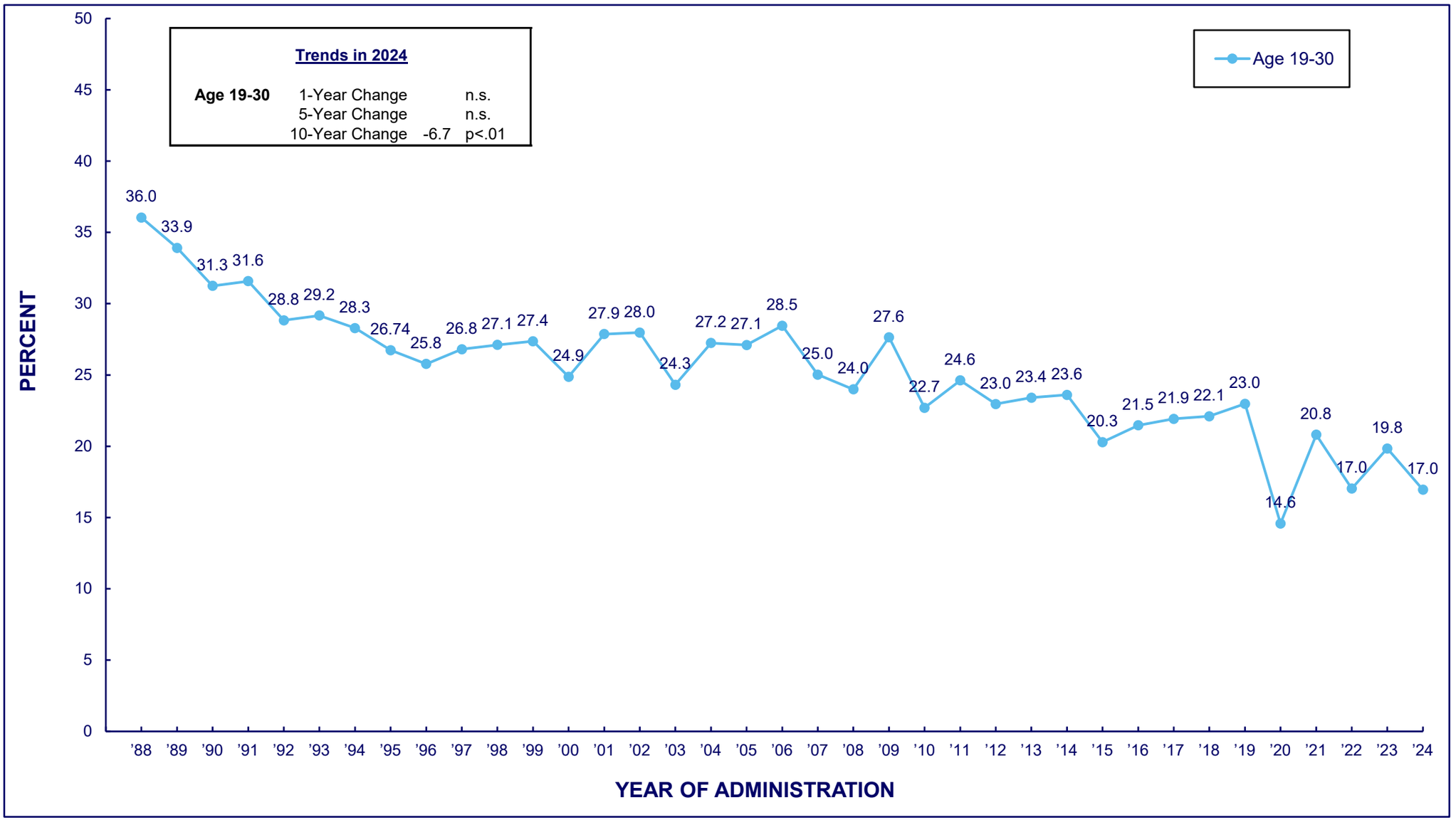
Notes. ' * ' indicates a percentage of less than 0.05%.

MONITORING THE FUTURE

TABLE/FIGURE 83

DRIVING AFTER USING ALCOHOL

Trends in 2-Week Prevalence among Respondents of Modal Ages 19 through 30



(Age-specific data provided in the following table.)

TABLE/FIGURE 84

DRIVING AFTER USING ALCOHOL

Trends in 2-Week Prevalence

among Respondents of Modal Ages 18 through 30, by Age Group

Year	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30
1984	34.4	46.6	45.5	45.9		
1985	32.4	36.0	39.8	35.6		
1986	29.6	38.4	40.2	37.3	40.1	
1987	26.4	38.6	39.8	39.6	36.3	
1988	25.5	34.7	45.6	36.0	37.9	35.9
1989	26.9	35.8	36.8	36.3	39.9	27.8
1990	21.1	32.4	35.3	34.6	34.0	29.6
1991	23.3	35.4	33.2	28.7	33.4	33.7
1992	24.3	27.2	30.1	30.8	34.1	25.4
1993	22.6	24.0	31.7	31.8	28.1	34.1
1994	14.6	30.7	26.6	30.4	30.8	34.3
1995	21.5	26.2	26.4	25.2	30.4	29.7
1996	17.5	28.3	31.8	22.5	26.4	27.7
1997	16.8	26.6	31.4	27.9	27.4	29.9
1998	20.3	29.7	28.9	32.3	26.6	25.0
1999	17.2	23.5	32.9	33.8	30.0	26.6
2000	20.1	24.0	27.0	29.9	25.4	22.7
2001	24.2	28.2	27.3	33.7	30.1	22.7
2002	14.9	28.5	36.9	30.3	27.6	27.6
2003	19.2	22.9	26.0	25.1	24.2	27.4
2004	19.4	28.8	32.1	26.2	28.3	28.6
2005	16.7	33.0	25.8	31.3	25.2	31.0
2006	17.2	36.1	31.3	30.5	31.1	24.5
2007	13.5	24.0	28.2	25.1	34.2	25.2
2008	13.5	20.7	30.6	28.3	22.7	28.3
2009	14.9	23.9	35.1	38.4	25.7	28.9
2010	8.5	18.5	25.7	29.8	22.8	29.8
2011	10.2	26.5	24.5	30.6	32.3	24.1
2012	8.6	22.0	27.2	27.6	32.0	18.9
2013	10.1	25.7	26.6	26.9	26.5	25.6
2014	8.1	18.7	26.5	26.9	27.2	31.9
2015	10.0	14.2	23.5	24.8	22.0	26.9
2016	11.5	22.5	30.5	15.6	22.0	24.6
2017	9.1	17.7	25.5	33.6	21.9	21.0
2018	4.5	16.8	34.0	28.7	22.9	25.1
2019	3.7	17.6	26.7	26.8	28.8	32.5
2020	10.7	8.4	11.8	17.1	19.3	17.8
2021	5.1	19.1	23.5	28.6	20.4	22.1
2022	6.6	14.7	17.5	14.7	16.7	25.0
2023	9.4	7.4	25.0	15.7	20.9	30.2
2024	0.5	10.3	15.8	18.4	22.2	24.1

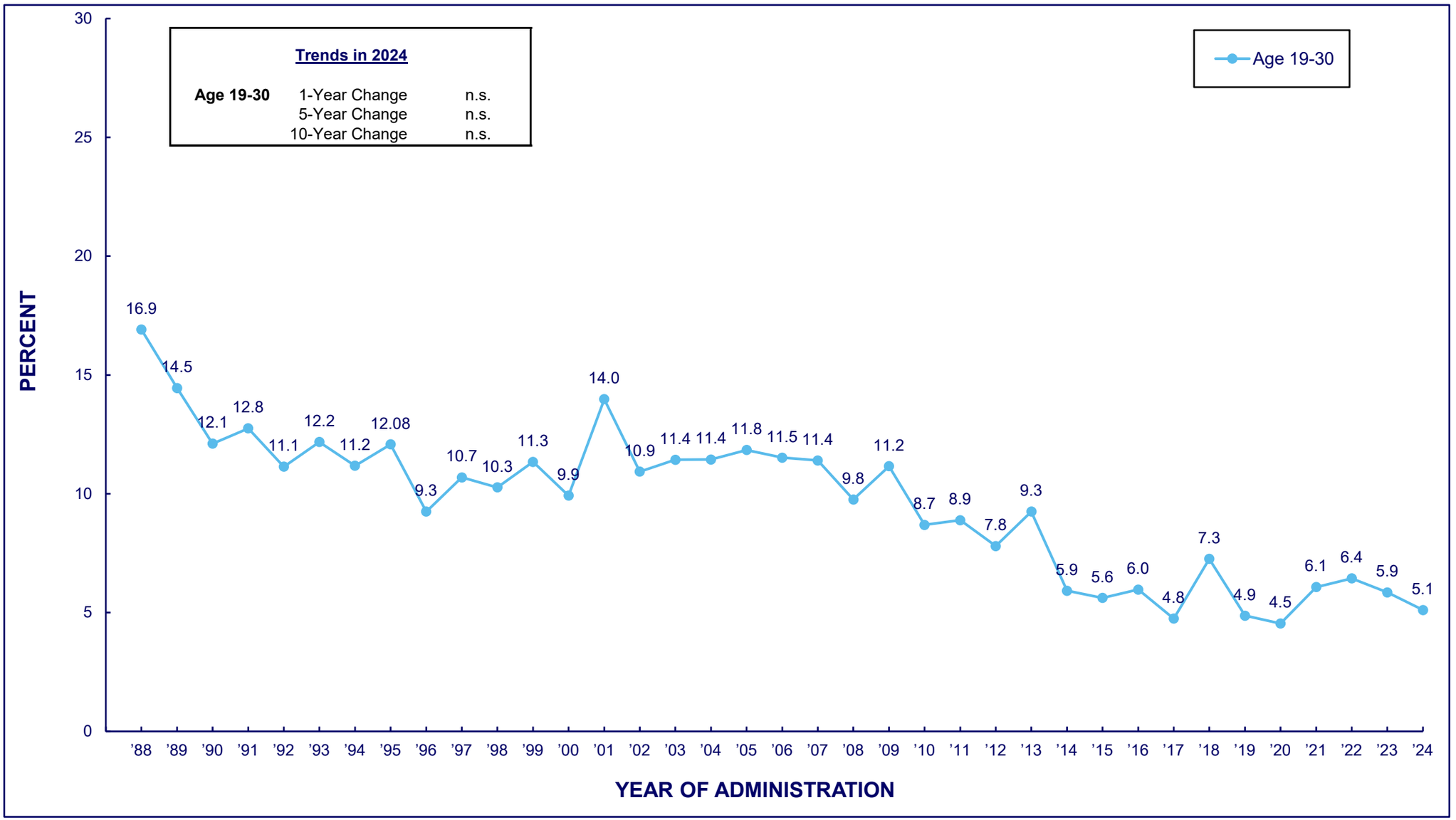
MONITORING THE FUTURE

TABLE/FIGURE 85

DRIVING AFTER HAVING 5 OR MORE DRINKS

Trends in 2-Week Prevalence among Respondents of Modal Ages 19 through 30

MONITORING THE FUTURE



(Age-specific data provided in the following table.)

TABLE/FIGURE 86

DRIVING AFTER HAVING 5 OR MORE DRINKS

Trends in 2-Week Prevalence

among Respondents of Modal Ages 18 through 30, by Age Group

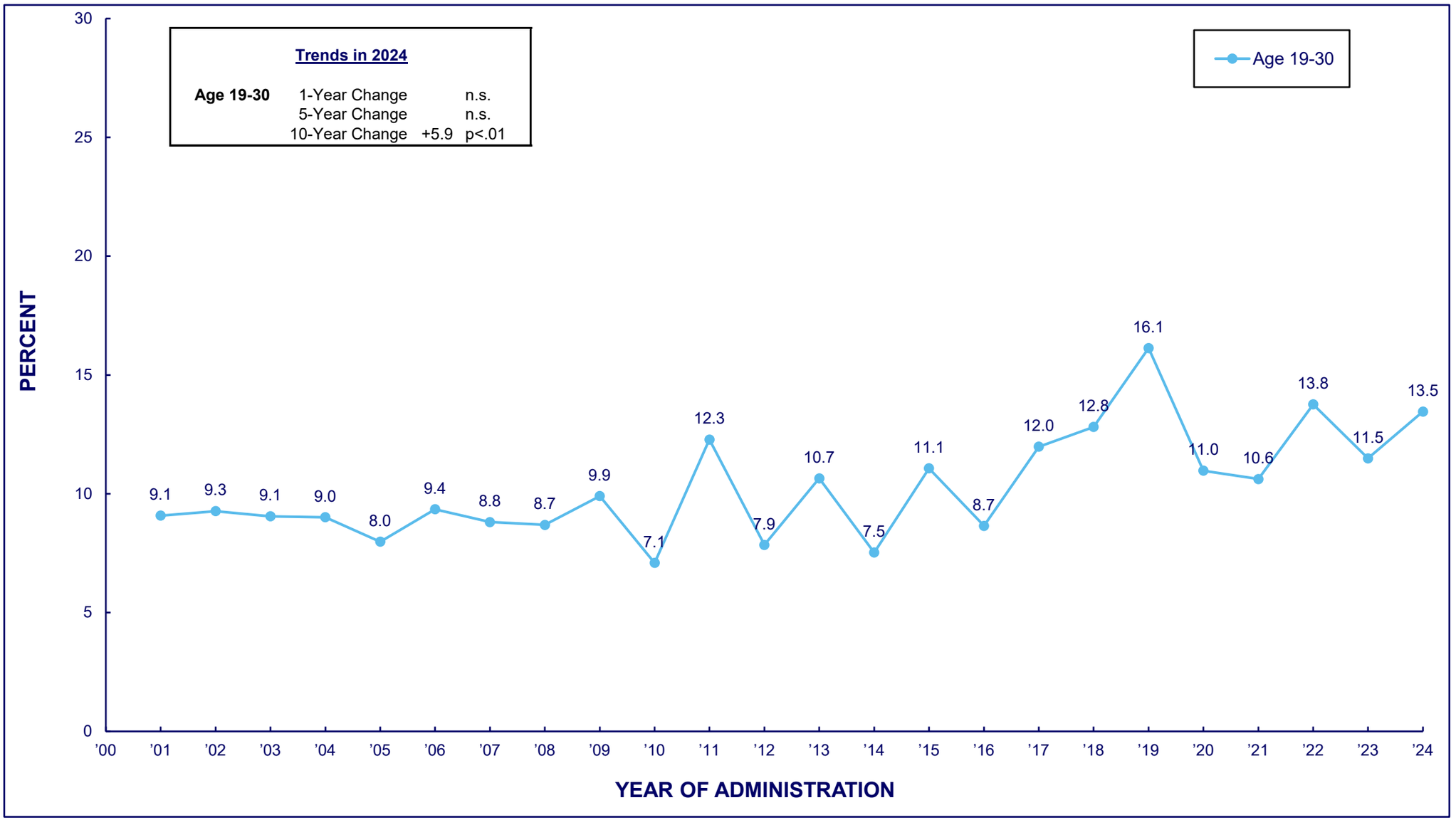
Year	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30
1984	18.3	26.2	22.1	22.7		
1985	16.4	18.4	22.2	15.7		
1986	16.1	22.7	18.8	19.9	16.5	
1987	12.3	19.3	18.1	16.9	19.0	
1988	14.6	17.6	20.4	17.0	16.6	14.8
1989	12.0	16.4	17.2	13.6	16.9	10.6
1990	7.7	12.1	11.8	15.1	14.2	11.4
1991	10.8	15.0	11.9	14.9	13.2	10.2
1992	9.0	9.7	12.9	12.6	13.0	9.1
1993	11.4	13.2	12.2	14.1	11.0	11.4
1994	6.8	13.8	10.7	11.3	10.0	14.0
1995	11.7	12.6	13.3	10.5	14.0	10.8
1996	6.4	10.0	17.6	8.5	7.7	6.3
1997	7.7	10.8	14.6	11.7	8.7	11.0
1998	9.9	7.2	10.2	17.2	11.2	6.3
1999	5.0	11.4	14.1	15.5	14.9	8.0
2000	12.8	9.5	9.7	6.9	12.1	8.8
2001	11.3	12.9	15.5	17.6	14.9	11.0
2002	9.0	12.4	15.7	9.0	8.1	11.0
2003	10.2	11.6	12.7	14.2	12.9	6.8
2004	10.1	10.7	15.9	15.2	9.7	7.1
2005	9.7	14.7	13.6	10.2	7.4	16.0
2006	7.0	15.2	14.0	12.1	9.1	12.1
2007	7.8	13.3	12.6	14.0	14.6	6.6
2008	7.0	9.6	14.0	9.0	8.2	10.3
2009	5.3	8.0	15.3	18.5	11.4	9.4
2010	5.6	10.1	8.3	9.3	9.1	9.8
2011	6.2	9.2	8.7	12.4	10.2	6.4
2012	5.3	6.7	8.3	5.9	13.1	7.4
2013	4.5	12.3	8.5	13.2	10.3	6.6
2014	2.1	4.2	6.4	10.7	3.6	8.0
2015	1.7	6.1	7.4	5.8	6.3	6.0
2016	3.3	3.7	14.6	4.8	7.8	1.3
2017	0.3	3.1	9.7	5.4	7.3	1.8
2018	1.0	4.0	11.5	9.2	11.5	6.1
2019	2.4	3.1	5.8	4.9	7.8	4.8
2020	5.3	3.8	2.7	5.2	6.0	4.1
2021	1.0	3.8	5.0	13.4	4.5	7.3
2022	4.8	4.6	4.8	4.6	8.4	10.0
2023	1.3	7.4	9.1	5.3	3.0	7.5
2024	6.0	8.0	2.4	5.1	6.3	5.1

MONITORING THE FUTURE

TABLE/FIGURE 87

DRIVING AFTER USING CANNABIS

Trends in 2-Week Prevalence among Respondents of Modal Ages 19 through 30



(Age-specific data provided in the following table.)

TABLE/FIGURE 88

DRIVING AFTER USING CANNABIS

Trends in 2-Week Prevalence

among Respondents of Modal Ages 18 through 30, by Age Group

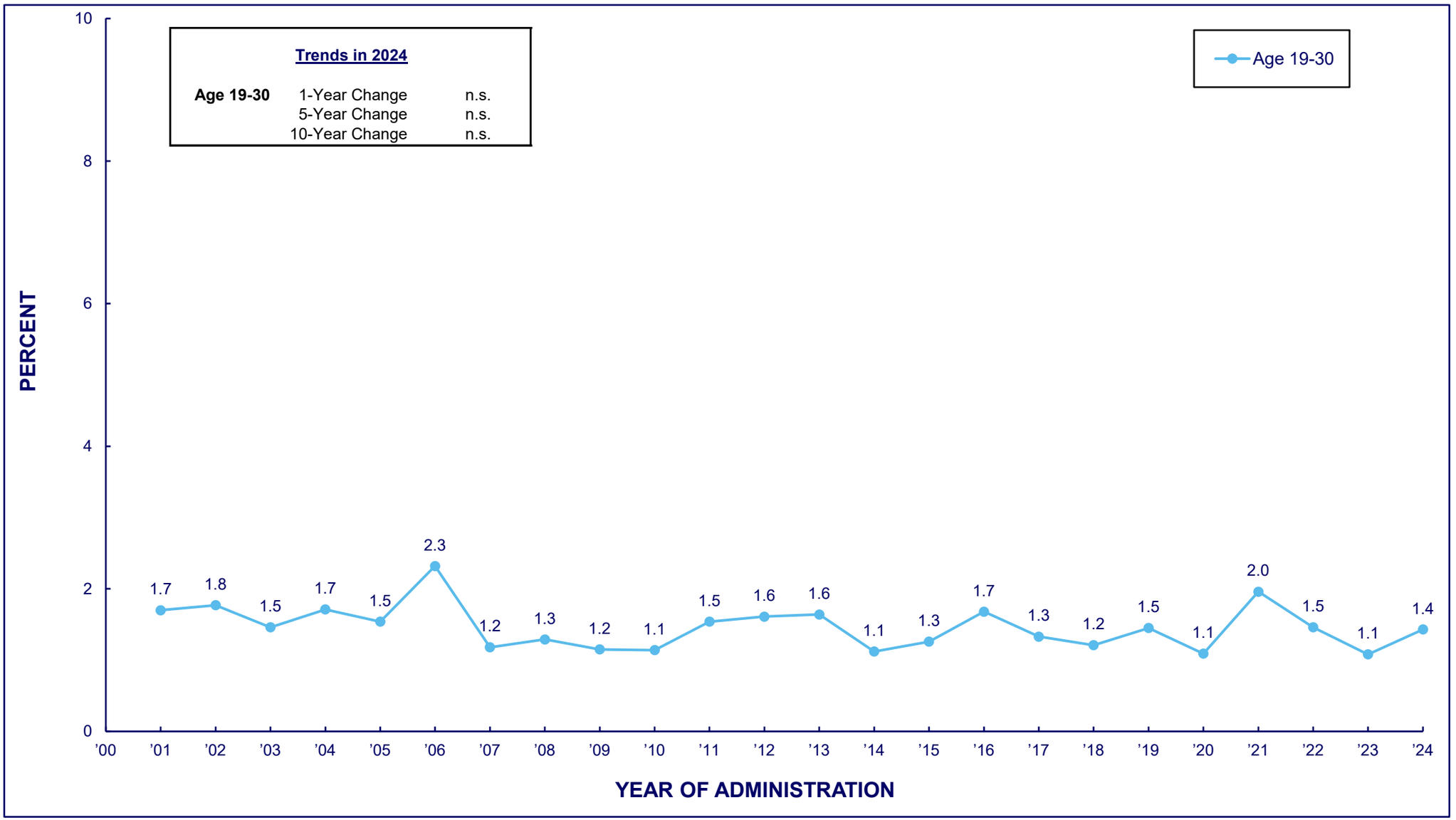
Year	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30
2001	13.4	13.4	5.4	7.9	7.8	7.0
2002	13.3	13.1	12.1	7.6	5.1	5.3
2003	12.3	12.8	9.0	7.9	8.9	4.6
2004	11.9	11.7	12.0	10.5	5.0	3.8
2005	8.8	12.7	6.3	10.9	4.0	5.9
2006	10.6	16.0	9.5	10.2	7.0	2.6
2007	5.2	13.9	11.5	7.0	10.1	5.2
2008	6.3	10.0	7.6	10.5	8.4	9.4
2009	13.0	7.3	14.7	10.7	5.5	8.1
2010	7.7	8.9	7.0	4.0	6.0	9.0
2011	10.2	14.7	9.4	17.4	13.8	7.6
2012	8.7	8.4	10.5	6.4	7.1	6.0
2013	12.4	17.4	13.4	7.5	8.8	3.7
2014	8.9	8.4	8.2	9.5	6.9	3.6
2015	12.8	11.0	15.6	14.7	3.9	8.2
2016	15.1	3.7	16.2	4.5	4.9	7.7
2017	11.5	10.8	12.5	15.3	16.4	4.8
2018	7.4	18.1	17.0	15.7	9.3	10.1
2019	11.9	17.1	18.8	17.7	18.7	13.0
2020	10.3	12.5	12.3	15.5	9.2	6.8
2021	8.0	9.3	6.6	13.1	11.8	13.1
2022	6.1	15.8	16.3	12.7	13.4	14.0
2023	4.1	12.3	14.6	7.2	11.6	15.9
2024	5.8	9.8	20.1	15.0	11.2	12.6

MONITORING THE FUTURE

TABLE/FIGURE 89

DRIVING AFTER USING ILLICIT DRUGS OTHER THAN CANNABIS

Trends in 2-Week Prevalence among Respondents of Modal Ages 19 through 30



(Age-specific data provided in the following table.)

TABLE/FIGURE 90

DRIVING AFTER USING ILLICIT DRUGS OTHER THAN CANNABIS

Trends in 2-Week Prevalence among Respondents of Modal Ages 18 through 30, by Age Group

Year	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30
2001	4.0	1.7	0.8	0.8	2.2	1.1
2002	1.0	2.4	2.7	2.8	0.7	0.9
2003	0.3	1.4	1.9	1.9	1.0	2.1
2004	1.5	2.1	2.3	2.7	1.4	0.5
2005	2.5	1.5	2.0	1.0	0.8	1.6
2006	1.6	4.7	0.9	1.4	2.5	2.5
2007	2.4	1.7	0.8	1.1	0.5	0.6
2008	1.3	2.4	0.3	*	1.1	2.3
2009	1.3	1.2	1.8	1.1	1.4	*
2010	1.2	1.4	1.7	1.0	1.0	0.5
2011	0.2	3.1	0.7	3.5	0.3	1.2
2012	0.4	1.5	1.5	4.1	0.9	0.8
2013	2.1	2.8	2.3	0.7	1.1	0.7
2014	1.0	0.6	0.4	2.2	2.3	*
2015	0.5	0.5	1.4	3.9	0.3	0.9
2016	0.6	1.6	6.0	0.5	0.2	0.9
2017	0.9	0.4	1.9	2.3	2.2	*
2018	0.5	0.8	3.8	*	0.7	1.7
2019	2.4	0.4	0.7	1.8	1.5	1.7
2020	1.4	2.5	1.3	1.1	0.5	*
2021	*	0.7	0.4	5.5	1.7	2.7
2022	1.5	1.0	1.4	1.8	0.6	2.4
2023	0.5	0.6	3.2	1.7	*	*
2024	*	4.3	2.8	0.9	0.8	0.7

MONITORING THE FUTURE

TABLE/FIGURE 91

Differences in Reported Use Between Question Text Versions for Specific Drugs, 2024:

Original vs. New Question Text

by Age Group

	Age 19-30			Age 35-50			Age 55-65		
	New Question Text	Original Question Text	Difference	New Question Text	Original Question Text	Difference	New Question Text	Original Question Text	Difference
Cannabis[1]									
Past 12 Months	45.2	41.4	n.s.	30.0	26.6	n.s.	18.1	19.7	n.s.
Past 30 Days	30.3	29.0	n.s.	18.9	18.8	n.s.	12.7	13.0	n.s.
Daily in Past 30 Days	10.6	10.8	n.s.	6.6	8.2	n.s.	5.2	3.7	n.s.
Narcotics/Opiods[2]									
Past 12 Months	1.9	0.5	p<.001	2.7	2.0	n.s.	3.2	1.6	p<.05
Past 30 Days	0.5	0.1	p<.05	1.2	0.7	n.s.	1.4	0.5	p<.05
Sedatives/Sleeping Medications[3]									
Past 12 Months	2.0	1.2	n.s.	1.2	1.7	n.s.	2.1	2.0	n.s.
Past 30 Days	0.9	0.9	n.s.	0.8	0.9	n.s.	1.3	1.7	n.s.
Tranquilizers/Anti-Anxiety Medications[4]									
Past 12 Months	2.8	2.0	n.s.	5.0	2.7	p<.01	3.9	2.2	p<.05
Past 30 Days	1.3	0.7	n.s.	2.5	1.4	p<.05	0.5	0.3	n.s.

Notes. ' — ' indicates question not asked of this age group.

[1]New question text: The next questions are about marijuana or cannabis (sometimes called pot, weed, or hashish). On how many occasions (if any) have you used marijuana (smoking, vaping, edibles)...
Original question text: On how many occasions (if any) have you used marijuana (weed, pot) or hashish (hash, hash oil)….

[2]New question text: On how many occasions (if any) have you taken prescription opioid medications on your own—that is, without a medical professional telling you to use them...
Original question text: On how many occasions (if any) have you taken narcotics other than heroin on your own—that is, without a doctor telling you to take them…

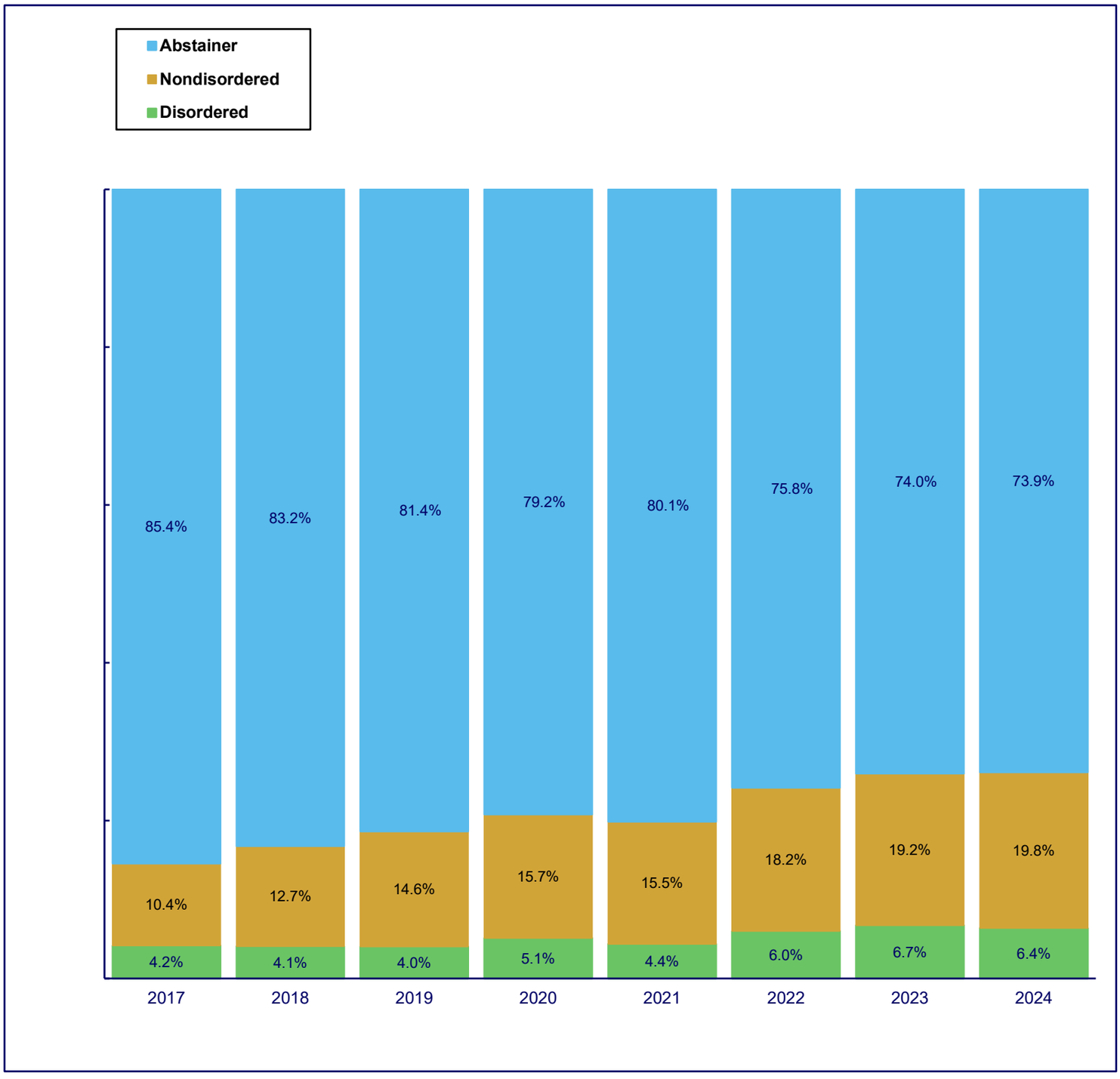
[3]New question text: On how many occasions (if any) have you taken prescription sleeping medications on your own—that is, without a medical professional telling you to use them…
Original question text: On how many occasions (if any) have you taken sedatives on your own—that is, without a doctor telling you to take them...

[4]New question text: On how many occasions (if any) have you taken prescription anti-anxiety medications on your own—that is, without a medical professional telling you to use them…
Original question text: On how many occasions (if any) have you taken tranquilizers on your own—that is, without a doctor telling you to take them…

TABLE/FIGURE 92

CANNABIS USE DISORDER [1]

among Respondents of Modal Ages 40 through 50



Trends in 2024

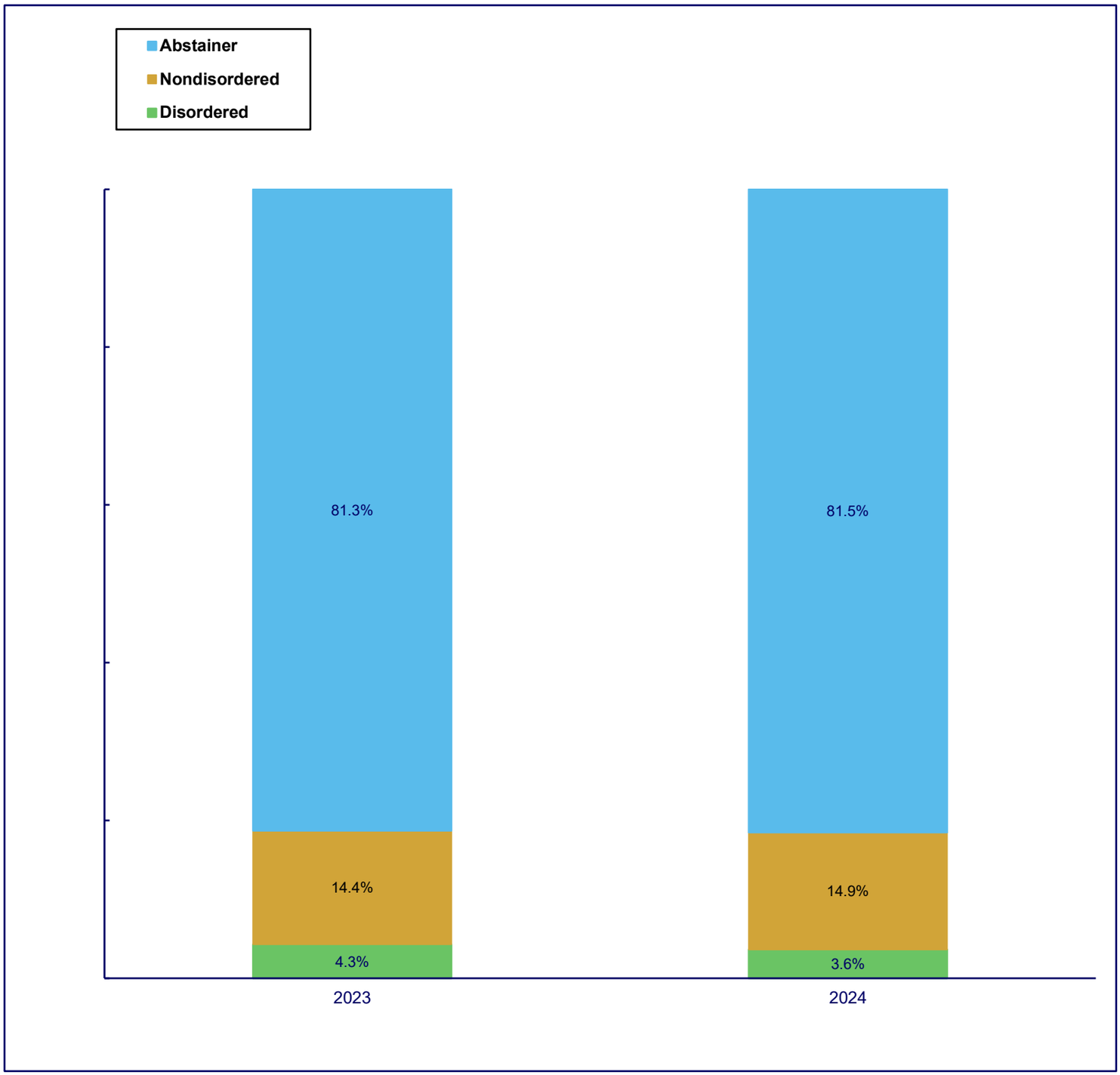
Abstainer	1-Year Change		n.s.	**Nondisordered**	1-Year Change		n.s.	**Disordered**	1-Year Change		n.s.
	5-Year Change	-7.5	p<.001		5-Year Change	+5.2	p<.001		5-Year Change	+2.3	p<.001
	10-Year Change	NA			10-Year Change	NA			10-Year Change	NA	p<.001

[1]MTF substance use disorder (SUD) measures are not equivalent to clinical SUD diagnoses but are based on diagnostic criteria specified in the *Diagnostic and Statistical Manual of Mental Disorders, 5th Edition Text Revision* (American Psychiatric Association, 2022). Categories include no use within the specified timeframe, non-disordered use (reporting 0-1 criteria), and disordered use (reporting 2+ criteria). In general, a past-12-month timeframe is used for SUD measures. For detailed information, see Terry-McElrath and Patrick, 2025.

TABLE/FIGURE 93

CANNABIS USE DISORDER [1]

among Respondents of Modal Ages 55 through 65



Trends in 2024

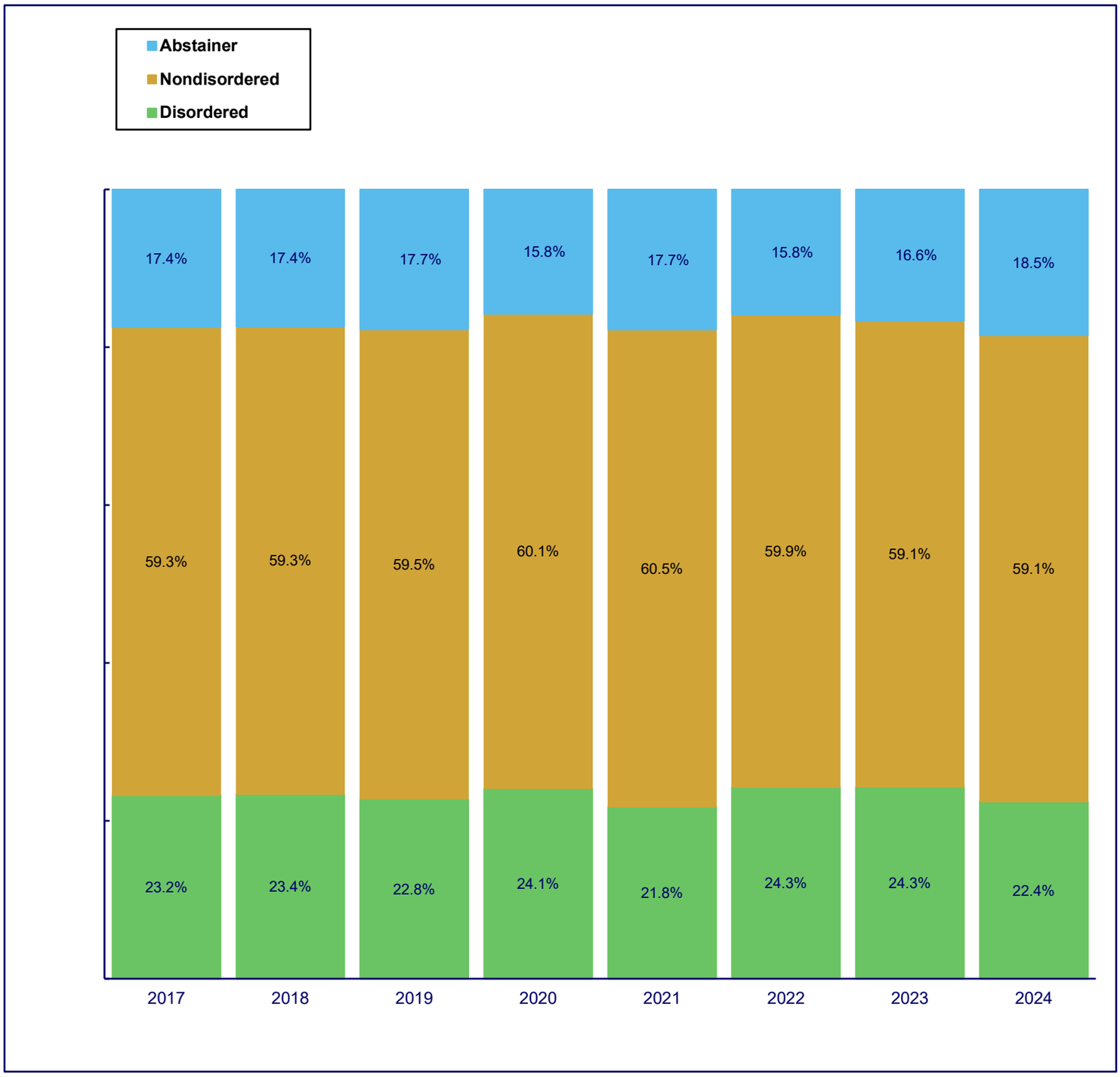
Abstainer	1-Year Change	n.s.	**Nondisordered**	1-Year Change	n.s.	**Disordered**	1-Year Change	n.s.
	5-Year Change	NA		5-Year Change	NA		5-Year Change	NA
	10-Year Change	NA		10-Year Change	NA		10-Year Change	NA

[1]MTF substance use disorder (SUD) measures are not equivalent to clinical SUD diagnoses but are based on diagnostic criteria specified in the *Diagnostic and Statistical Manual of Mental Disorders, 5th Edition Text Revision* (American Psychiatric Association, 2022). Categories include no use within the specified timeframe, non-disordered use (reporting 0-1 criteria), and disordered use (reporting 2+ criteria). In general, a past-12-month timeframe is used for SUD measures. For detailed information, see Terry-McElrath and Patrick, 2025.

TABLE/FIGURE 94

ALCOHOL USE DISORDER [1]

among Respondents of Modal Ages 40 through 50



Trends in 2024

Abstainer	1-Year Change	n.s.	**Nondisordered**	1-Year Change	n.s.	**Disordered**	1-Year Change	n.s.
	5-Year Change	n.s.		5-Year Change	n.s.		5-Year Change	n.s.
	10-Year Change	NA		10-Year Change	NA		10-Year Change	NA

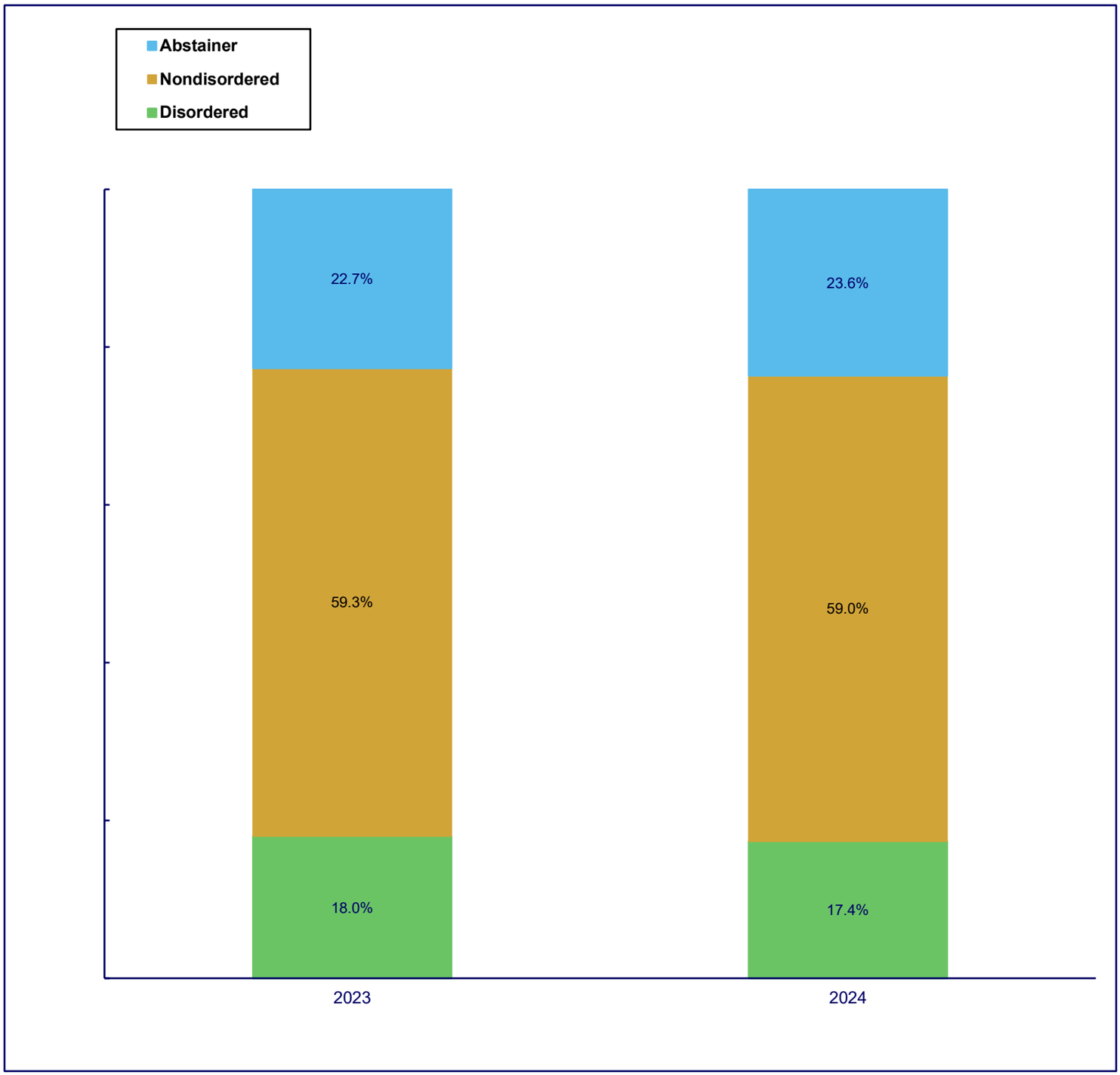
[1]MTF substance use disorder (SUD) measures are not equivalent to clinical SUD diagnoses but are based on diagnostic criteria specified in the *Diagnostic and Statistical Manual of Mental Disorders, 5th Edition Text Revision* (American Psychiatric Association, 2022). Categories include no use within the specified timeframe, non-disordered use (reporting 0-1 criteria), and disordered use (reporting 2+ criteria). In general, a past-12-month timeframe is used for SUD measures. For detailed information, see Terry-McElrath and Patrick, 2025.

TABLE/FIGURE 95

ALCOHOL USE DISORDER [1]

among Respondents of Modal Ages 55 through 65

MONITORING THE FUTURE



Trends in 2024

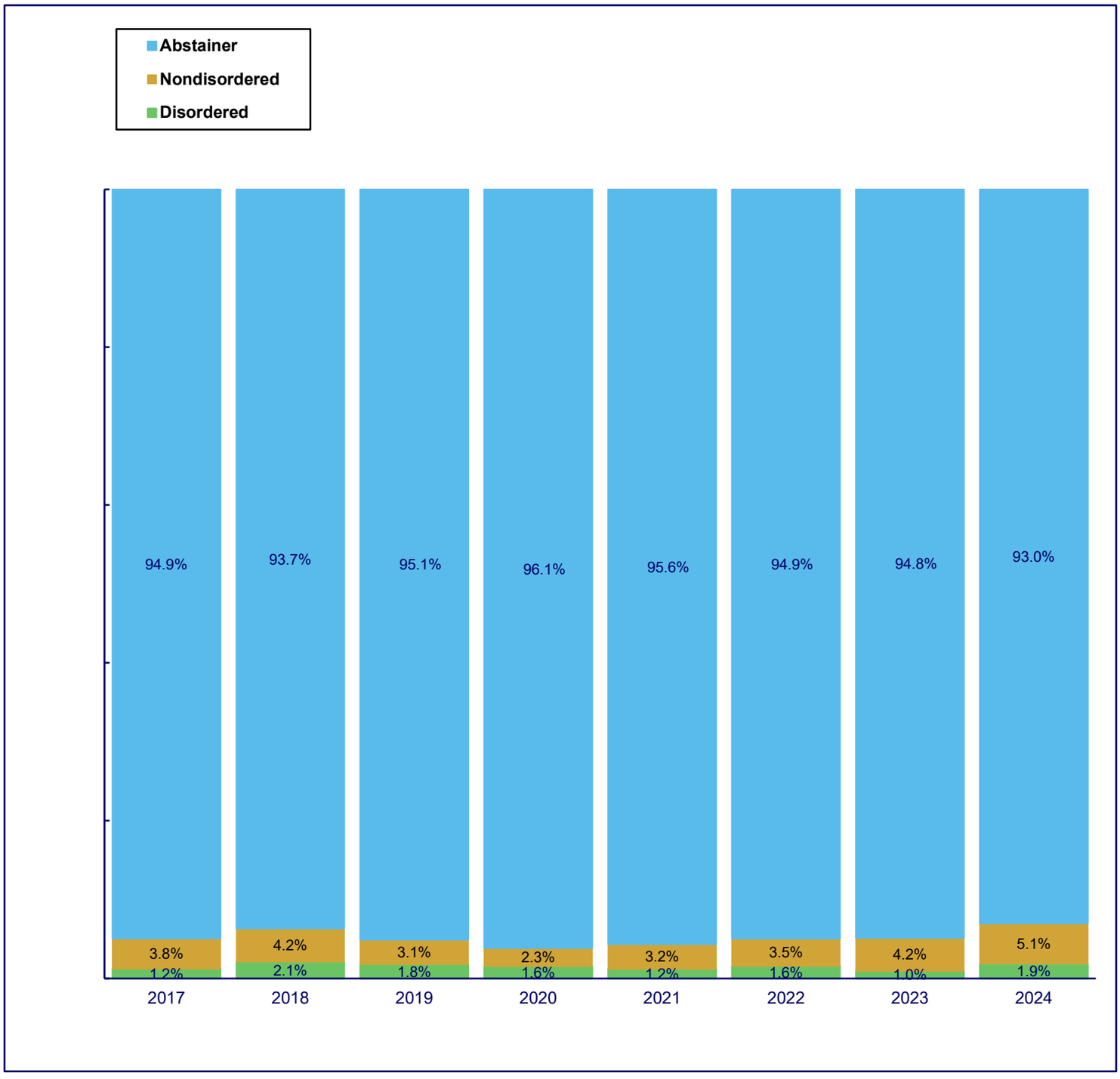
Abstainer	1-Year Change	n.s.	**Nondisordered**	1-Year Change	n.s.	**Disordered**	1-Year Change	n.s.
	5-Year Change	NA		5-Year Change	NA		5-Year Change	NA
	10-Year Change	NA		10-Year Change	NA		10-Year Change	NA

[1]MTF substance use disorder (SUD) measures are not equivalent to clinical SUD diagnoses but are based on diagnostic criteria specified in the *Diagnostic and Statistical Manual of Mental Disorders, 5th Edition Text Revision* (American Psychiatric Association, 2022). Categories include no use within the specified timeframe, non-disordered use (reporting 0-1 criteria), and disordered use (reporting 2+ criteria). In general, a past-12-month timeframe is used for SUD measures. For detailed information, see Terry-McElrath and Patrick, 2025.

TABLE/FIGURE 96

OTHER DRUG USE DISORDER [1]

among Respondents of Modal Ages 40 through 50



Trends in 2024

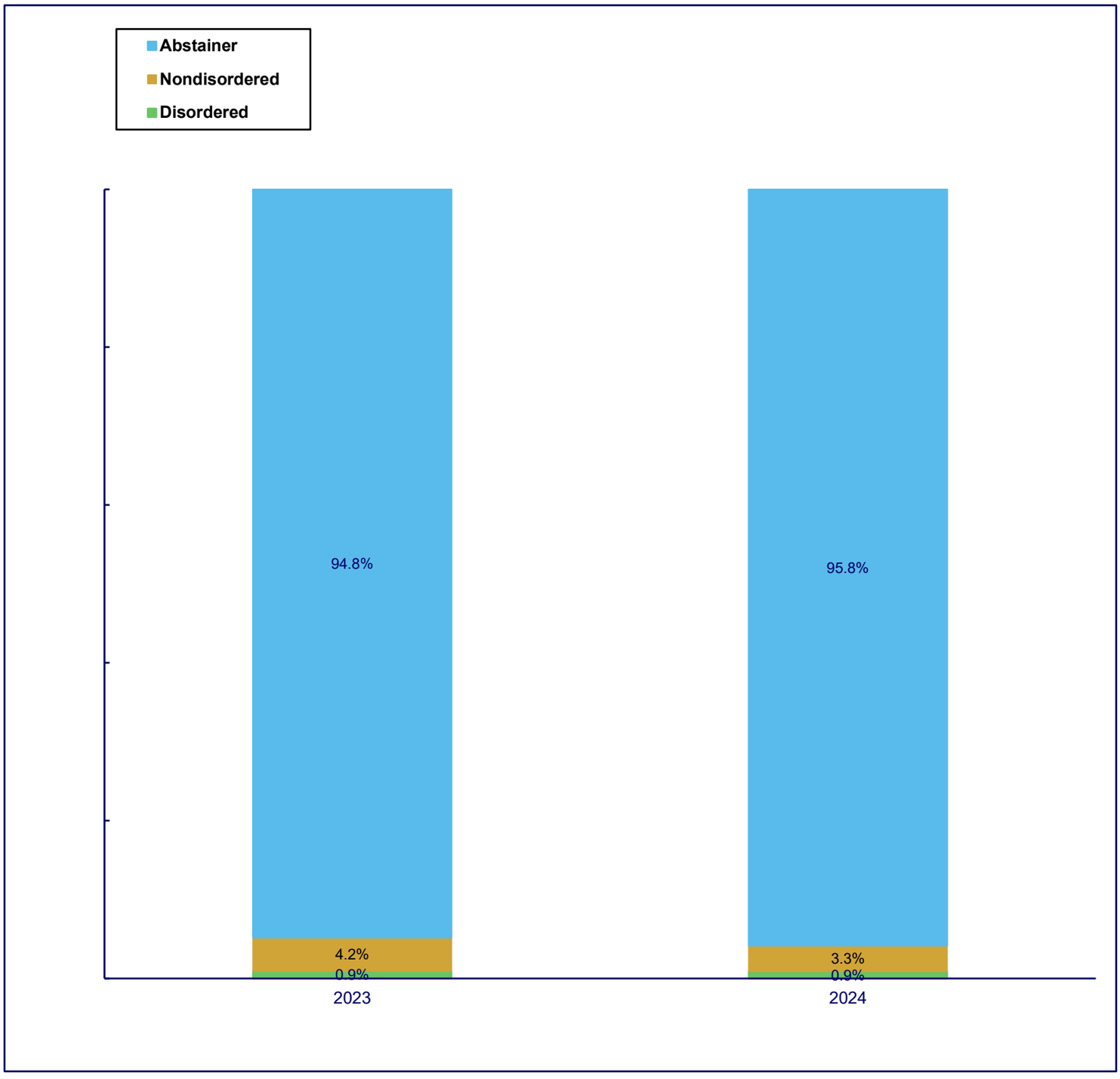
Abstainer	1-Year Change	-1.8	p<.05	**Nondisordered**	1-Year Change		n.s.	**Disordered**	1-Year Change	+0.9	p<.05
	5-Year Change	-2.1	p<.001		5-Year Change	+2.0	p<.001		5-Year Change		n.s.
	10-Year Change	NA			10-Year Change	NA			10-Year Change	NA	

[1]MTF substance use disorder (SUD) measures are not equivalent to clinical SUD diagnoses but are based on diagnostic criteria specified in the *Diagnostic and Statistical Manual of Mental Disorders, 5th Edition Text Revision* (American Psychiatric Association, 2022). Categories include no use within the specified timeframe, non-disordered use (reporting 0-1 criteria), and disordered use (reporting 2+ criteria). In general, a past-12-month timeframe is used for SUD measures. For detailed information, see Terry-McElrath and Patrick, 2025.

TABLE/FIGURE 97

OTHER DRUG USE DISORDER [1]

among Respondents of Modal Ages 55 through 65



Trends in 2024

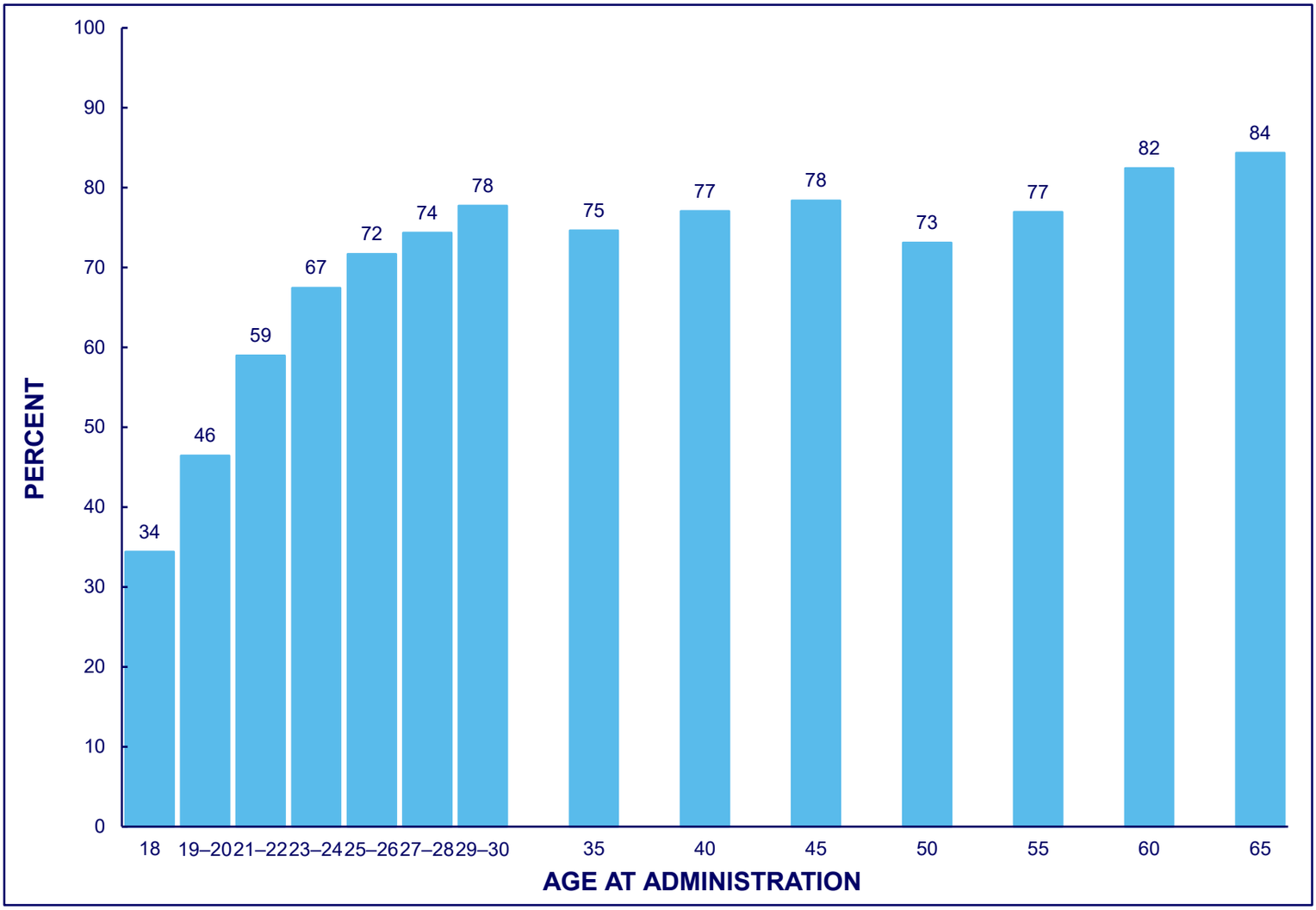
Abstainer	1-Year Change	n.s.	**Nondisordered**	1-Year Change	n.s.	**Disordered**	1-Year Change	n.s.
	5-Year Change	NA		5-Year Change	NA		5-Year Change	NA
	10-Year Change	NA		10-Year Change	NA		10-Year Change	NA

[1]MTF substance use disorder (SUD) measures are not equivalent to clinical SUD diagnoses but are based on diagnostic criteria specified in the *Diagnostic and Statistical Manual of Mental Disorders, 5th Edition Text Revision* (American Psychiatric Association, 2022). Categories include no use within the specified timeframe, non-disordered use (reporting 0-1 criteria), and disordered use (reporting 2+ criteria). In general, a past-12-month timeframe is used for SUD measures. For detailed information, see Terry-McElrath and Patrick, 2025.

TABLE/FIGURE 98

CANNABIS

Adjusted Lifetime Prevalence among Respondents of Modal Ages 18 through 65 by Age Group, 2024

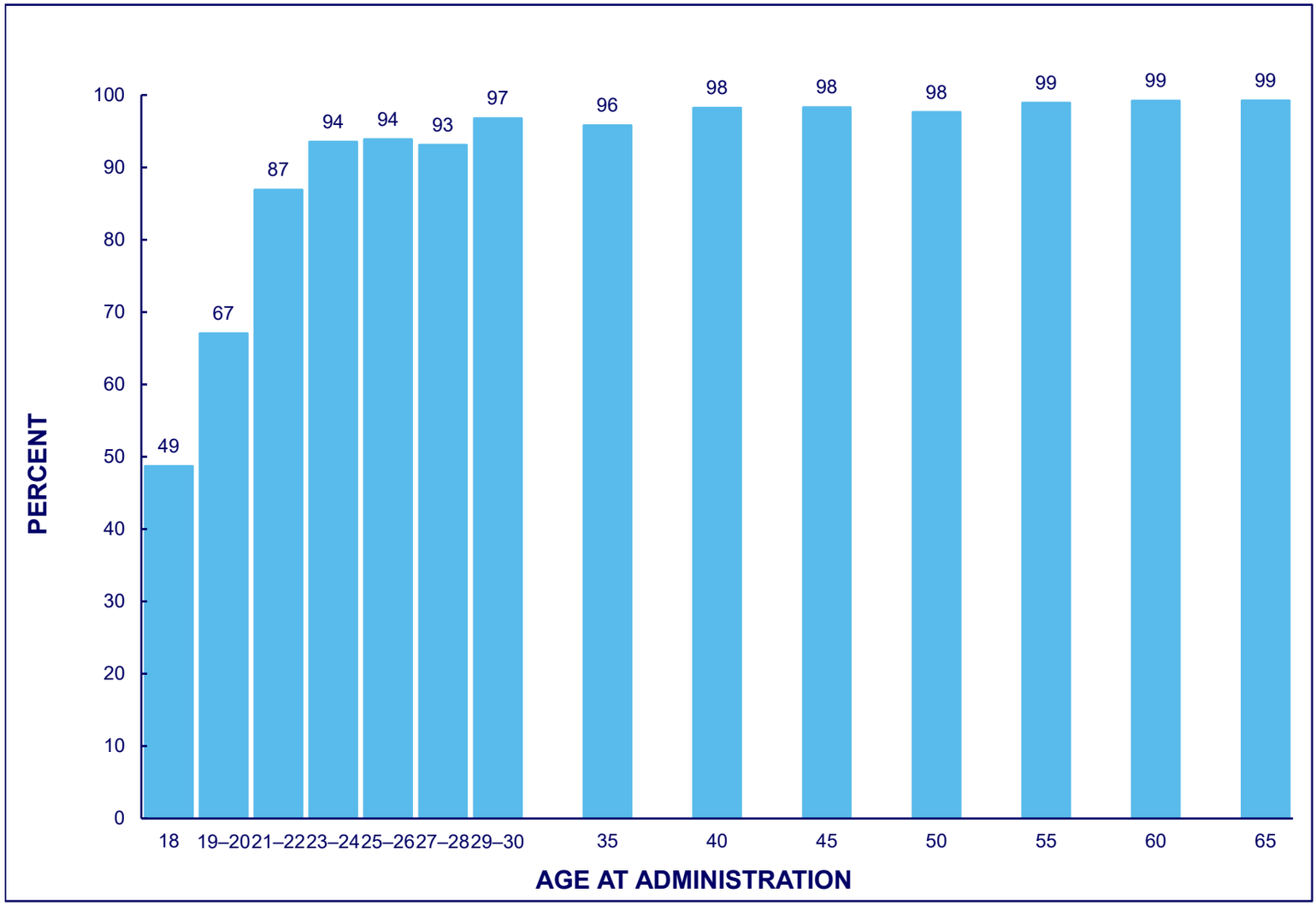


Notes. Lifetime prevalence estimates were adjusted for inconsistency in self-reports of drug use over time. See text for discussion.
Due to rounding some bars with the same number may have uneven height.

TABLE/FIGURE 99

ALCOHOL

Adjusted Lifetime Prevalence among Respondents of Modal Ages 18 through 65 by Age Group, 2024

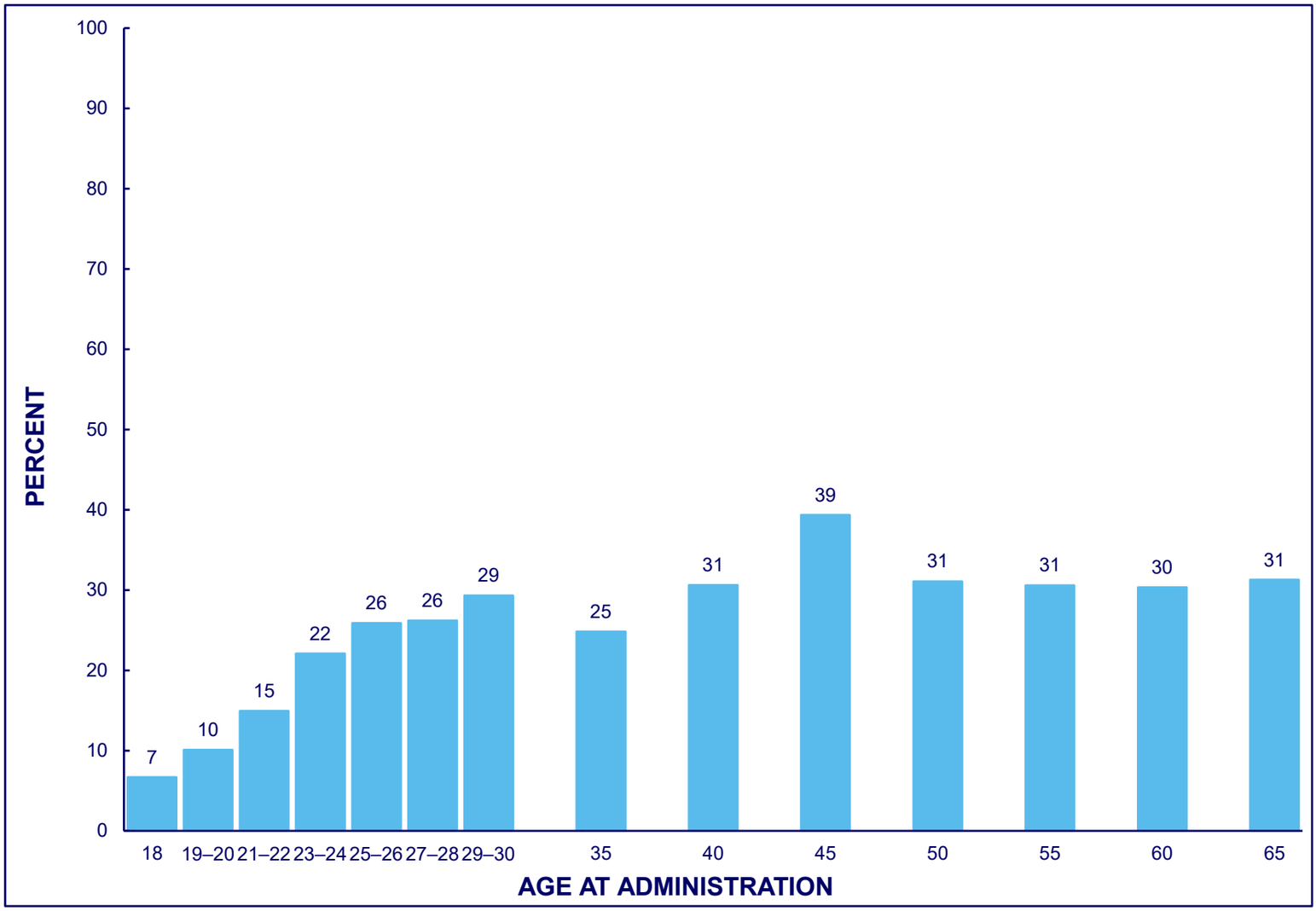


Notes. Lifetime prevalence estimates were adjusted for inconsistency in self-reports of drug use over time. See text for discussion. Due to rounding, some bars with the same number may have uneven height.

TABLE/FIGURE 100

HALLUCINOGENS

Adjusted Lifetime Prevalence among Respondents of Modal Ages 18 through 65 by Age Group, 2024

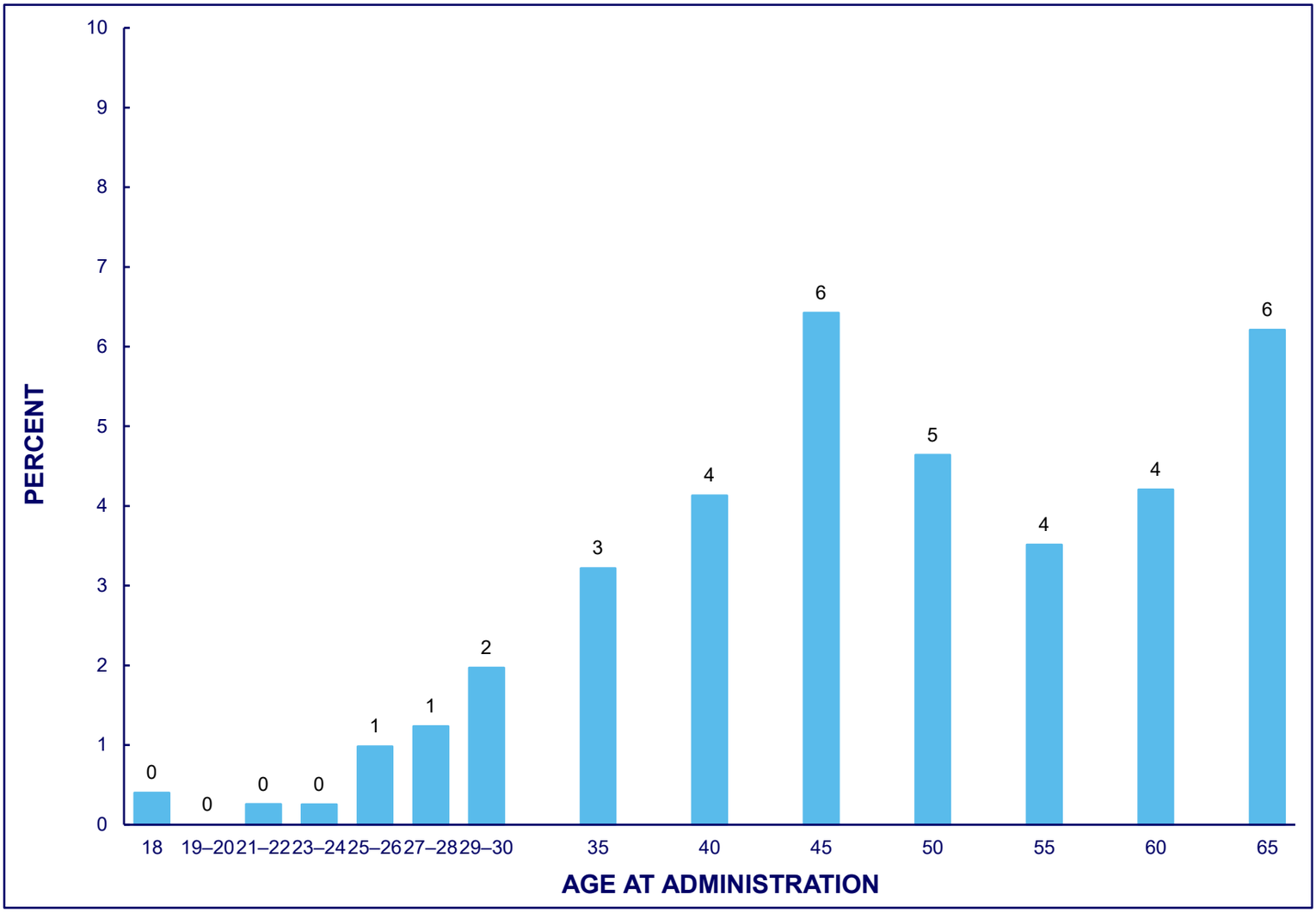


Notes. Lifetime prevalence estimates were adjusted for inconsistency in self-reports of drug use over time. See text for discussion.
Due to rounding, some bars with the same number may have uneven height.

TABLE/FIGURE 101

HEROIN

Adjusted Lifetime Prevalence among Respondents of Modal Ages 18 through 65 by Age Group, 2024

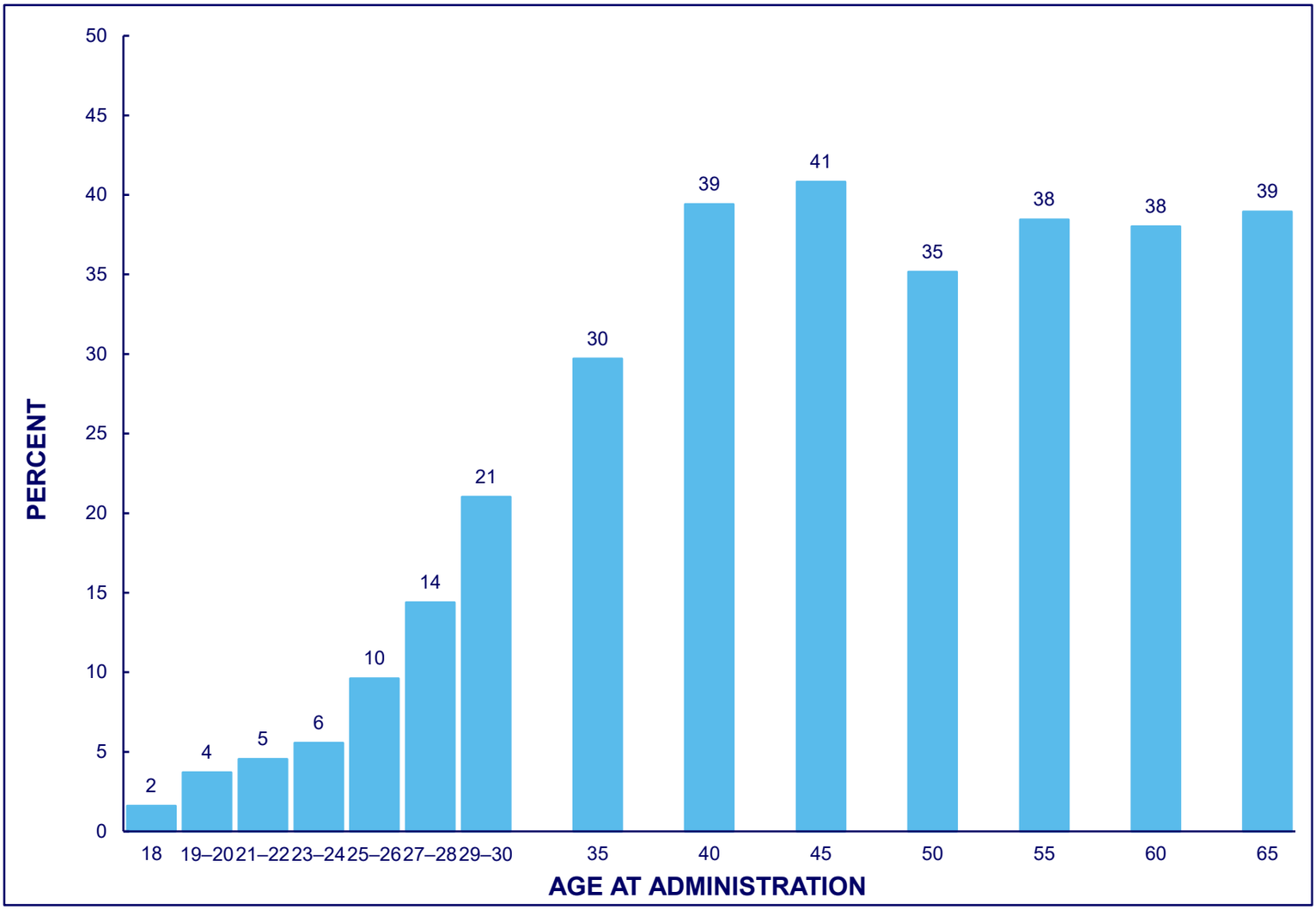


Notes. Lifetime prevalence estimates were adjusted for inconsistency in self-reports of drug use over time. See text for discussion. Due to rounding, some bars with the same number may have uneven height.

TABLE/FIGURE 102

NARCOTICS OTHER THAN HEROIN

Adjusted Lifetime Prevalence among Respondents of Modal Ages 18 through 65 by Age Group, 2024

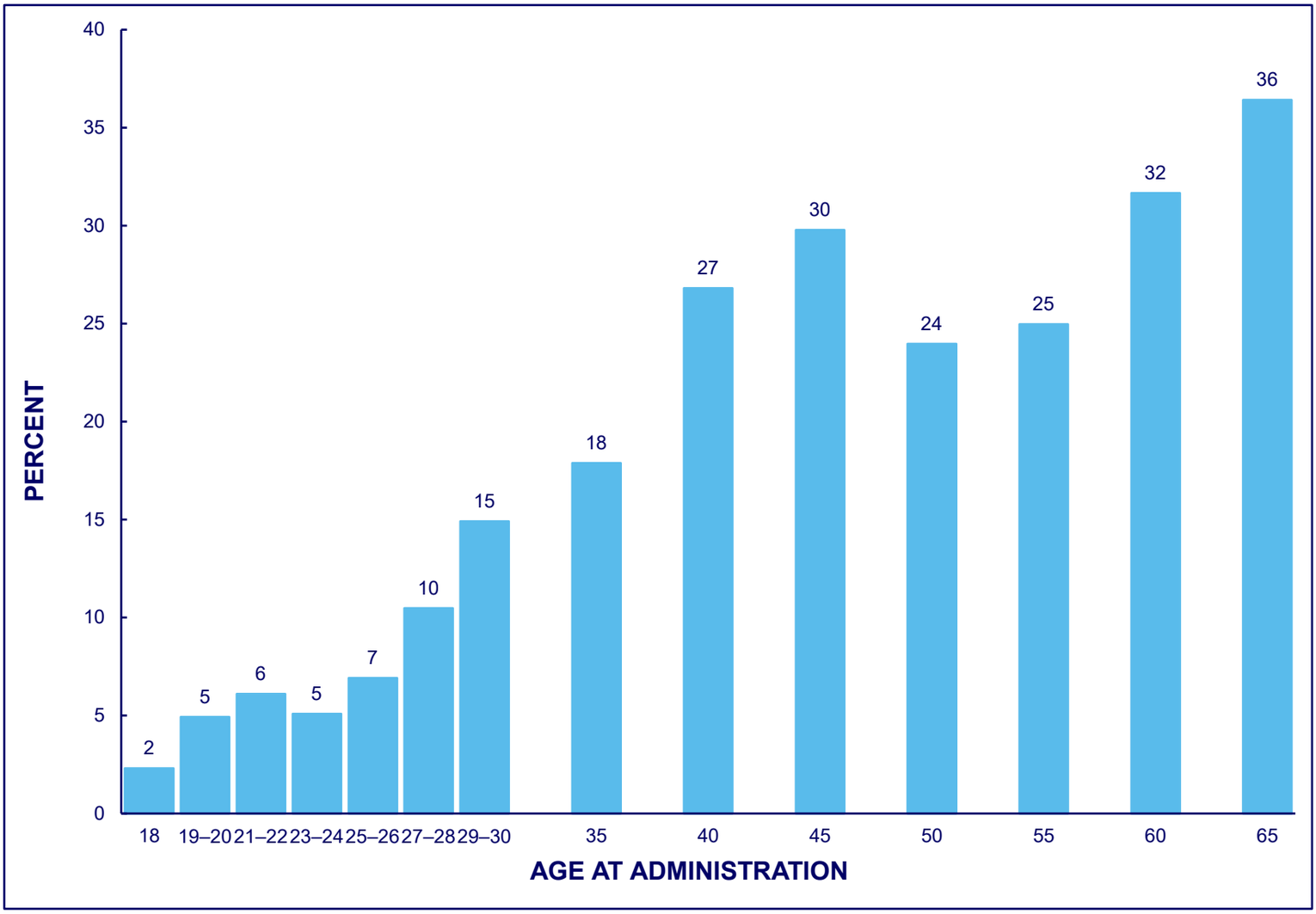


Notes. Lifetime prevalence estimates were adjusted for inconsistency in self-reports of drug use over time. See text for discussion.
Due to rounding, some bars with the same number may have uneven height.

TABLE/FIGURE 103

SEDATIVES (BARBITURATES)

Adjusted Lifetime Prevalence among Respondents of Modal Ages 18 through 65 by Age Group, 2024

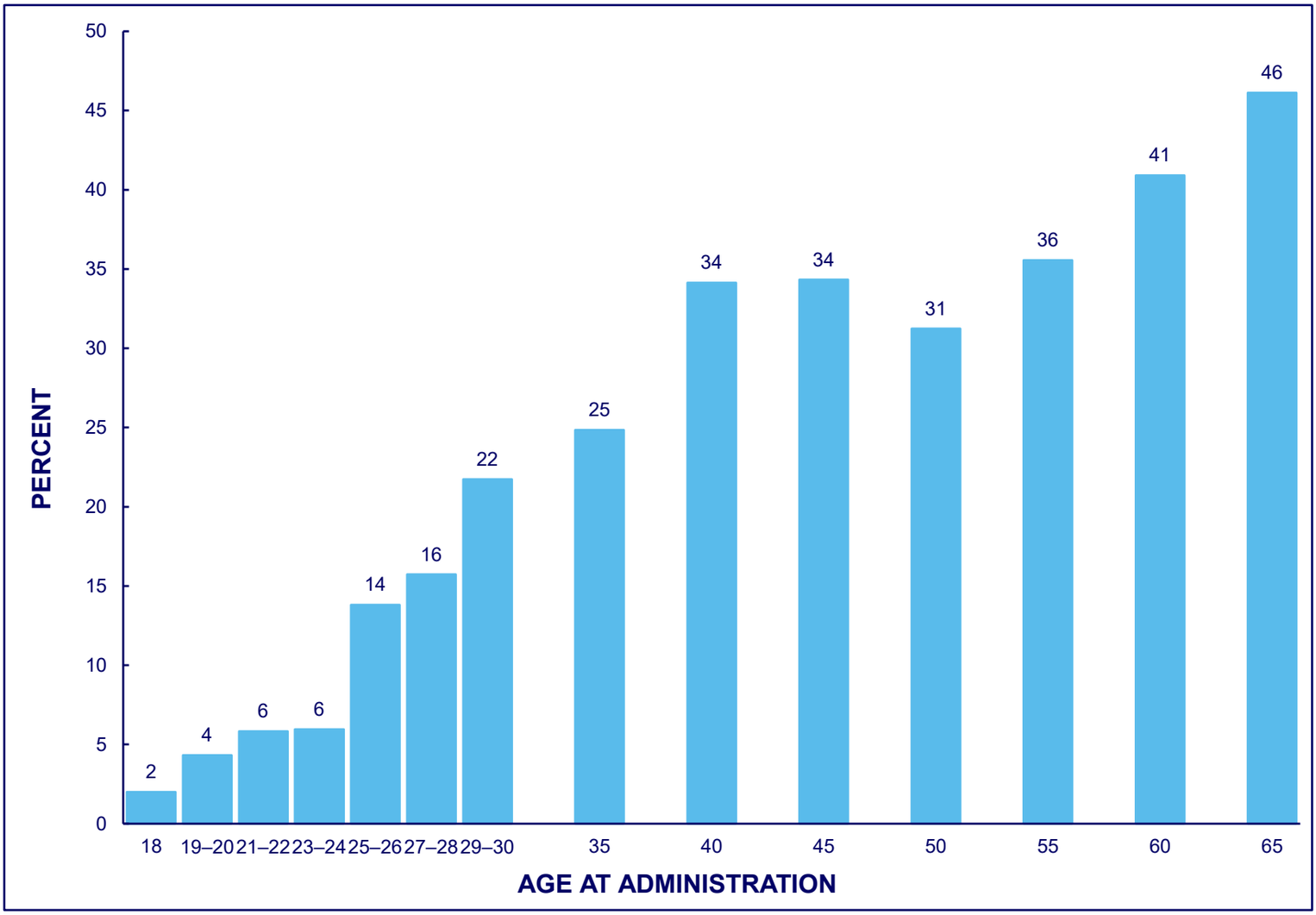


Notes. Lifetime prevalence estimates were adjusted for inconsistency in self-reports of drug use over time. See text for discussion. Due to rounding, some bars with the same number may have uneven height.

TABLE/FIGURE 104

TRANQUILIZERS

Adjusted Lifetime Prevalence among Respondents of Modal Ages 18 through 65 by Age Group, 2024

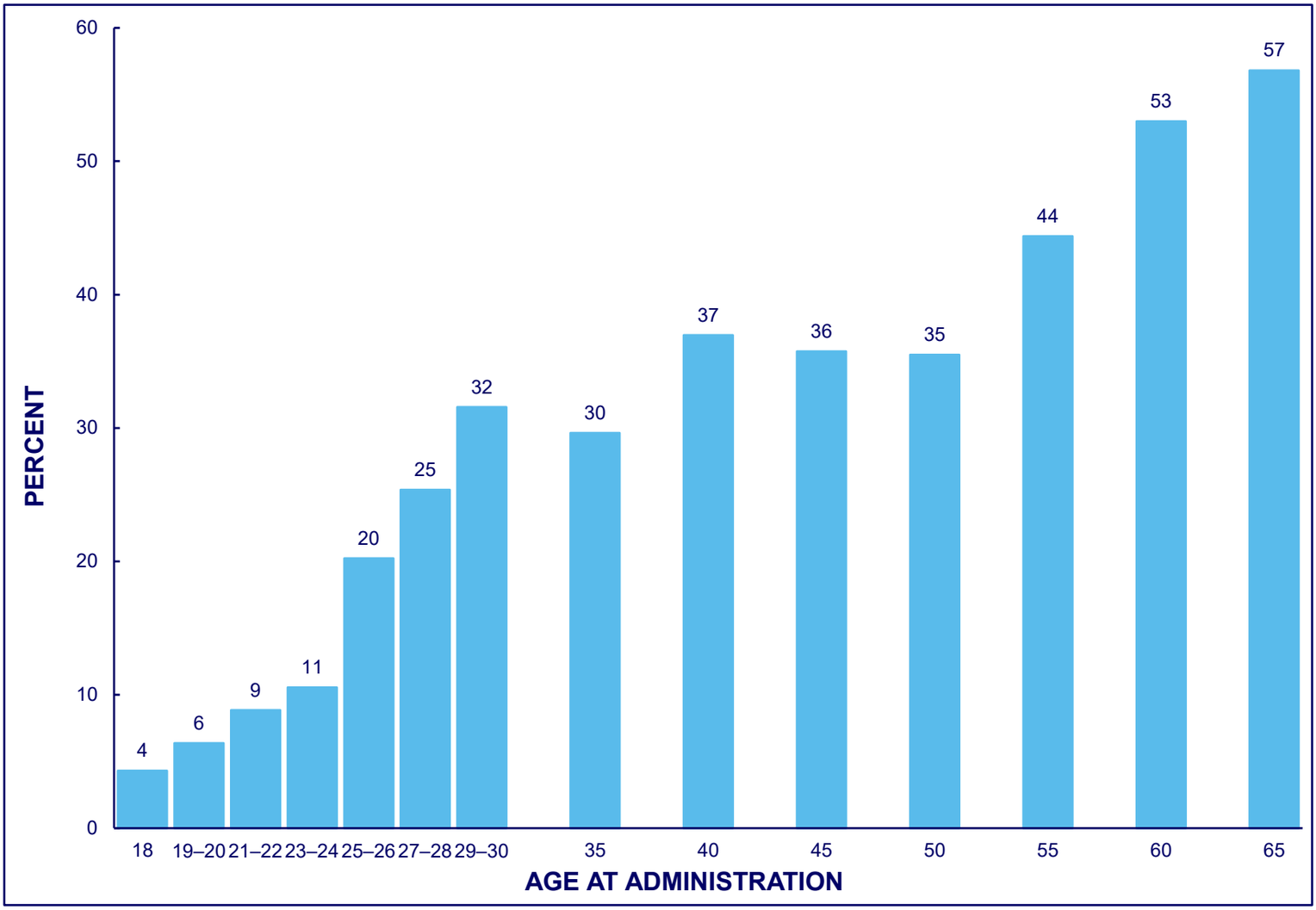


Notes. Lifetime prevalence estimates were adjusted for inconsistency in self-reports of drug use over time. See text for discussion. Due to rounding, some bars with the same number may have uneven height.

TABLE/FIGURE 105

AMPHETAMINES

Adjusted Lifetime Prevalence among Respondents of Modal Ages 18 through 65 by Age Group, 2024

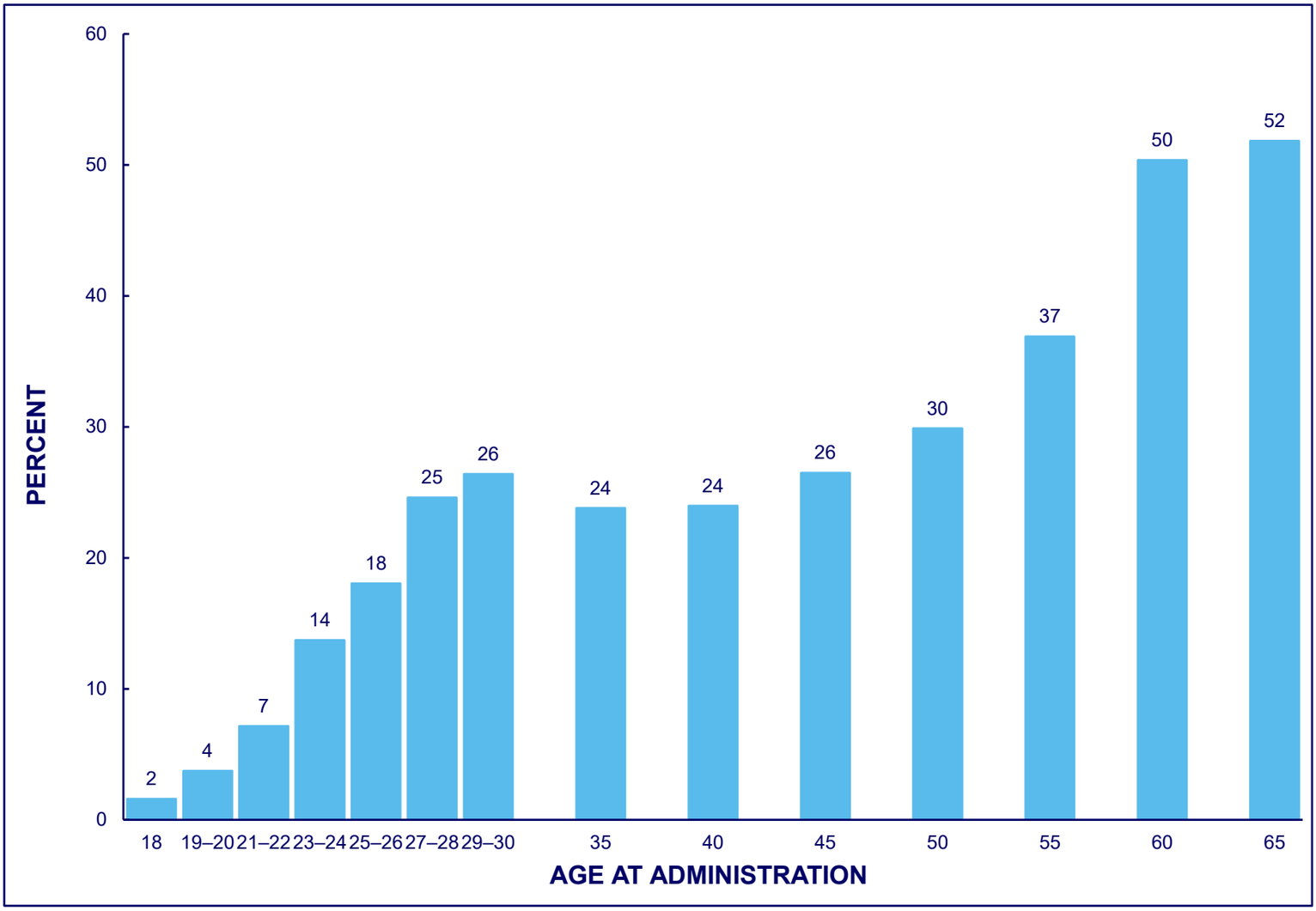


Notes. Lifetime prevalence estimates were adjusted for inconsistency in self-reports of drug use over time. See text for discussion. Due to rounding, some bars with the same number may have uneven height.

TABLE/FIGURE 106

COCAINE

Adjusted Lifetime Prevalence among Respondents of Modal Ages 18 through 65 by Age Group, 2024



Notes. Lifetime prevalence estimates were adjusted for inconsistency in self-reports of drug use over time. See text for discussion. Due to rounding some bars with the same number may have uneven height.

TABLE/FIGURE 107

12-Month Prevalence of Use for Various Types of Drugs, 2024:

College vs. Noncollege Young Adults 1 to 4 Years beyond High School

by Sex

	Total			Men		Women		Sex Differences	
	Full-Time College	Non-College	College/Non-College Differences	Full-Time College	Non-College	Full-Time College	Non-College	Full-Time College	Non-College
Cannabis [1]									
Original Question	34.9	37.2	n.s.	29.6	43.4	36.7	31.2	n.s.	n.s.
Updated Question	39.8	41.1	n.s.	40.5	33.5	39.0	46.9	n.s.	n.s.
Vaping Cannabis	20.2	19.7	n.s.	16.7	20.2	21.6	20.0	n.s.	n.s.
Delta-8	14.9	19.5	n.s.	14.9	17.1	14.4	20.5	n.s.	n.s.
CBD	15.5	18.5	n.s.	12.2	19.0	17.5	18.8	n.s.	n.s.
Alcohol	71.5	63.0	p<.05	66.1	62.1	76.0	66.7	p<.05	n.s.
Cigarettes	13.5	21.1	p<.01	16.6	26.0	11.4	17.3	n.s.	n.s.
Vaping Nicotine	19.7	29.9	p<.01	17.2	31.6	22.0	29.2	n.s.	n.s.
Any Drug other than Cannabis [2]									
Original Question	13.9	13.4	n.s.	11.7	18.6	16.0	9.2	n.s.	n.s.
Updated Question	15.1	14.8	n.s.	19.8	16.2	10.8	11.3	n.s.	n.s.
Hallucinogens	7.3	7.7	n.s.	10.3	11.9	4.9	4.1	n.s.	p<.05
LSD	0.8	1.9	n.s.	1.3	3.6	0.4	0.4	n.s.	n.s.
Hallucinogens other than LSD	7.0	6.3	n.s.	8.9	9.3	5.5	3.6	n.s.	p<.05
Ketamine	0.8	0.8	n.s.	*	1.7	1.5	*	n.s.	n.s.
MDMA (ecstasy, molly)	1.4	3.9	p<.05	1.9	4.6	1.1	3.6	n.s.	n.s.
Heroin	0.1	*	n.s.	0.1	*	*	*	n.s.	n.s.
Narcotics other than Heroin [1]									
Original Question	0.2	1.0	n.s.	*	1.2	0.4	1.1	n.s.	n.s.
Updated Question	2.1	2.4	n.s.	3.2	1.2	1.2	1.1	n.s.	n.s.
Fentanyl	*	0.4	n.s.	*	0.7	*	*	n.s.	n.s.
Sedatives (Barbiturates) [1]									
Original Question	0.6	0.4	n.s.	0.3	0.4	0.8	0.5	n.s.	n.s.
Updated Question	3.1	4.2	n.s.	2.8	1.7	3.0	4.1	n.s.	n.s.
Tranquilizers [1]									
Original Question	0.8	0.6	n.s.	0.3	*	1.1	0.7	n.s.	n.s.
Updated Question	3.1	1.4	n.s.	2.3	*	3.7	0.6	n.s.	n.s.
Amphetamines	4.1	1.5	p<.05	4.9	1.6	3.5	1.6	n.s.	n.s.
Any Prescription Drug (Nonmedical Use) [2]									
Original Question	6.0	3.1	n.s.	4.6	2.8	7.2	3.4	n.s.	n.s.
Updated Question	7.1	7.2	n.s.	8.0	3.9	5.9	7.8	n.s.	n.s.
Cocaine	2.6	2.5	n.s.	2.8	3.4	2.5	2.1	n.s.	n.s.
Methamphetamine	0.1	0.6	n.s.	0.3	*	*	1.2	n.s.	n.s.
Large Cigars	5.9	8.7	n.s.	7.2	14.9	5.0	3.9	n.s.	p<.05
Small Cigars	4.8	9.8	n.s.	7.2	16.2	3.2	2.7	n.s.	p<.01
Tobacco using a Hookah	4.3	2.9	n.s.	2.6	2.7	5.7	3.4	n.s.	n.s.
Smokeless Tobacco	1.8	3.7	n.s.	2.9	7.4	1.1	0.7	n.s.	p<.05
Nicotine Pouches	7.4	9.4	n.s.	11.9	16.6	4.2	1.7	n.s.	p<.01
Any Nicotine Use [3]	28.5	37.6	n.s.	20.7	40.1	34.9	34.2	p<.05	n.s.

Notes. '*' indicates a prevalence rate of less than 0.05%.

[1]In 2024, the text for this question was changed on half of the survey forms. Estimates for both the original version and the new version of the question are presented here. For details on the survey items, please refer to Table/Figure 91.

[2]In 2024, the text for questions on use of sedatives, tranquilizers, and narcotics were changed on half of the survey forms. These questions are used in the calculation of estimates for this drug use index. Estimates based on both the original versions and the new versions of these questions are presented here. For details on the survey items, please refer to Table/Figure 91.

[3]Includes use of cigarettes, large cigars, small cigars, tobacco using a hookah, smokeless tobacco, or vaping nicotine.

MONITORING THE FUTURE

TABLE/FIGURE 108

30-Day Prevalence of Use for Various Types of Drugs, 2024:

College vs. Noncollege Young Adults 1 to 4 Years beyond High School

by Sex

	Total			Men		Women		Sex Differences	
	Full-Time College	Non-College	College/Non-College Differences	Full-Time College	Non-College	Full-Time College	Non-College	Full-Time College	Non-College
Cannabis [1]									
Original Question	22.0	26.3	n.s.	18.5	27.4	24.0	23.6	n.s.	n.s.
Updated Question	21.6	31.5	p<.05	22.0	26.1	21.9	35.8	n.s.	n.s.
Vaping Cannabis	12.9	14.6	n.s.	10.3	14.8	14.5	15.4	n.s.	n.s.
Alcohol	52.1	42.7	p<.05	49.1	42.3	55.1	44.6	n.s.	n.s.
Cigarettes	5.8	8.6	n.s.	7.5	13.4	4.6	4.7	n.s.	p<.05
Vaping Nicotine	14.1	24.8	p<.01	13.7	27.4	14.7	23.7	n.s.	n.s.
Hallucinogens	1.9	0.7	n.s.	0.7	0.4	3.0	1.2	n.s.	n.s.
Hallucinogens other than LSD	2.7	0.5	p<.05	0.9	0.4	4.0	0.8	n.s.	n.s.
MDMA (ecstasy, molly)	0.7	0.3	n.s.	1.1	0.4	0.5	0.2	n.s.	n.s.
Narcotics other than Heroin [1]									
Original Question	0.1	*	n.s.	*	*	0.1	*	n.s.	n.s.
Updated Question	0.8	*	n.s.	1.6	*	*	*	n.s.	n.s.
Sedatives (Barbiturates) [1]									
Original Question	0.5	0.1	n.s.	0.3	*	0.6	0.2	n.s.	n.s.
Updated Question	1.9	2.4	n.s.	1.1	1.7	2.6	3.2	n.s.	n.s.
Tranquilizers [1]									
Original Question	0.1	0.3	n.s.	*	*	0.1	0.7	n.s.	n.s.
Updated Question	1.4	0.2	n.s.	0.5	*	1.8	0.2	n.s.	n.s.
Amphetamines	1.2	1.2	n.s.	1.6	1.0	0.8	1.6	n.s.	n.s.
Any Prescription Drug (Nonmedical Use) [2]									
Original Question	1.8	1.4	n.s.	1.4	1.2	2.1	2.0	n.s.	n.s.
Updated Question	4.1	3.9	n.s.	4.6	2.7	3.4	5.5	n.s.	n.s.
Cocaine	0.5	1.3	n.s.	0.2	2.6	0.8	0.1	n.s.	n.s.

Notes. '*' indicates a prevalence rate of less than 0.05%.

[1]In 2024, the text for this question was changed on half of the survey forms. Estimates for both the original version and the new version of the question are presented here. For details on the survey items, please refer to Table/Figure 91.

[2]In 2024, the text for questions on use of sedatives, tranquilizers, and narcotics were changed on half of the survey forms. These questions are used in the calculation of estimates for this drug use index. Estimates based on both the original versions and the new versions of these questions are presented here. For details on the survey items, please refer to Table/Figure 91.

MONITORING THE FUTURE

TABLE/FIGURE 109

30-Day Prevalence of Daily Use for Various Types of Drugs, 2024:

College vs. Noncollege Young Adults 1 to 4 Years beyond High School

by Sex

	Total			Men		Women		Sex Differences	
	Full-Time College	Non-College	College/Non-College Differences	Full-Time College	Non-College	Full-Time College	Non-College	Full-Time College	Non-College
Cannabis [1]									
Daily Original Question	6.3	7.4	n.s.	5.2	8.4	6.8	6.4	n.s.	n.s.
Daily Updated Question	4.2	10.7	p<.05	4.4	8.5	4.2	12.5	n.s.	n.s.
Alcohol									
Daily	0.5	1.9	n.s.	0.2	3.4	0.7	0.6	n.s.	n.s.
5+ Drinks in a Row in Last 2 Weeks	22.8	21.1	n.s.	25.1	25.9	21.8	17.4	n.s.	n.s.
10+ Drinks in a Row in Last 2 Weeks	4.7	7.2	n.s.	5.2	9.4	4.5	5.7	n.s.	n.s.
Cigarettes									
Daily	1.7	2.8	n.s.	1.9	2.4	1.6	3.4	n.s.	n.s.
1/2 Pack+/Day	0.4	0.4	n.s.	0.5	0.8	0.4	0.1	n.s.	n.s.

Notes. '*' indicates a prevalence rate of less than 0.05%.

[1]In 2024, the text for this question was changed on half of the survey forms. Estimates for both the original version and the new version of the question are presented here. For details on the survey items, please refer to Table/Figure 91.

TABLE/FIGURE 110

2-Week Prevalence of Driving After Using Various Types of Drugs[1], 2023-2024 Combined:

College vs. Noncollege Young Adults 1 to 4 Years beyond High School

	Total		
	Full-Time College	Non-College	College/Non-College Differences
Cannabis	4.0	12.2	p<.05
Alcohol	3.8	10.6	p<.05
5+ Alcoholic Drinks	5.7	4.8	n.s.
Other Illicit Drugs	0.8	1.5	n.s.

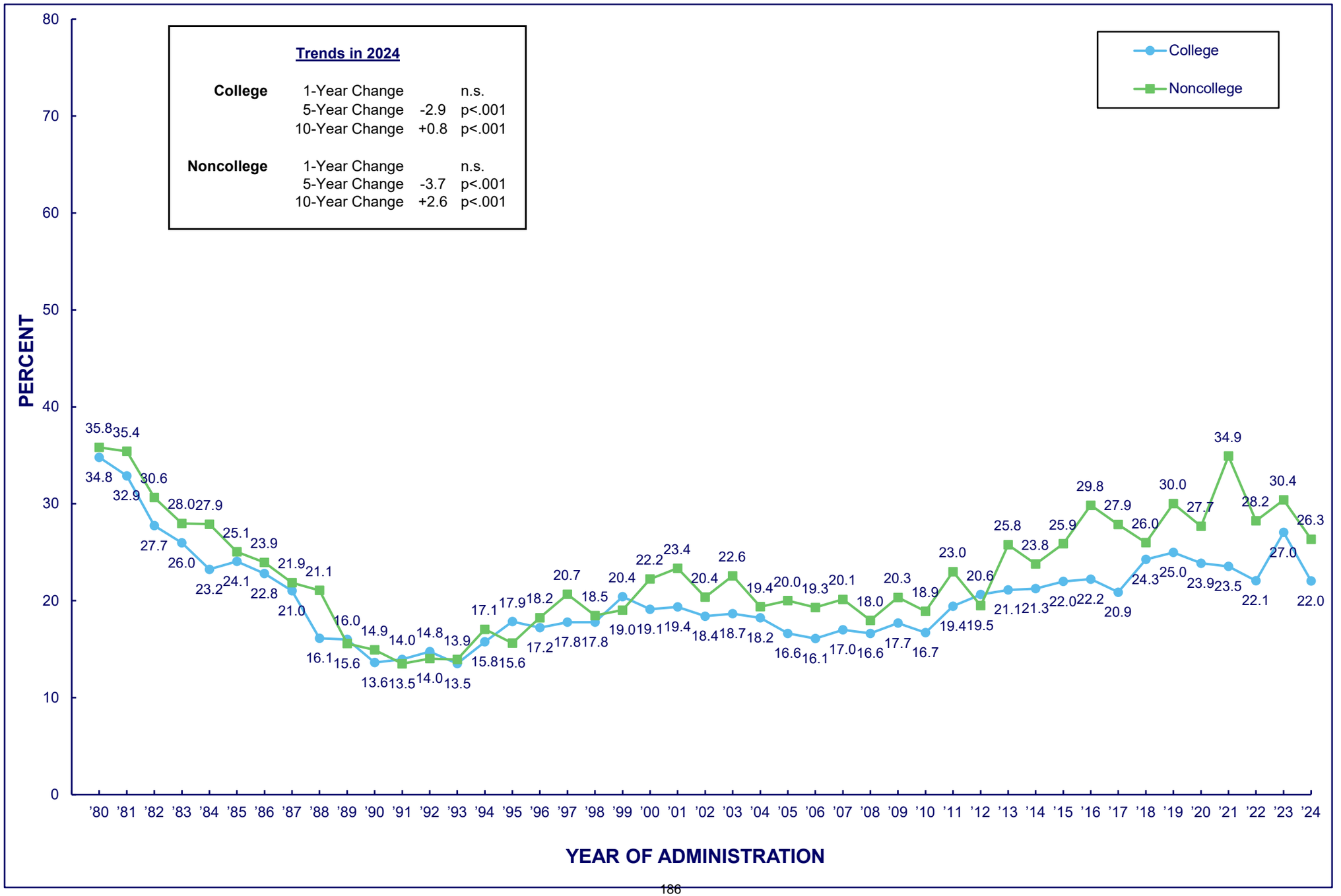
[1]Question text for this item:
During the LAST TWO WEEKS, how many times (if any) have you driven a car, truck, or motorcycle after…

TABLE/FIGURE 111

CANNABIS

Trends in 30-Day Prevalence among College vs. Noncollege Young Adults
1 to 4 Years beyond High School

MONITORING THE FUTURE

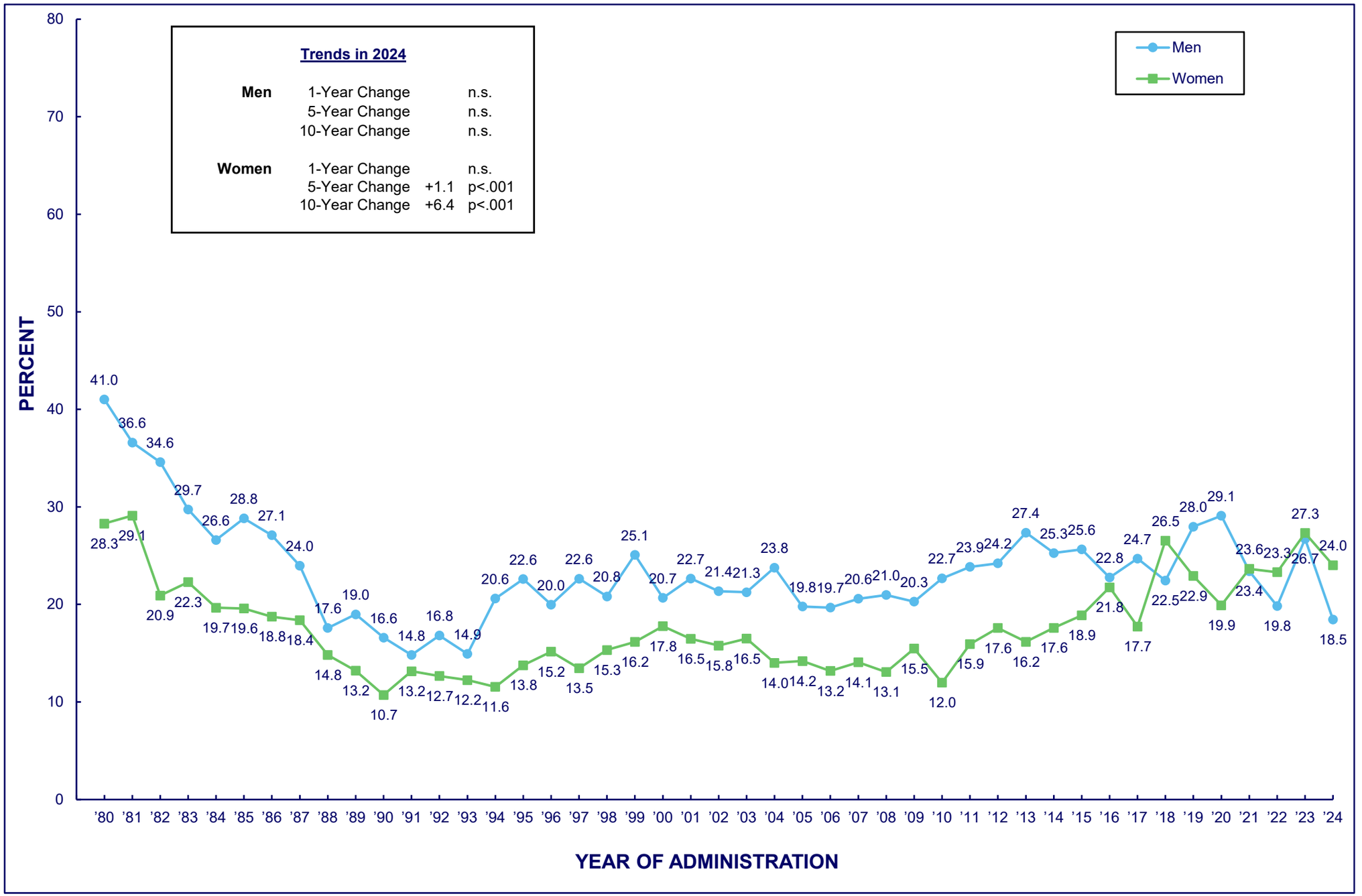


TABLE/FIGURE 112

CANNABIS

Trends in 30-Day Prevalence among College Students 1 to 4 Years beyond High School, by Sex

MONITORING THE FUTURE

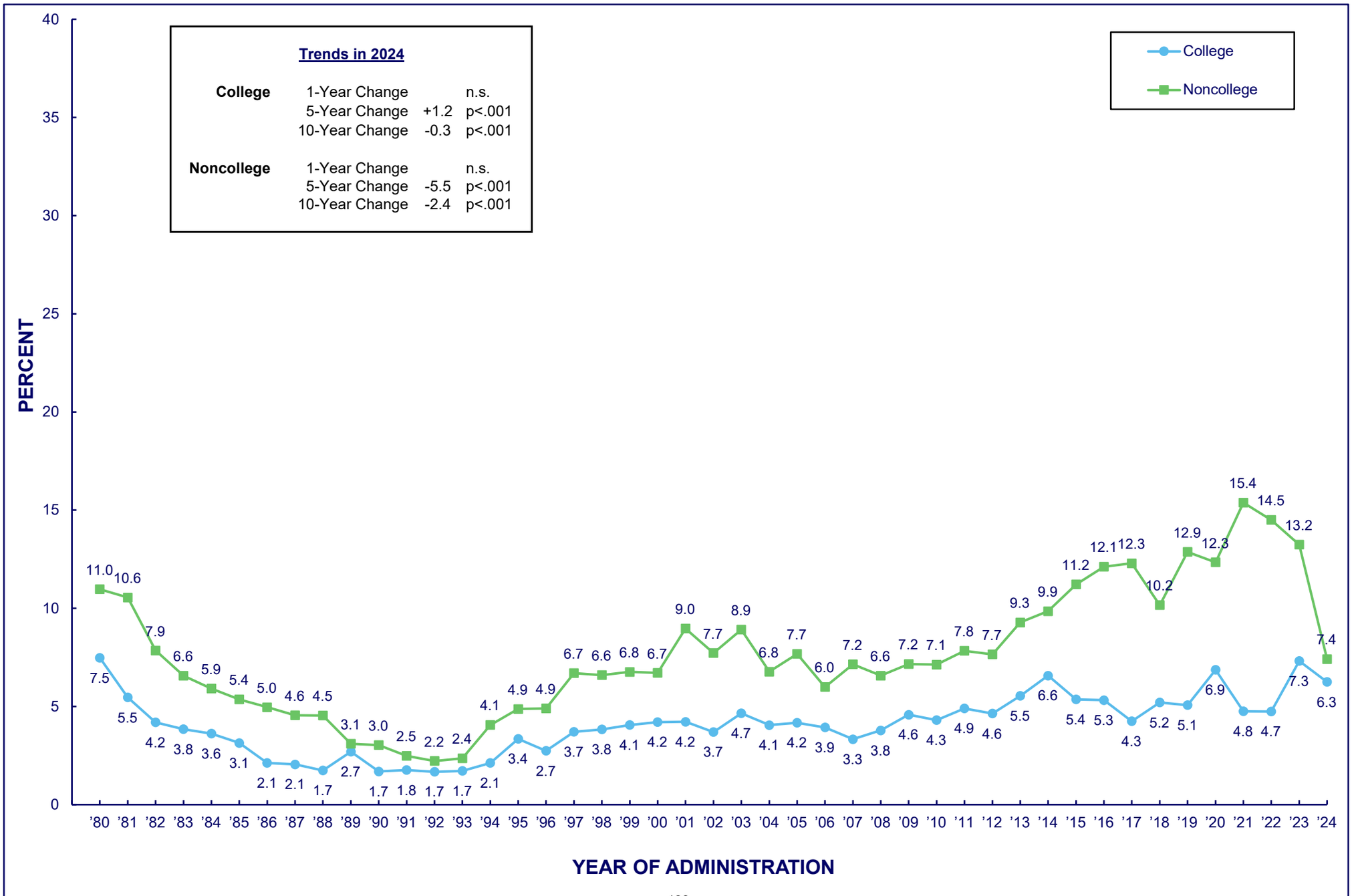


TABLE/FIGURE 113

CANNABIS

Trends in 30-Day Prevalence of Daily Use among College vs. Noncollege Young Adults 1 to 4 Years beyond High School

MONITORING THE FUTURE

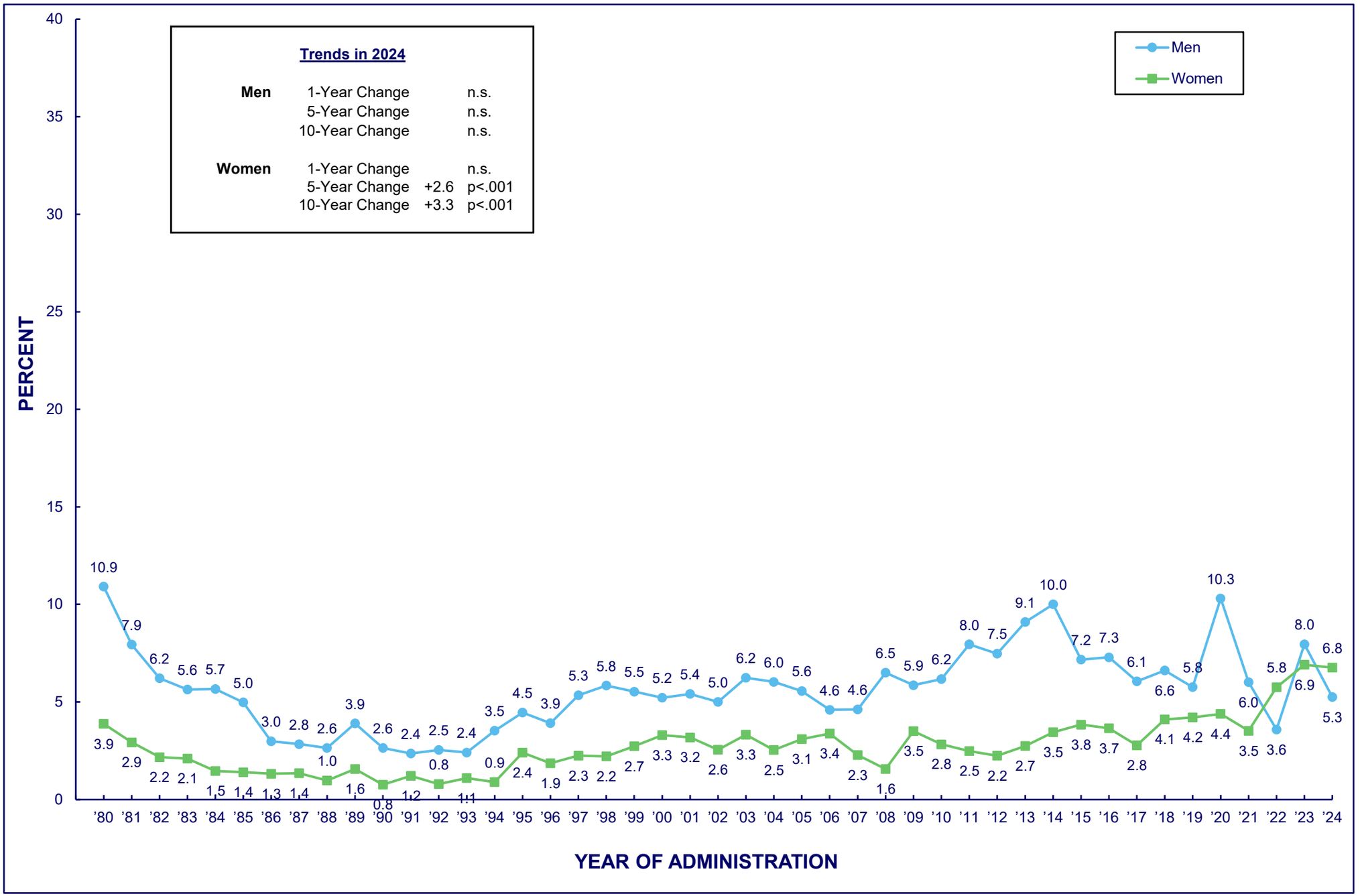


TABLE/FIGURE 114

CANNABIS

Trends in 30-Day Prevalence of Daily Use among College Students 1 to 4 Years beyond High School, by Sex

MONITORING THE FUTURE

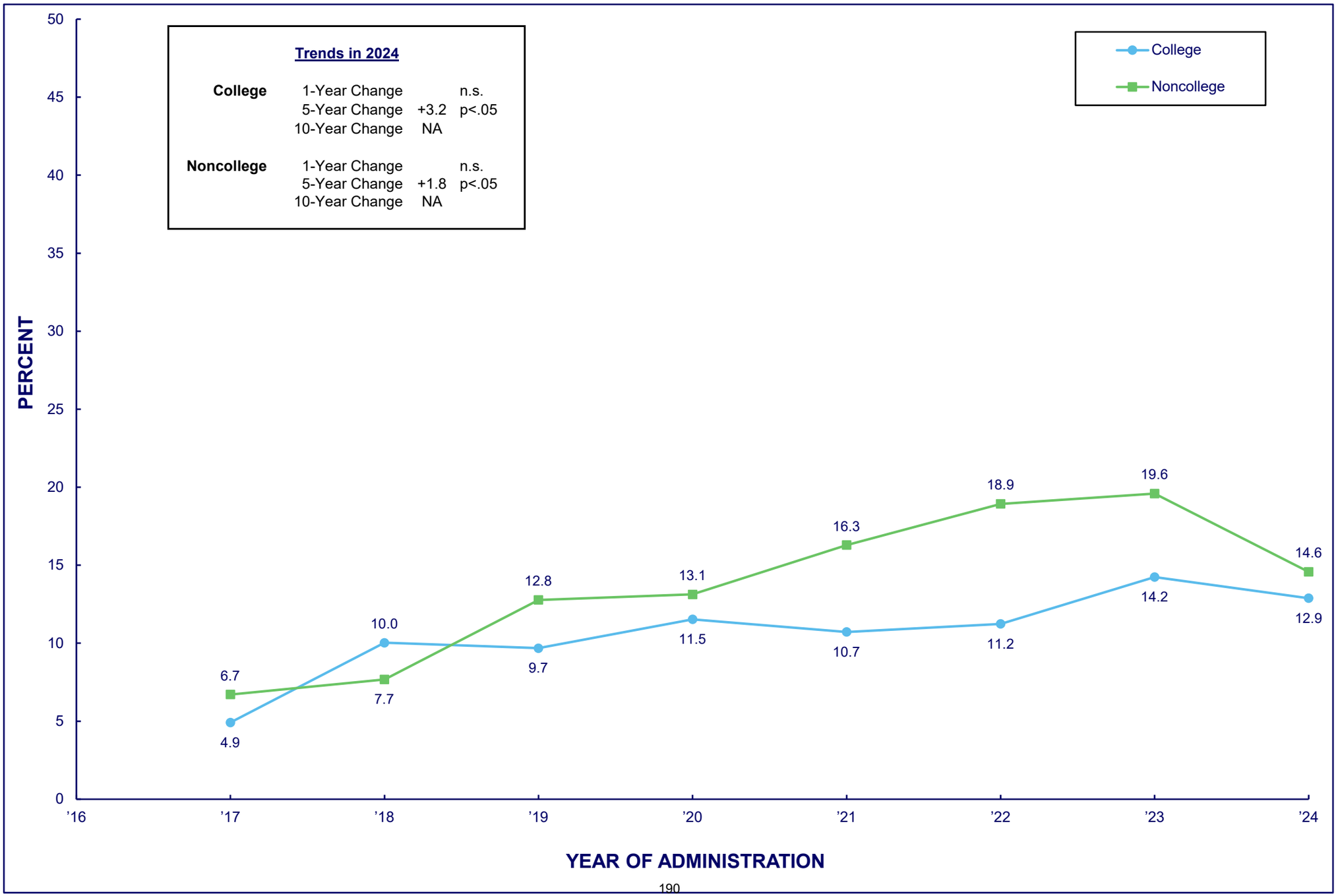


TABLE/FIGURE 115

VAPING CANNABIS

Trends in 30-Day Prevalence among College vs. Noncollege Young Adults 1 to 4 Years beyond High School

MONITORING THE FUTURE



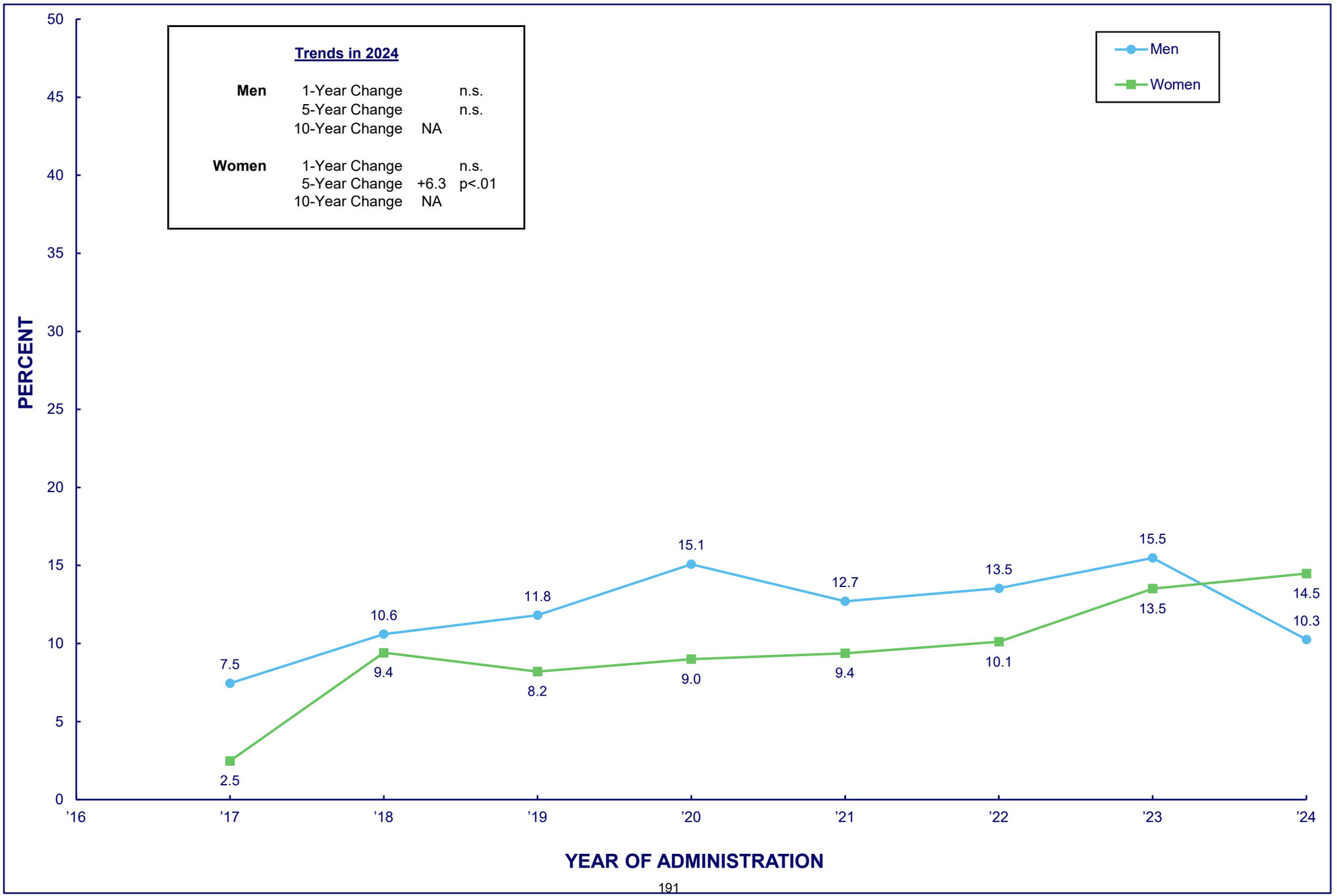
TABLE/FIGURE 116

VAPING CANNABIS

Trends in 30-Day Prevalence

among College Students 1 to 4 Years beyond High School, by Sex

MONITORING THE FUTURE

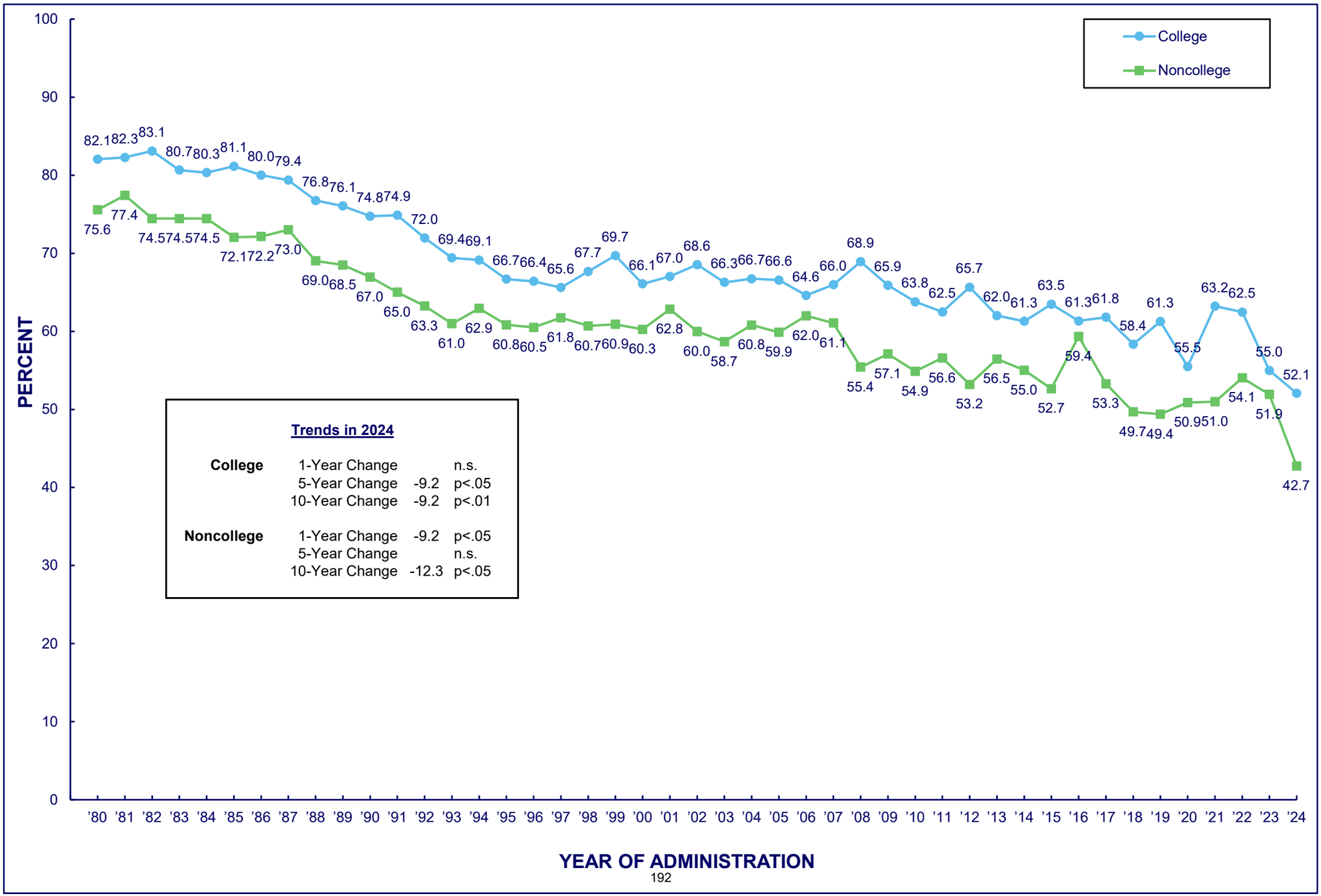


TABLE/FIGURE 117

ALCOHOL

Trends in 30-Day Prevalence among College vs. Noncollege Young Adults 1 to 4 Years beyond High School

MONITORING THE FUTURE

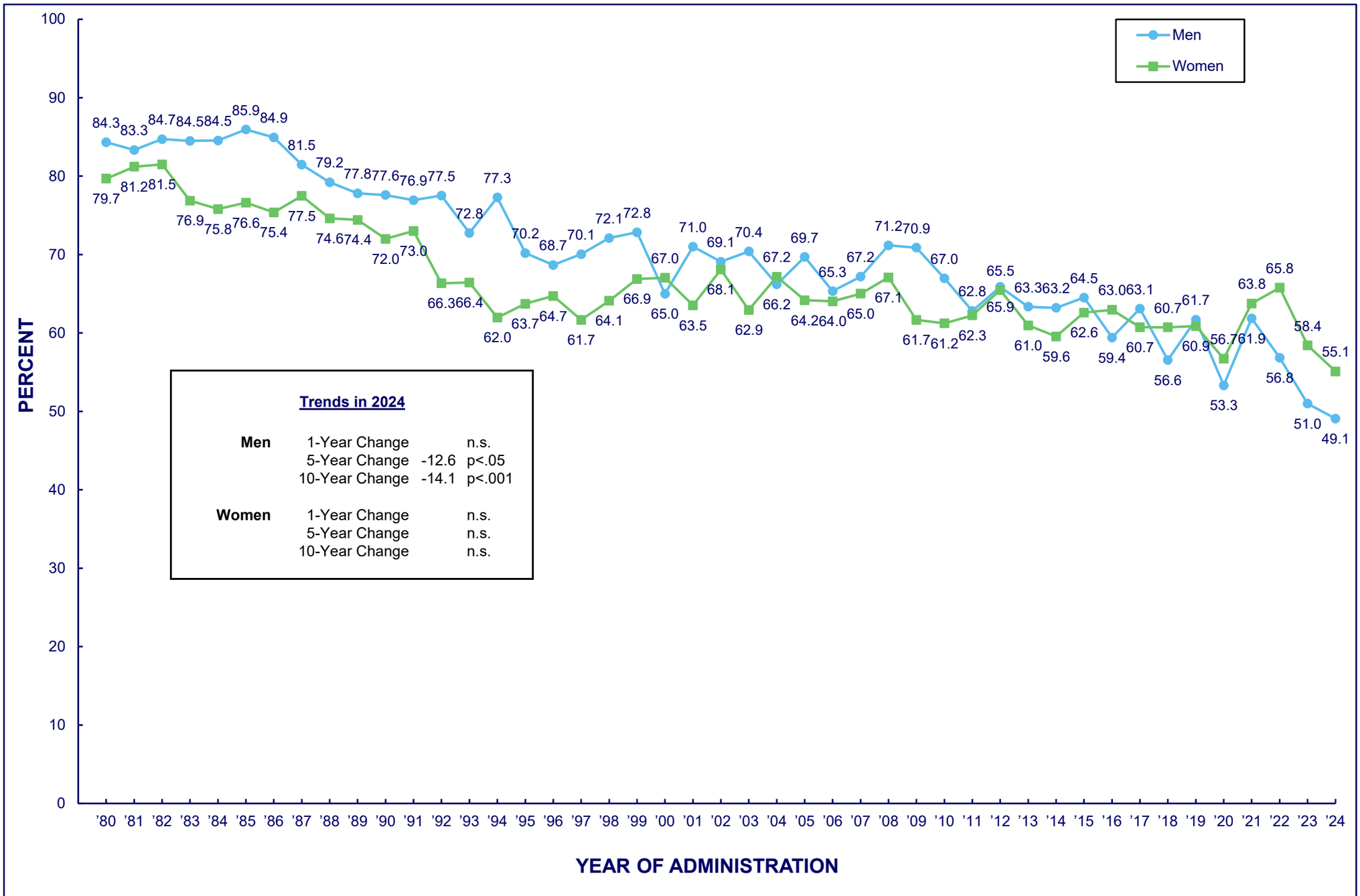


TABLE/FIGURE 118

ALCOHOL

Trends in 30-Day Prevalence among College Students 1 to 4 Years beyond High School, by Sex

MONITORING THE FUTURE

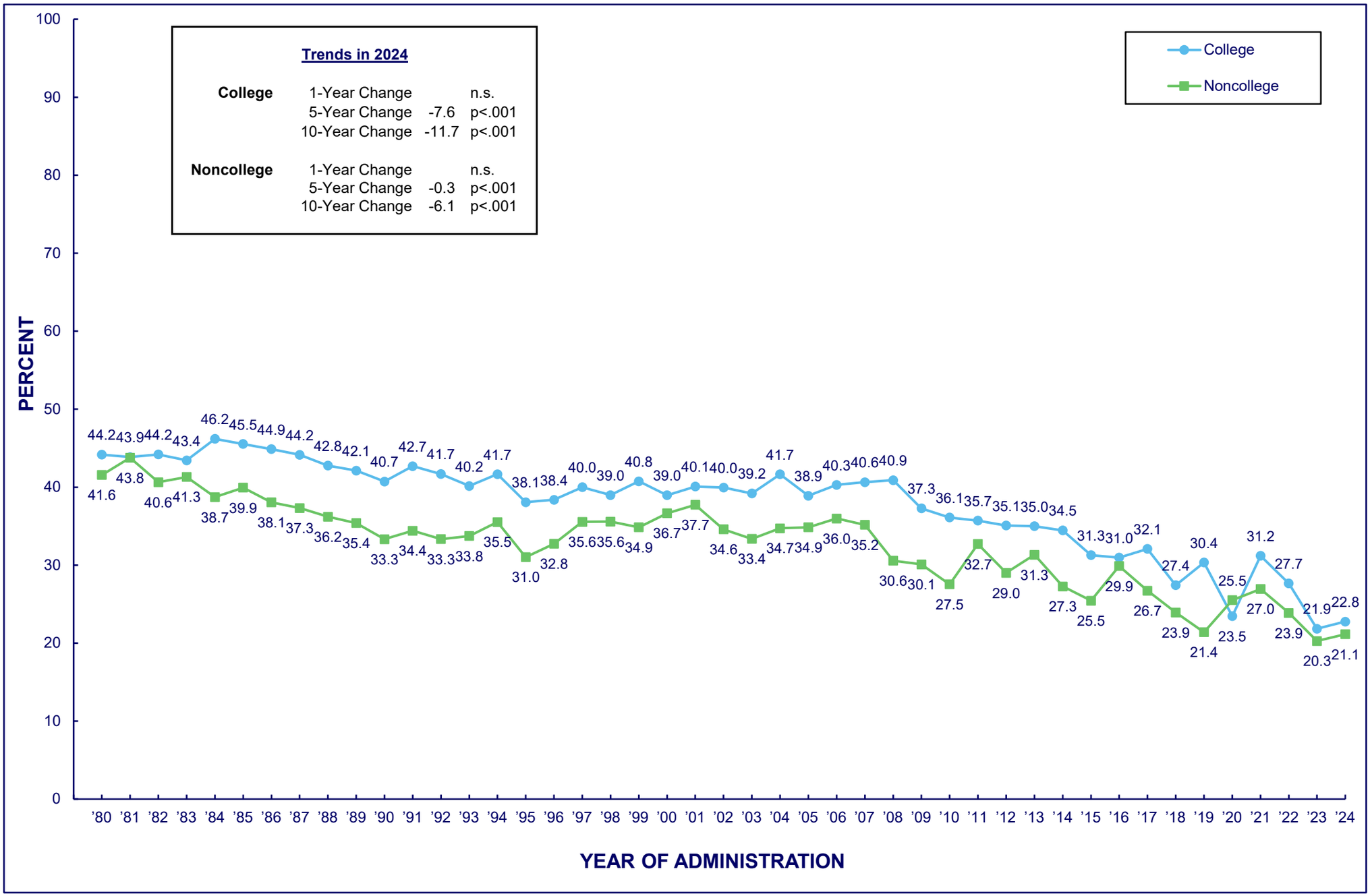


TABLE/FIGURE 119

ALCOHOL

Trends in 2-Week Prevalence of Having 5 or More Drinks in a Row among College vs. Noncollege Young Adults 1 to 4 Years beyond High School

MONITORING THE FUTURE

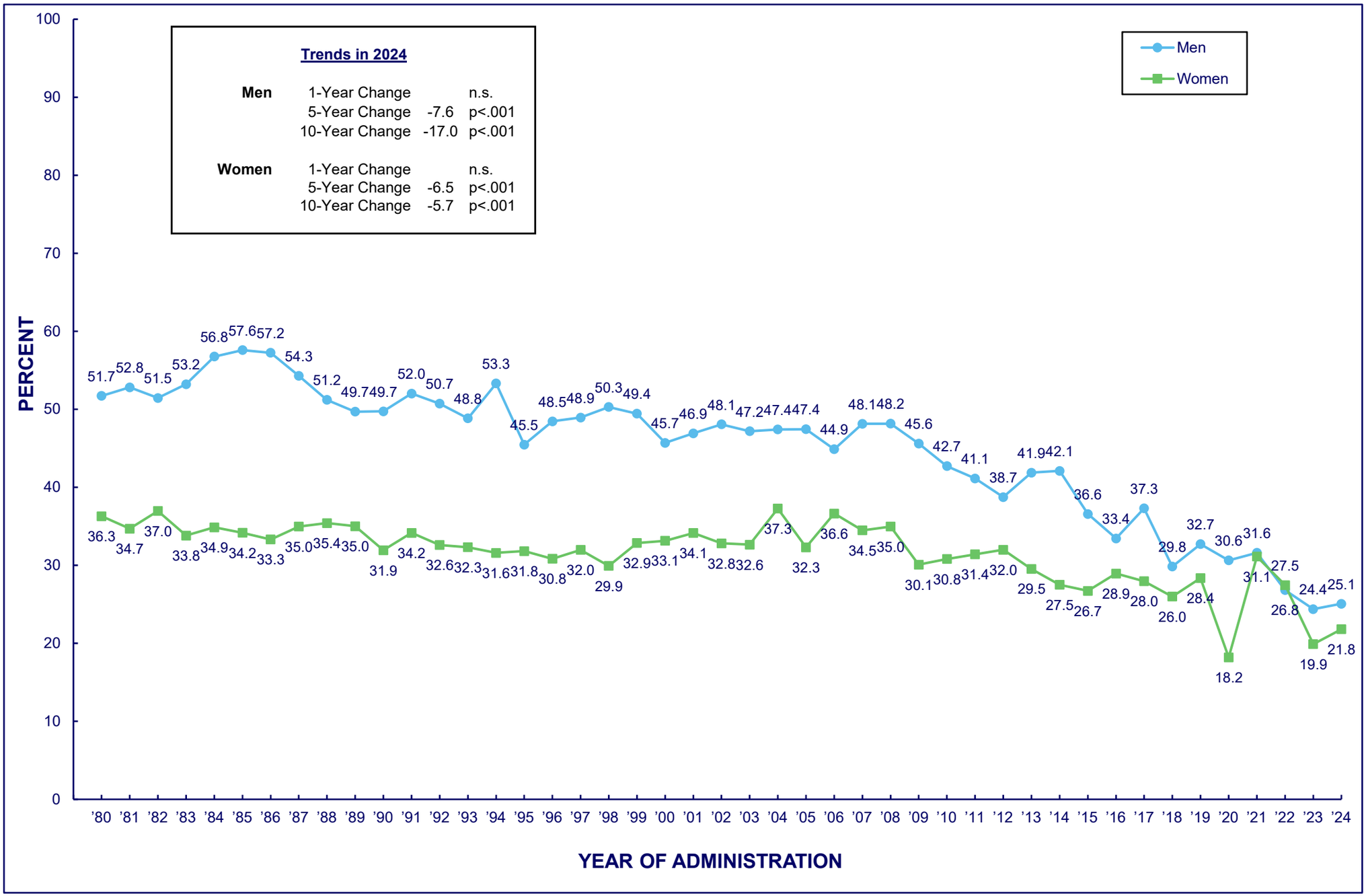


TABLE/FIGURE 120

ALCOHOL

Trends in 2-Week Prevalence of Having 5 or More Drinks in a Row among College Students 1 to 4 Years beyond High School, by Sex

MONITORING THE FUTURE

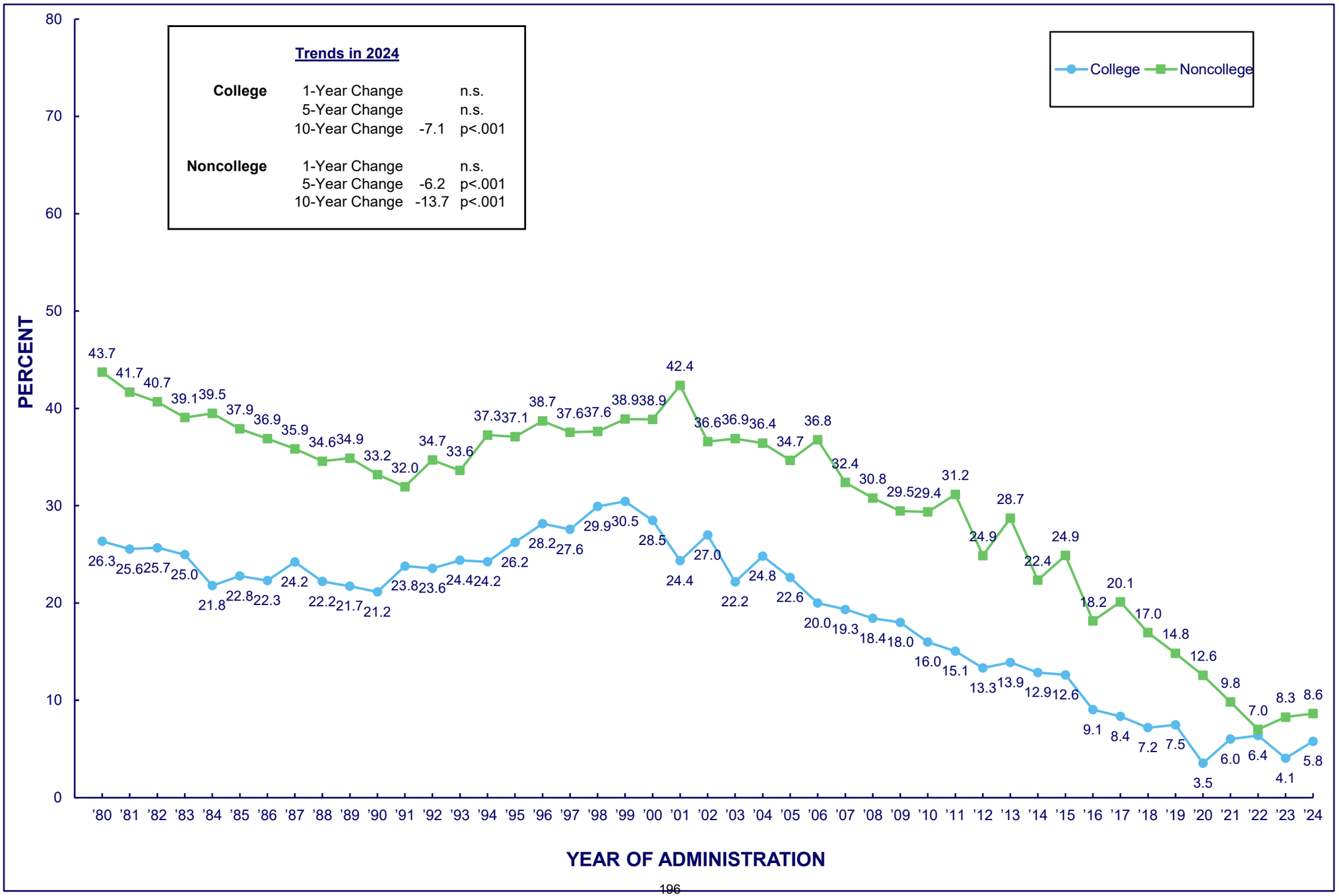


TABLE/FIGURE 121

CIGARETTES

Trends in 30-Day Prevalence among College vs. Noncollege Young Adults
1 to 4 Years beyond High School

MONITORING THE FUTURE

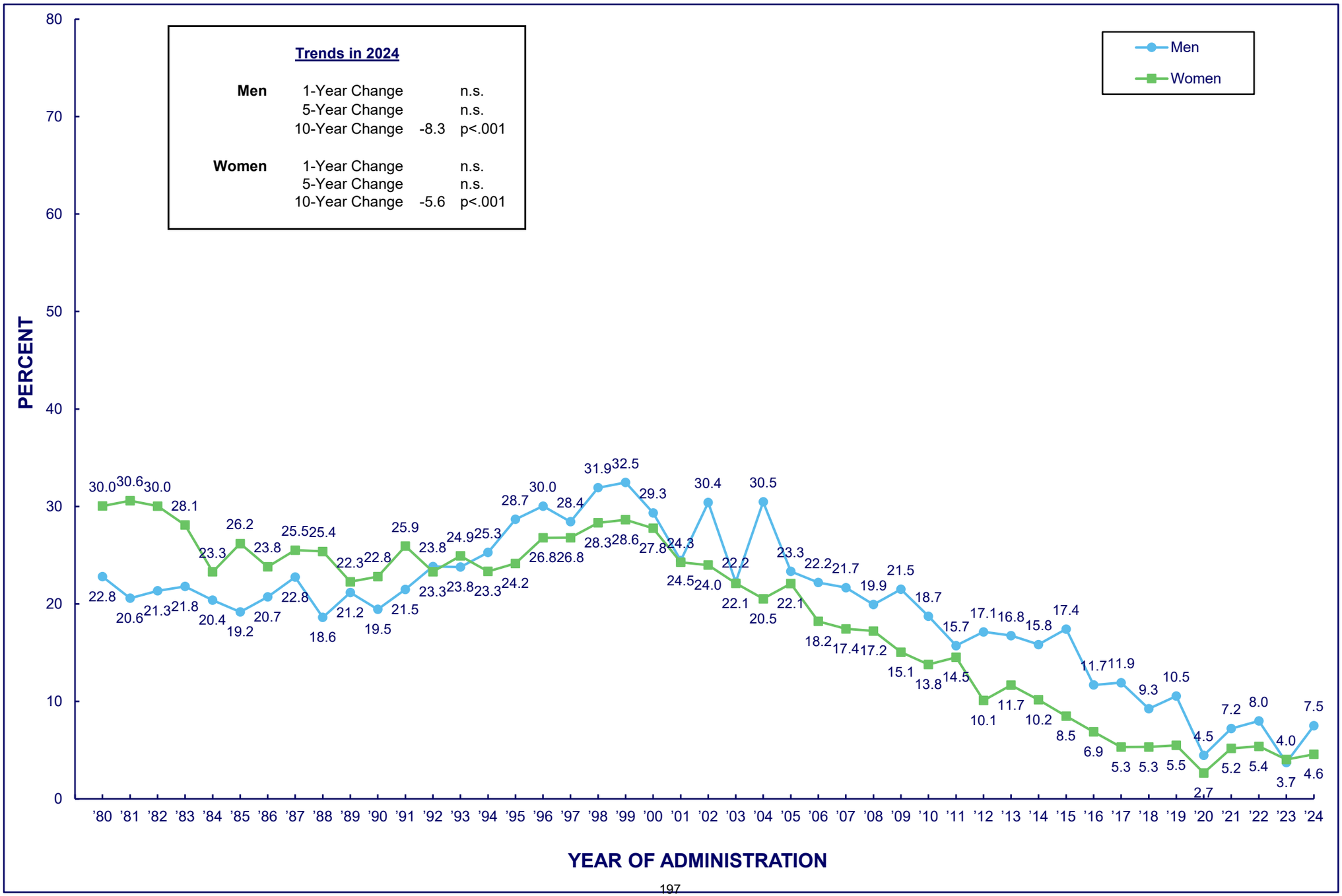


TABLE/FIGURE 122

CIGARETTES

Trends in 30-Day Prevalence among College Students 1 to 4 Years beyond High School, by Sex

MONITORING THE FUTURE

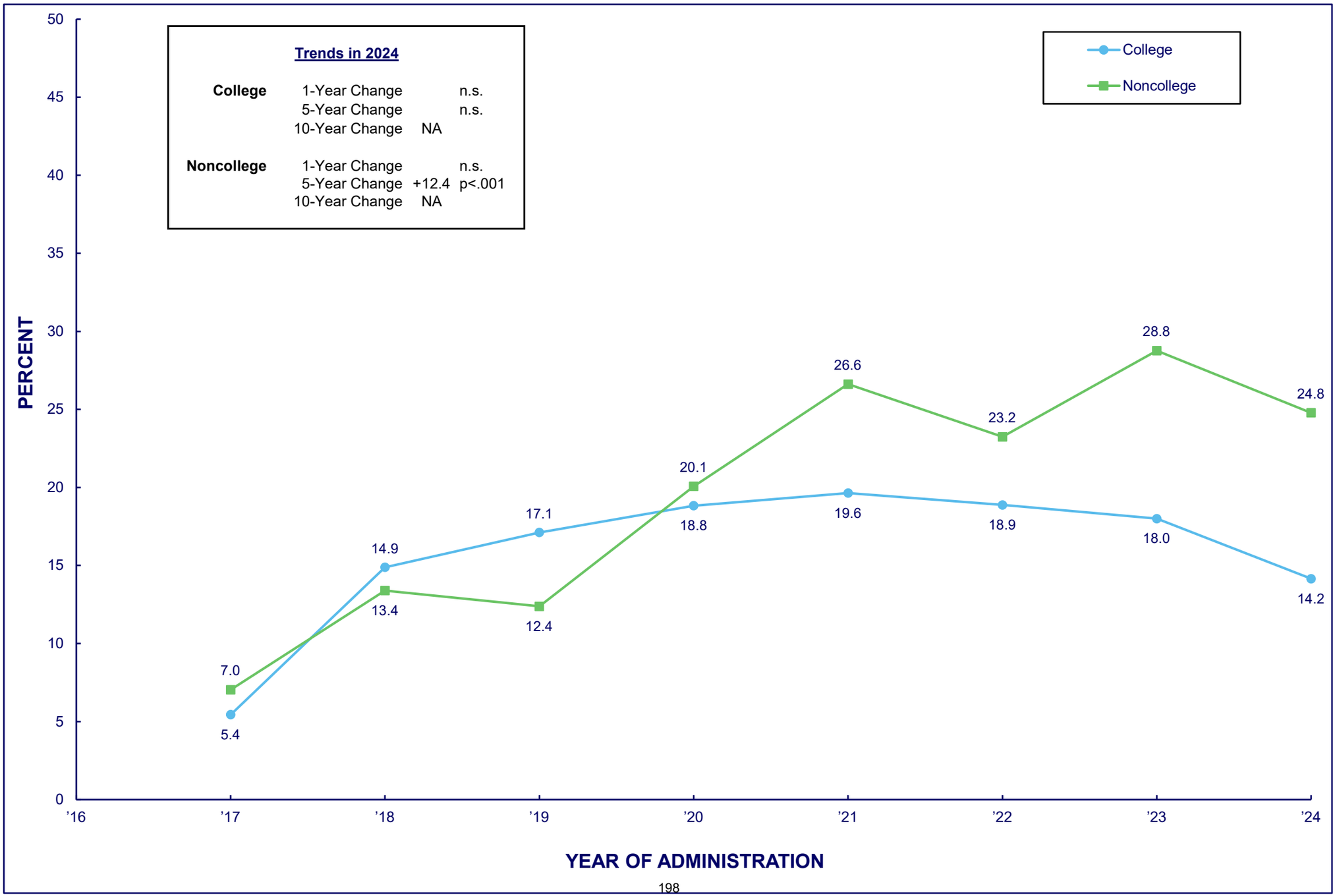


TABLE/FIGURE 123

VAPING NICOTINE

Trends in 30-Day Prevalence among College vs. Noncollege Young Adults 1 to 4 Years beyond High School

MONITORING THE FUTURE



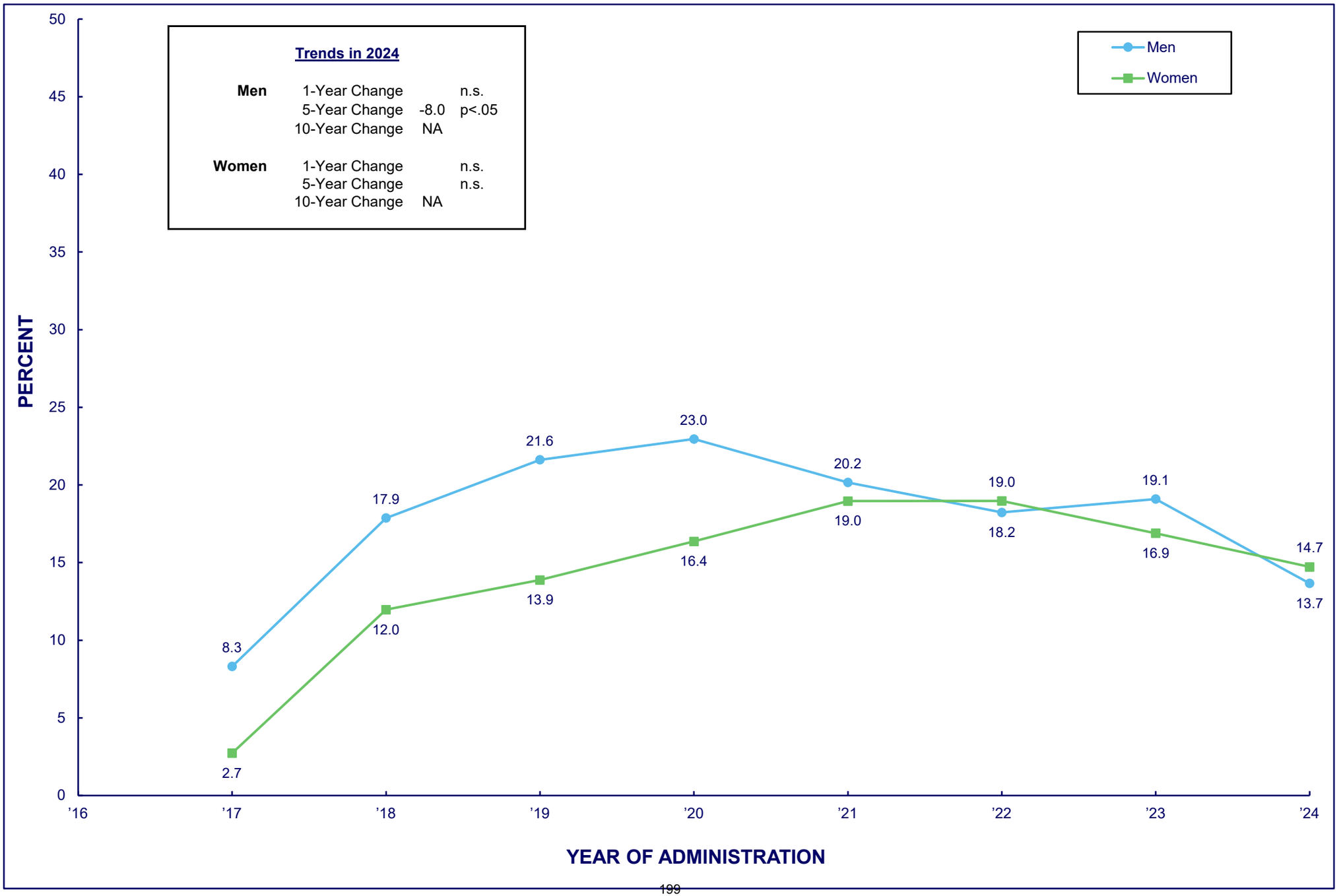
TABLE/FIGURE 124

VAPING NICOTINE

Trends in 30-Day Prevalence

among College Students 1 to 4 Years beyond High School, by Sex

MONITORING THE FUTURE



TABLE/FIGURE 125

Demographic Distribution of 2024 MTF Panel Sample

	Young Adults (ages 19-30)	Early Midlife Adults (ages 35-50)	Midlife Adults (ages 55-65)
	Original Age 18	Original Age 18	Original Age 18
Year Reported	(2012-2023)	(1992, 1997, 2002, 2007)	(1977, 1982, 1987)
Sex			
Male	48.0	47.0	48.2
Female	52.1	53.1	51.9
N	4384	3440	3041
Race/Ethnicity [1]			
Hispanic	24.7	12.3	4.8
American Indian or Alaska Native	1.2	1.2	0.6
Asian American	4.1	3.7	1.7
Black or African American	12.0	11.9	11.9
Middle Eastern [2]	0.1	NA	NA
Native Hawaiian or Other Pacific Islander [3]	0.3	*	NA
White	53.2	70.1	81.1
More than One Race	4.3	0.8	NA
N	4450	3330	2944

	Age 19-22
Year Reported	2024
College Attendance	
Attend College Full-Time	47.2
Not Attending College Full-Time	52.8
N	1496

	Age 23-55 [4]
Year Reported	2024
College Completion	
Obtained 4-Year Degree	39.5
Did Not Obtain 4-Year Degree	60.5
N	7082

Notes. '*' indicates a prevalence rate of less than 0.05%.

[1]For the age 18 surveys, respondents could only select one option prior to 2005. Beginning in 2005, respondents were able to select more than one option.

[2]Added as a response option in 2021.

[3]Added as a response option in 2005.

[4]Question not asked on surveys for age 60/65.

TABLE/FIGURE 126

Differences in Prevalence of Use for Various Types of Drugs

Among Respondents Modal Ages 19 through 30, by Sex and Race/Ethnicity, 2024

	Differences by Sex			Differences by Race/Ethnicity								
	Men	Women	Men vs. Women	Black	Hispanic	Black vs. Hispanic	Black	White	Black vs. White	Hispanic	White	Hispanic vs. White
Cannabis:[1]												
12-month	42.0	41.1	n.s.	42.3	40.5	n.s.	42.3	43.5	n.s.	40.5	43.5	n.s.
30-day	29.4	28.6	n.s.	36.0	27.3	n.s.	36.0	30.1	n.s.	27.3	30.1	n.s.
Cannabis Use Disorder:[2]												
Abstainer												
Nondisordered												
Disordered												
Alcohol:												
30-day	62.3	63.1	n.s.	53.8	59.3	n.s.	53.8	67.7	p<.001	59.3	67.7	p<.001
5+ drinks in row in two weeks	29.9	21.4	p<.001	21.6	24.9	n.s.	21.6	28.3	n.s.	24.9	28.3	n.s.
Cigarettes:												
30-day	9.9	5.4	p<.001	8.5	6.0	n.s.	8.5	8.4	n.s.	6.0	8.4	n.s.
Vaping Nicotine:												
30-day	22.4	16.8	p<.01	15.8	16.8	n.s.	15.8	21.4	n.s.	16.8	21.4	p<.05
Any Drug other than Cannabis:[2]												
12-month	21.5	15.5	p<.05	11.5	19.5	n.s.	11.5	19.5	p<.05	19.5	19.5	n.s.

[1]In 2024, the text for this question was changed on half of the survey forms. Estimates for the original version of the question are presented here. For details on the survey items, please refer to Table/Figure 91.

[2]In 2024, the text for questions on use of sedatives, tranquilizers, and narcotics were changed on half of the survey forms. These questions are used in the calculation of estimates for this drug use index. Estimates based on the original versions of these questions are presented here. For details on the survey items, please refer to Table/Figure 91.

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TABLE/FIGURE 127

Differences in Prevalence of Use for Various Types of Drugs

Among Respondents Modal Ages 35 through 50, by Sex and Race/Ethnicity, 2024

	Differences by Sex			Differences by Race/Ethnicity								
	Men	Women	Men vs. Women	Black	Hispanic	Black vs. Hispanic	Black	White	Black vs. White	Hispanic	White	Hispanic vs. White
Cannabis:[1]												
12-month	28.1	25.4	n.s.	17.4	22.1	n.s.	17.4	29.0	p<.05	22.1	29.0	n.s.
30-day	19.8	18.0	n.s.	15.8	14.4	n.s.	15.8	20.5	n.s.	14.4	20.5	n.s.
Cannabis Use Disorder:[2,3]												
Abstainer	70.9	76.6	p<.01	81.6	78.2	n.s.	81.6	72.2	p<.01	78.2	72.2	n.s.
Nondisordered	22.2	17.6	p<.05	13.7	18.2	n.s.	13.7	20.7	p<.05	18.2	20.7	n.s.
Disordered	7.0	5.8	n.s.	4.7	3.6	n.s.	4.7	7.1	n.s.	3.6	7.1	p<.05
Alcohol:												
30-day	68.3	61.4	p<.001	53.0	61.2	n.s.	53.0	67.9	p<.001	61.2	67.9	n.s.
5+ drinks in row in two weeks	32.5	17.5	p<.001	20.0	22.8	n.s.	20.0	26.0	n.s.	22.8	26.0	n.s.
Alcohol Use Disorder:[2,3]												
Abstainer	17.1	19.7	n.s.	28.0	17.9	p<.05	28.0	16.8	p<.01	17.9	16.8	n.s.
Nondisordered	56.8	61.1	n.s.	62.6	62.3	n.s.	62.6	58.4	n.s.	62.3	58.4	n.s.
Disordered	26.1	19.2	p<.001	9.4	19.8	p<.05	9.4	24.8	p<.001	19.8	24.8	n.s.
Cigarettes:												
30-day	11.5	10.0	n.s.	7.1	5.0	n.s.	7.1	12.2	p<.05	5.0	12.2	p<.001
Vaping Nicotine:												
30-day	6.6	6.3	n.s.	3.9	2.3	n.s.	3.9	7.2	p<.05	2.3	7.2	p<.001
Any Drug other than Cannabis:[4]												
12-month	13.9	10.1	n.s.	6.2	9.6	n.s.	6.2	13.1	p<.05	9.6	13.1	n.s.
Other Drug Use Disorder:[2,3]												
Abstainer	91.9	94.0	n.s.	95.1	92.6	n.s.	95.1	93.5	n.s.	92.6	93.5	n.s.
Nondisordered	5.7	4.6	n.s.	4.9	5.0	n.s.	4.9	4.5	n.s.	5.0	4.5	n.s.
Disordered	2.5	1.4	n.s.	*	2.4	n.s.	*	2.0	p<.001	2.4	2.0	n.s.

(Footnotes on following page.)

TABLE/FIGURE 127 (cont.)

Differences in Prevalence of Use for Various Types of Drugs

Among Respondents Modal Ages 35 through 50,

by Sex and Race/Ethnicity, 2024

[1]In 2024, the text for this question was changed on half of the survey forms. Estimates for the original version of the question are presented here. For details on the survey items, please refer to Table/Figure 91.

[2]MTF substance use disorder (SUD) measures are not equivalent to clinical SUD diagnoses but are based on diagnostic criteria specified in the Diagnostic and Statistical Manual of Mental Disorders, 5th Edition Text Revision (American Psychiatric Association, 2022). Categories include no use within the specified timeframe, non-disordered use (reporting 0-1 criteria), and disordered use (reporting 2+ criteria). In general, a past-12-month timeframe is used for SUD measures. For detailed information, see Terry-McElrath and Patrick, 2025.

[3]Estimates presented here based on respondents modal ages 40 through 50.

[4]In 2024, the text for questions on use of sedatives, tranquilizers, and narcotics were changed on half of the survey forms. These questions are used in the calculation of estimates for this drug use index. Estimates based on the original versions of these questions are presented here. For details on the survey items, please refer to Table/Figure 91.

TABLE/FIGURE 128

Differences in Prevalence of Use for Various Types of Drugs

Among Respondents Modal Ages 55 through 65, by Sex and Race/Ethnicity, 2024

	Differences by Sex			Differences by Race/Ethnicity								
	Men	Women	Men vs. Women	Black	Hispanic	Black vs. Hispanic	Black	White	Black vs. White	Hispanic	White	Hispanic vs. White
Cannabis:[1]												
12-month	21.4	18.2	n.s.	26.4	6.5	p<.05	26.4	20.0	n.s.	6.5	20.0	p<.001
30-day	14.8	11.4	n.s.	17.1	*	p<.05	17.1	13.1	n.s.	*	13.1	p<.001
Cannabis Use Disorder:[2]												
Abstainer	78.4	83.8	p<.001	84.1	87.4	n.s.	84.1	80.3	n.s.	87.4	80.3	p<.05
Nondisordered	17.4	13.2	p<.01	14.2	12.6	n.s.	14.2	15.6	n.s.	12.6	15.6	n.s.
Disordered	4.1	3.0	n.s.	1.7	*	p<.05	1.7	4.0	p<.01	*	4.0	p<.001
Alcohol:												
30-day	68.4	58.3	p<.001	48.7	48.1	n.s.	48.7	66.5	p<.001	48.1	66.5	p<.001
5+ drinks in row in two weeks	25.3	12.7	p<.001	9.8	21.8	n.s.	9.8	19.5	p<.01	21.8	19.5	n.s.
Alcohol Use Disorder:[2]												
Abstainer	20.5	24.9	p<.01	38.0	28.2	n.s.	38.0	19.9	p<.001	28.2	19.9	n.s.
Nondisordered	58.6	61.1	n.s.	52.6	59.2	n.s.	52.6	61.2	p<.05	59.2	61.2	n.s.
Disordered	20.9	14.0	p<.001	9.4	12.6	n.s.	9.4	18.9	p<.001	12.6	18.9	p<.05
Cigarettes:												
30-day	9.3	11.2	n.s.	12.8	6.1	n.s.	12.8	9.4	n.s.	6.1	9.4	n.s.
Vaping Nicotine:												
30-day	1.8	3.5	n.s.	2.2	*	n.s.	2.2	3.1	n.s.	*	3.1	p<.001
Any Drug other than Cannabis:[3]												
12-month	8.0	6.6	n.s.	0.9	3.3	n.s.	0.9	7.7	p<.001	3.3	7.7	n.s.
Other Drug Use Disorder:[2]												
Abstainer	95.2	95.7	n.s.	96.7	93.9	n.s.	96.7	95.6	n.s.	93.9	95.6	n.s.
Nondisordered	3.4	3.6	n.s.	2.6	4.2	n.s.	2.6	3.4	n.s.	4.2	3.4	n.s.
Disordered	1.5	0.7	n.s.	0.7	1.9	n.s.	0.7	0.9	n.s.	1.9	0.9	n.s.

(Footnotes on following page.)

TABLE/FIGURE 128 (cont.)

Differences in Prevalence of Use for Various Types of Drugs

Among Respondents Modal Ages 55 through 65,

by Sex and Race/Ethnicity, 2024

[1]In 2024, the text for this question was changed on half of the survey forms. Estimates for the original version of the question are presented here. For details on the survey items, please refer to Table/Figure 91.

[2]MTF substance use disorder (SUD) measures are not equivalent to clinical SUD diagnoses but are based on diagnostic criteria specified in the Diagnostic and Statistical Manual of Mental Disorders, 5th Edition Text Revision (American Psychiatric Association, 2022). Categories include no use within the specified timeframe, non-disordered use (reporting 0-1 criteria), and disordered use (reporting 2+ criteria). In general, a past-12-month timeframe is used for SUD measures. For detailed information, see Terry-McElrath and Patrick, 2025.

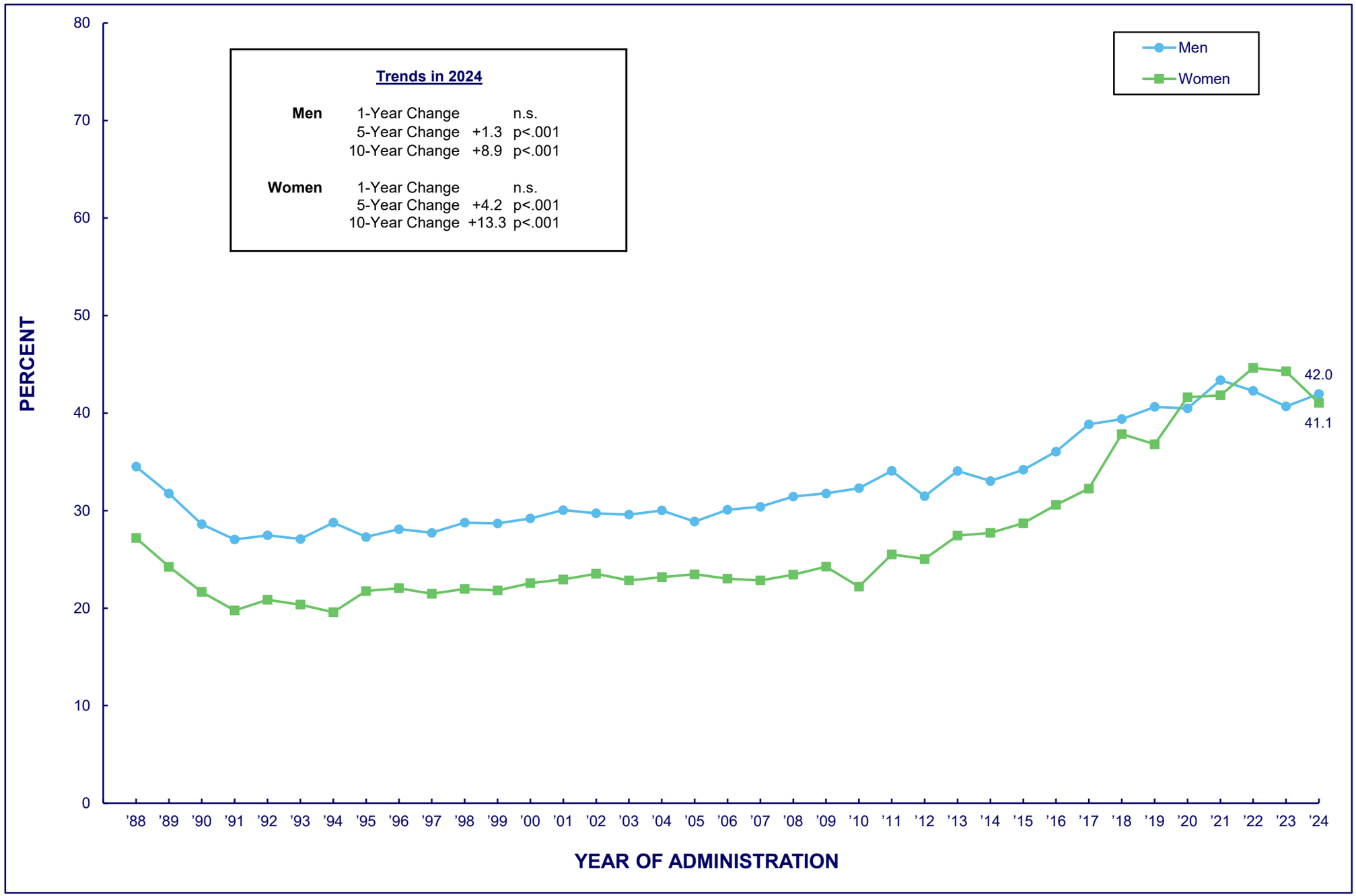
[3]In 2024, the text for questions on use of sedatives, tranquilizers, and narcotics were changed on half of the survey forms. These questions are used in the calculation of estimates for this drug use index. Estimates based on the original versions of these questions are presented here. For details on the survey items, please refer to Table/Figure 91.

TABLE/FIGURE 129

CANNABIS

Trends in 12-Month Prevalence among Respondents of Modal Ages 19 through 30, by Sex

MONITORING THE FUTURE

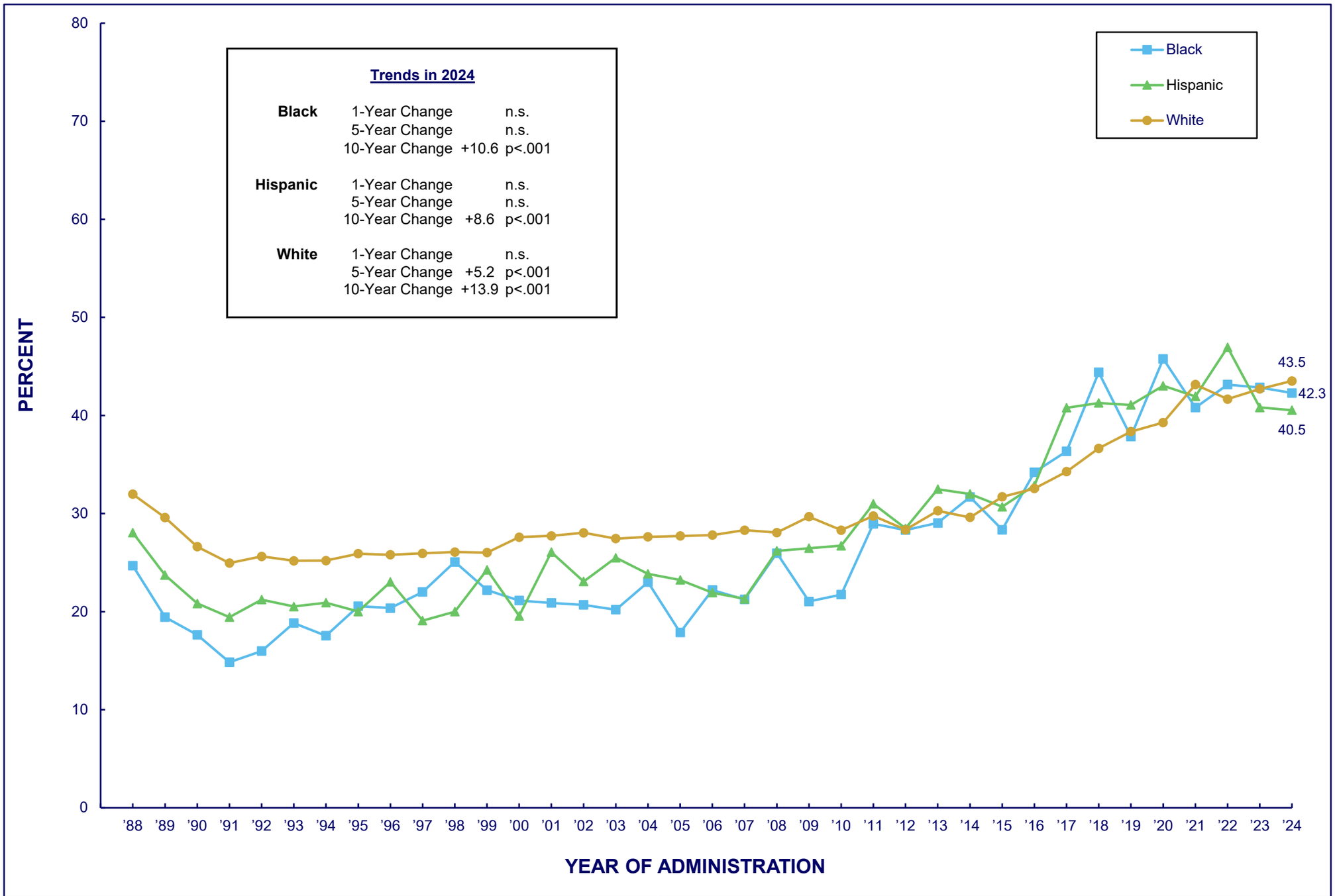


TABLE/FIGURE 130

CANNABIS

Trends in 12-Month Prevalence among Respondents of Modal Ages 19 through 30, by Race/Ethnicity

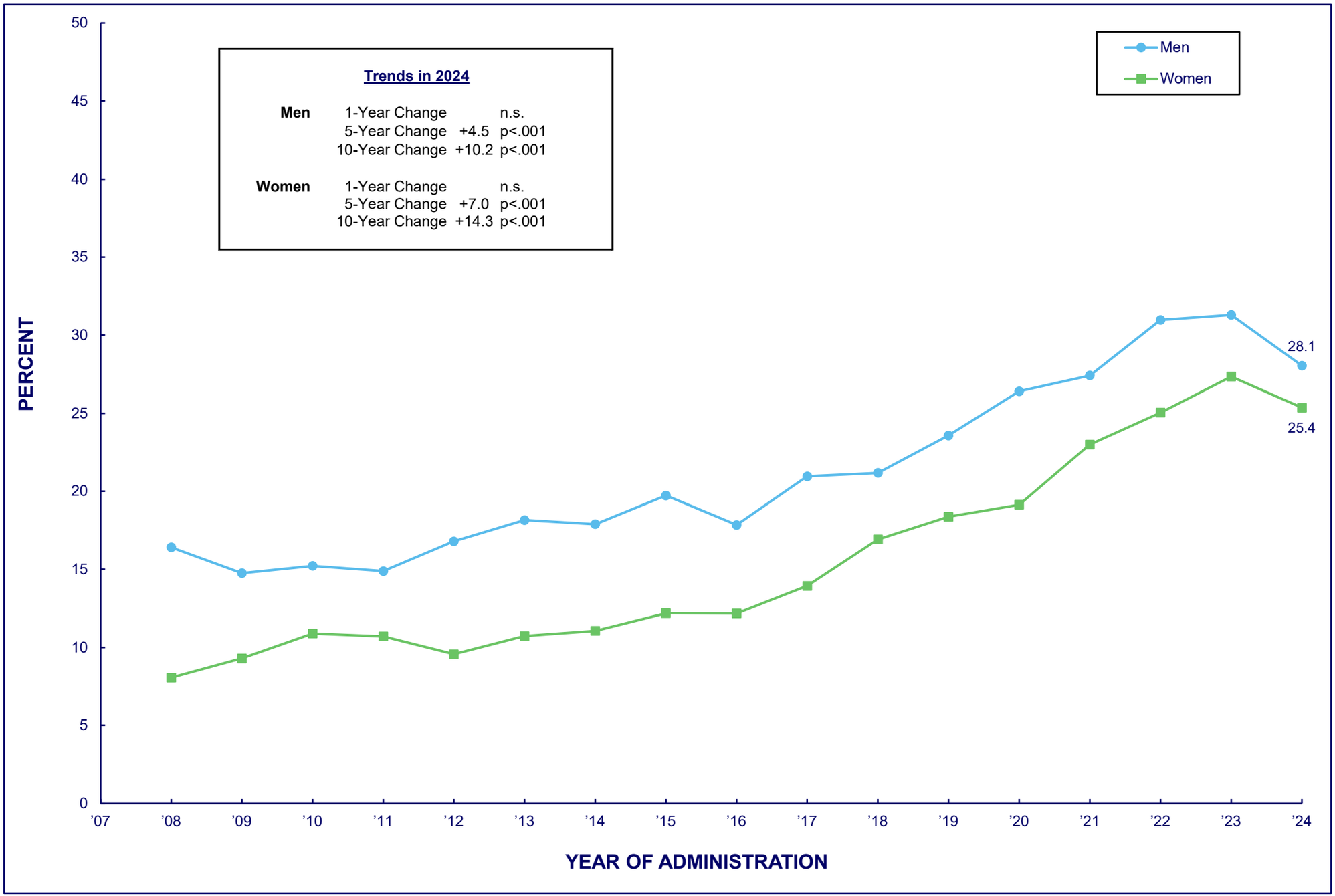
MONITORING THE FUTURE



TABLE/FIGURE 131

CANNABIS

Trends in 12-Month Prevalence among Respondents of Modal Ages 35 through 50, by Sex

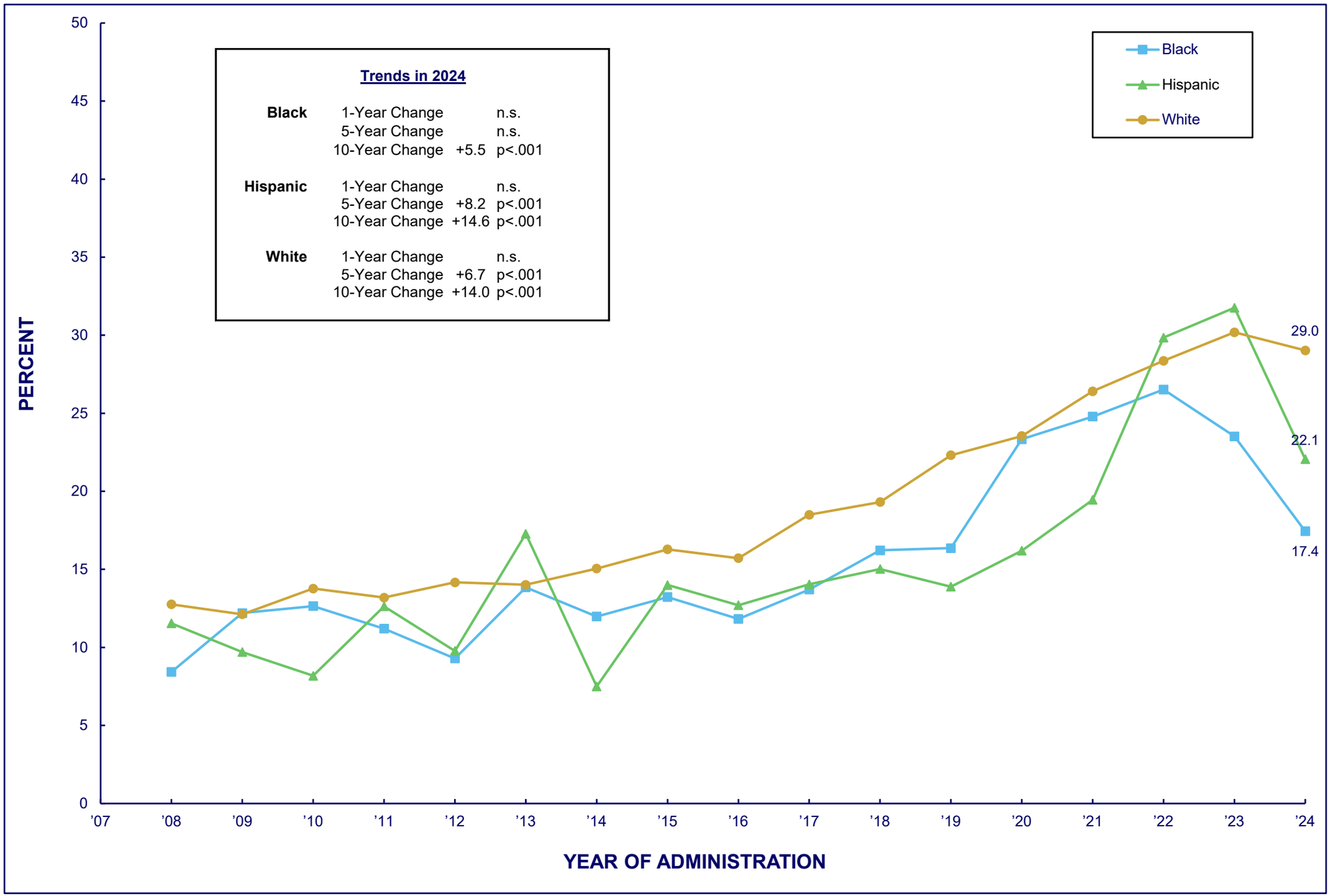


TABLE/FIGURE 132

CANNABIS

Trends in 12-Month Prevalence among Respondents of Modal Ages 35 through 50, by Race/Ethnicity

MONITORING THE FUTURE

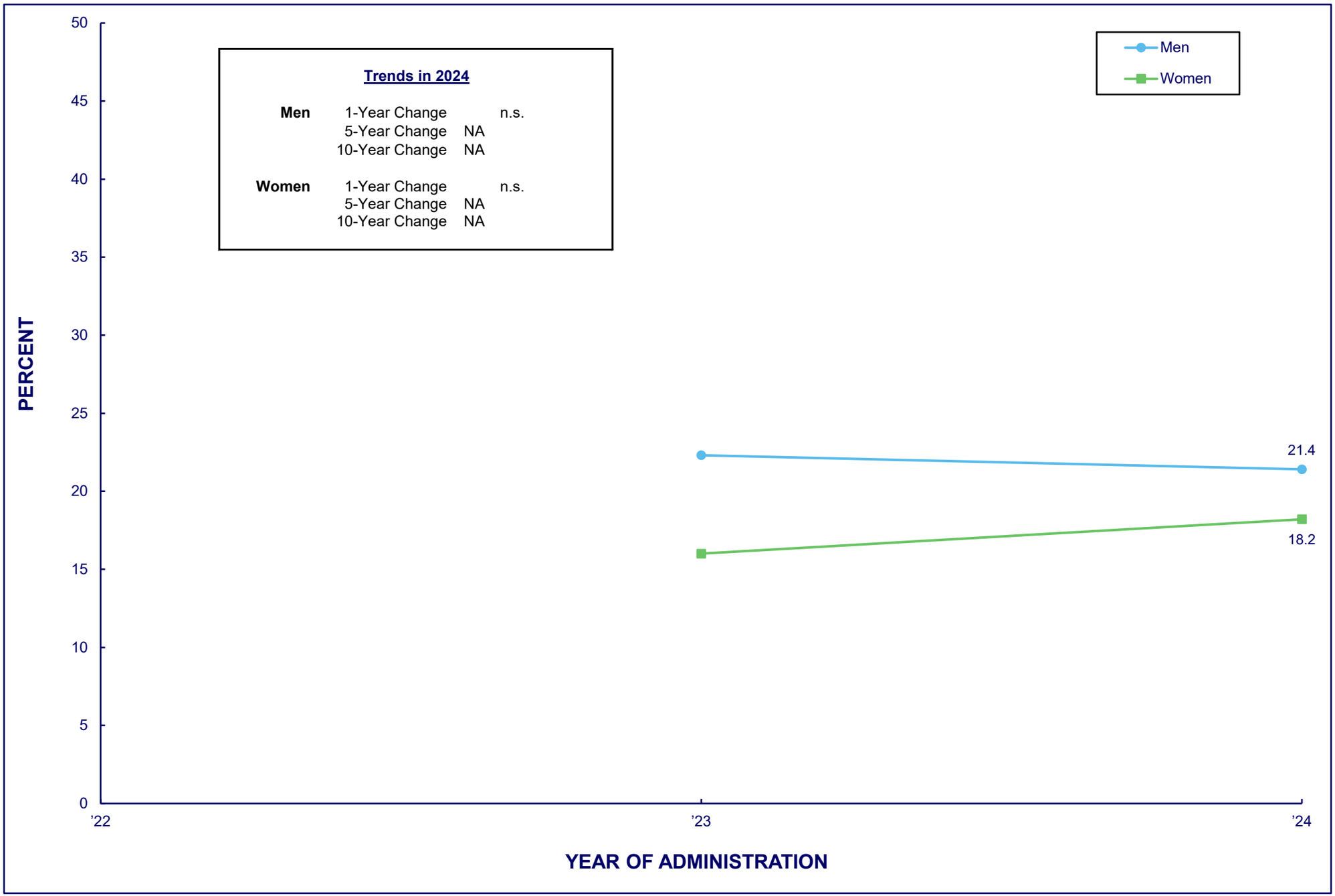


TABLE/FIGURE 133

CANNABIS

Trends in 12-Month Prevalence among Respondents of Modal Ages 55 through 65, by Sex

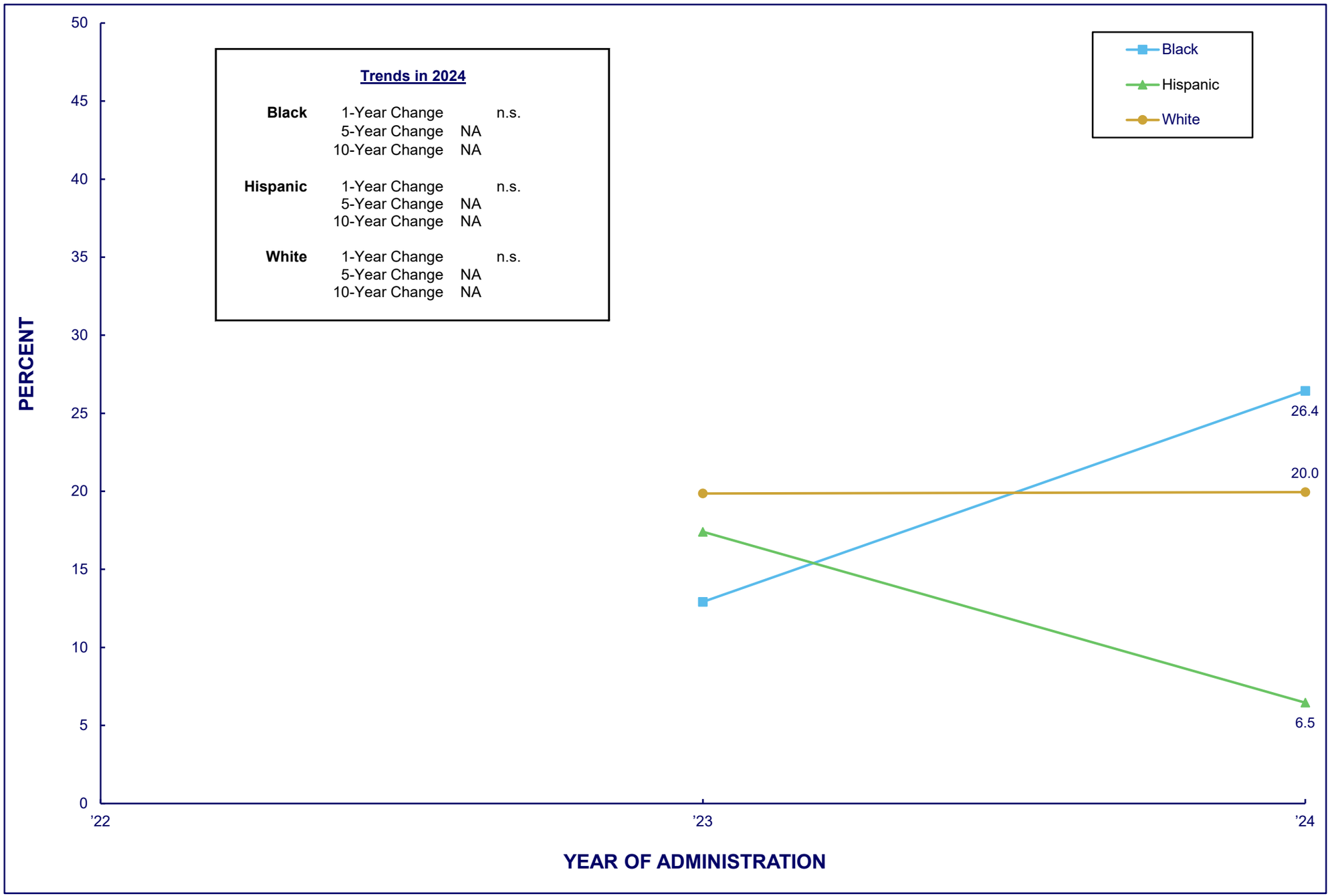
MONITORING THE FUTURE



TABLE/FIGURE 134

CANNABIS

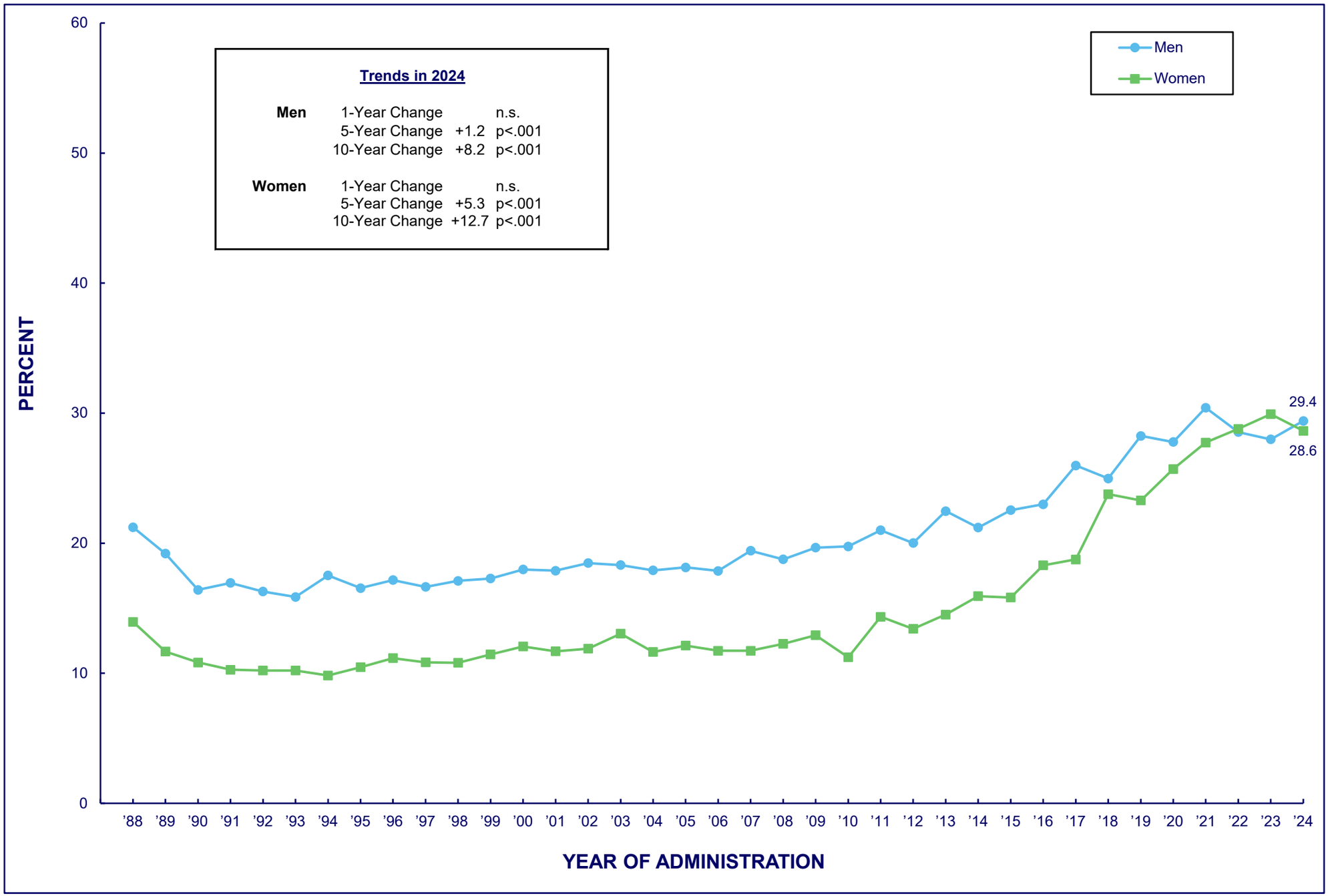
Trends in 12-Month Prevalence among Respondents of Modal Ages 55 through 65, by Race/Ethnicity



TABLE/FIGURE 135

CANNABIS

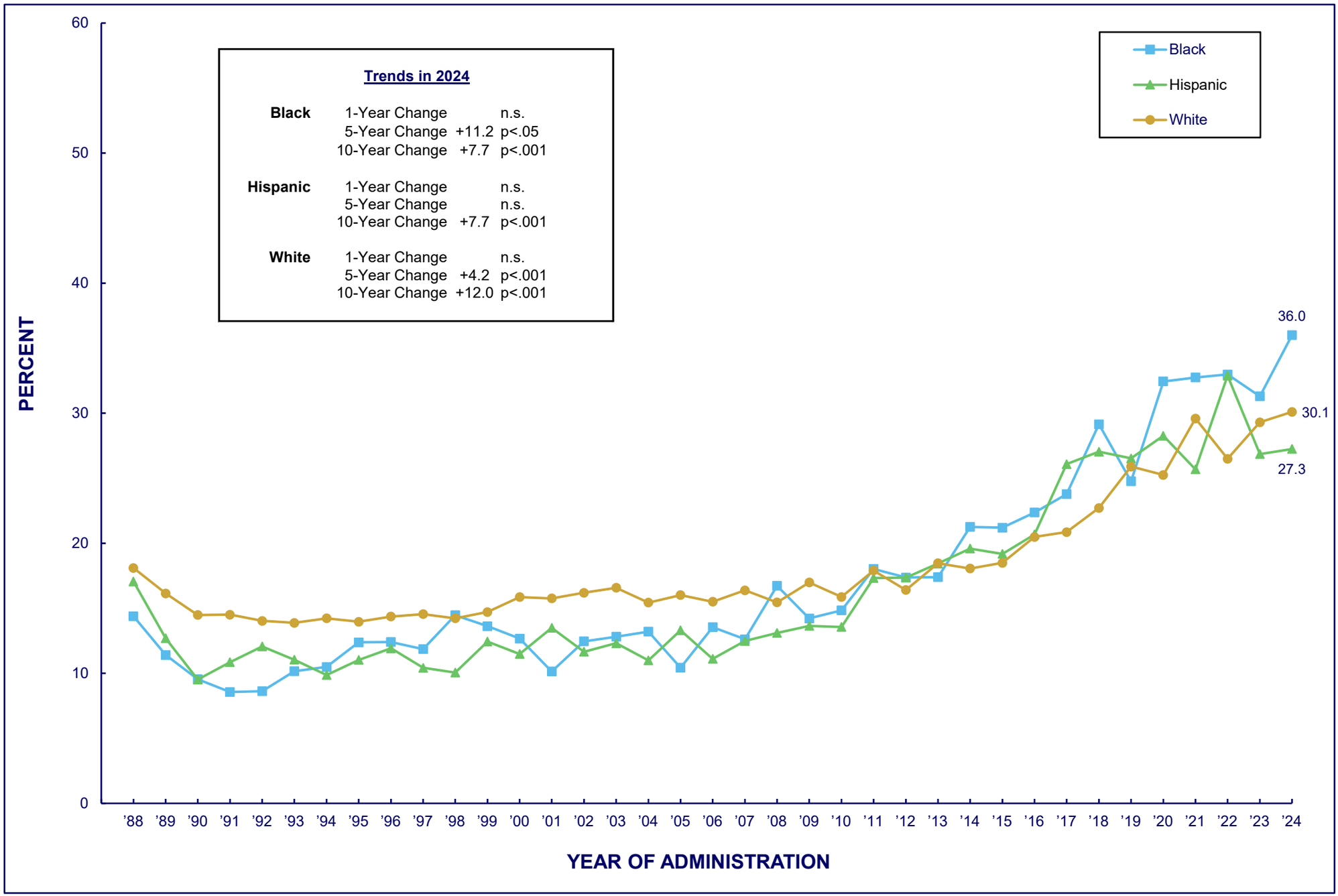
Trends in 30-Day Prevalence among Respondents of Modal Ages 19 through 30, by Sex



TABLE/FIGURE 136

CANNABIS

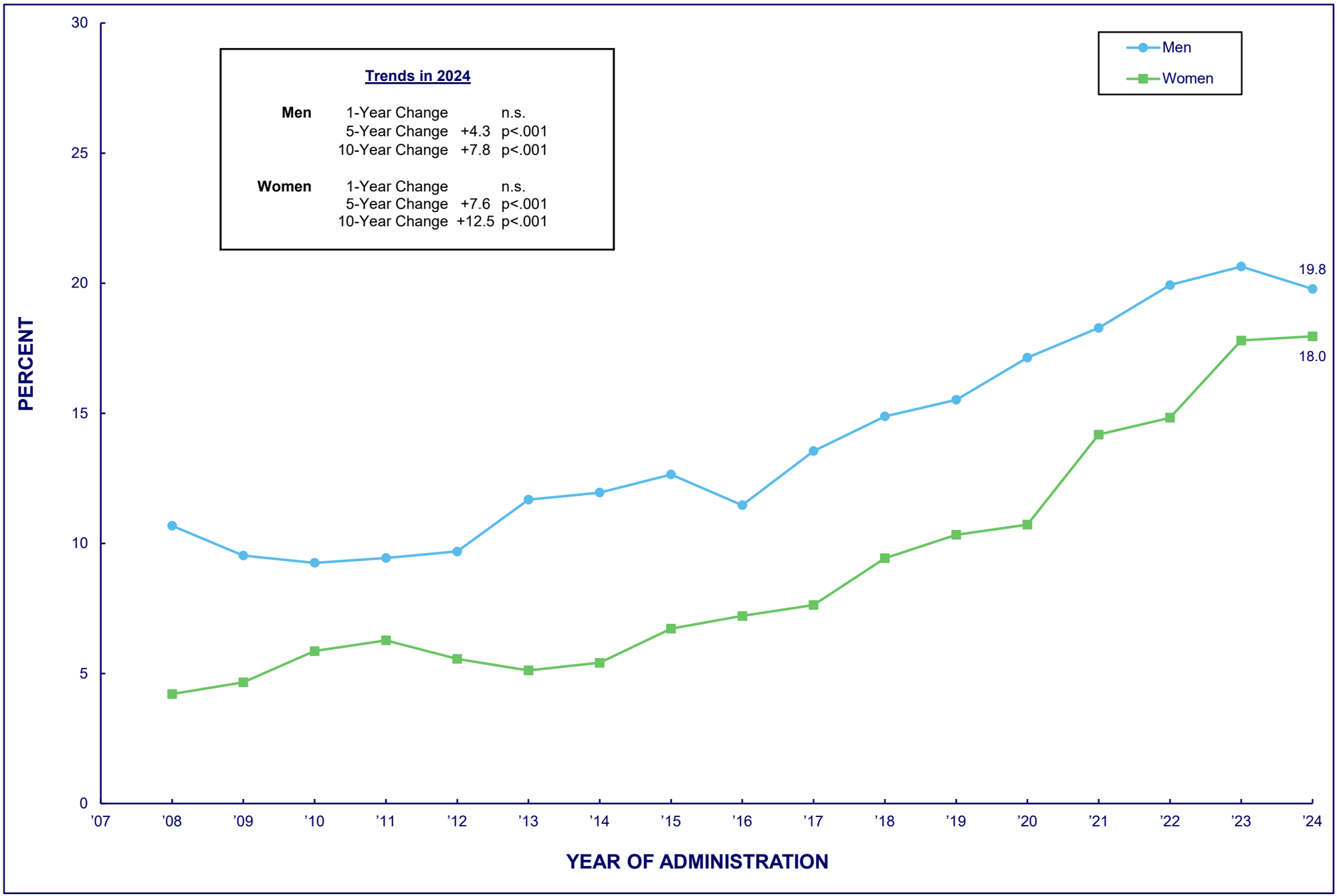
Trends in 30-Day Prevalence among Respondents of Modal Ages 19 through 30, by Race/Ethnicity



TABLE/FIGURE 137

CANNABIS

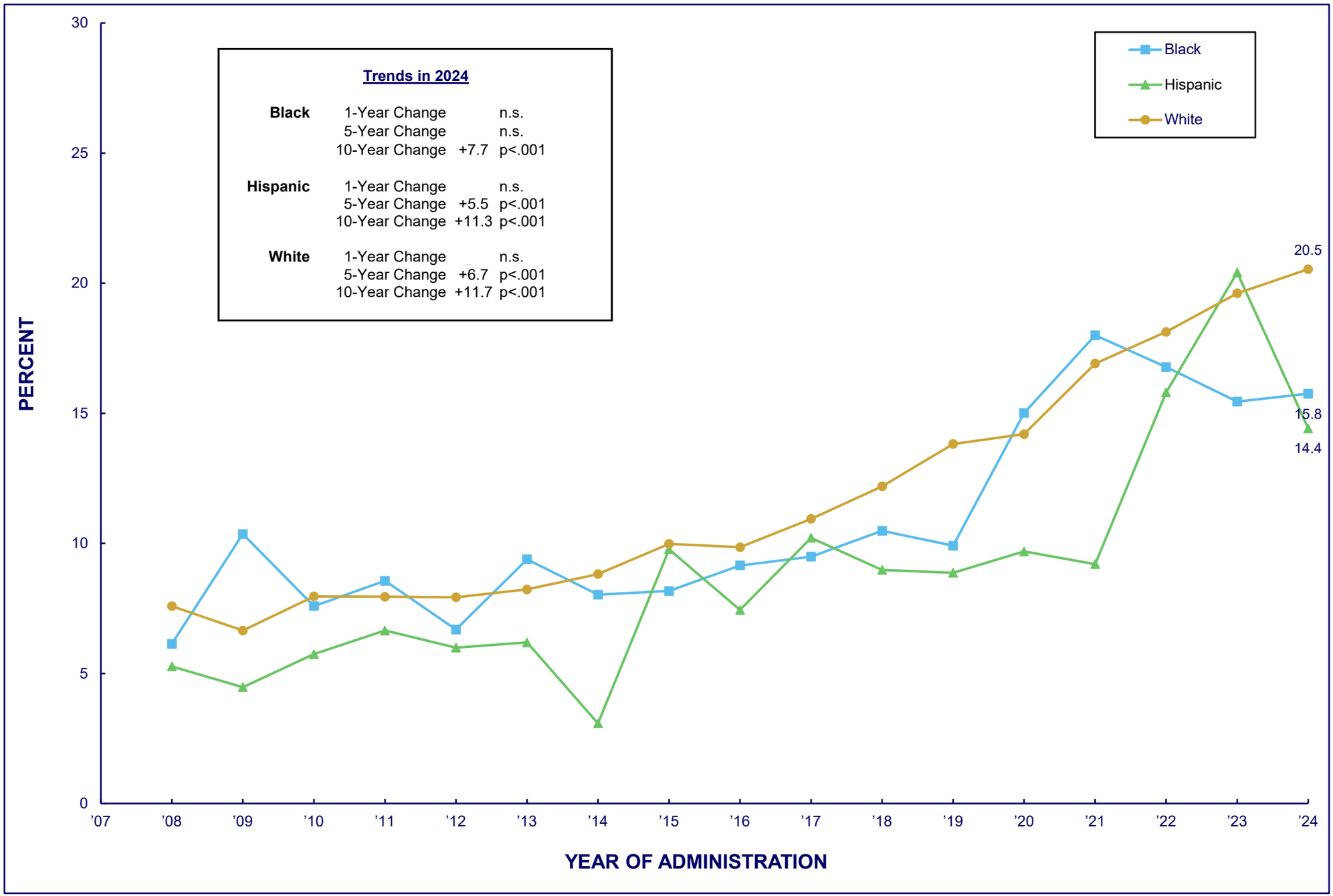
Trends in 30-Day Prevalence among Respondents of Modal Ages 35 through 50, by Sex



TABLE/FIGURE 138

CANNABIS

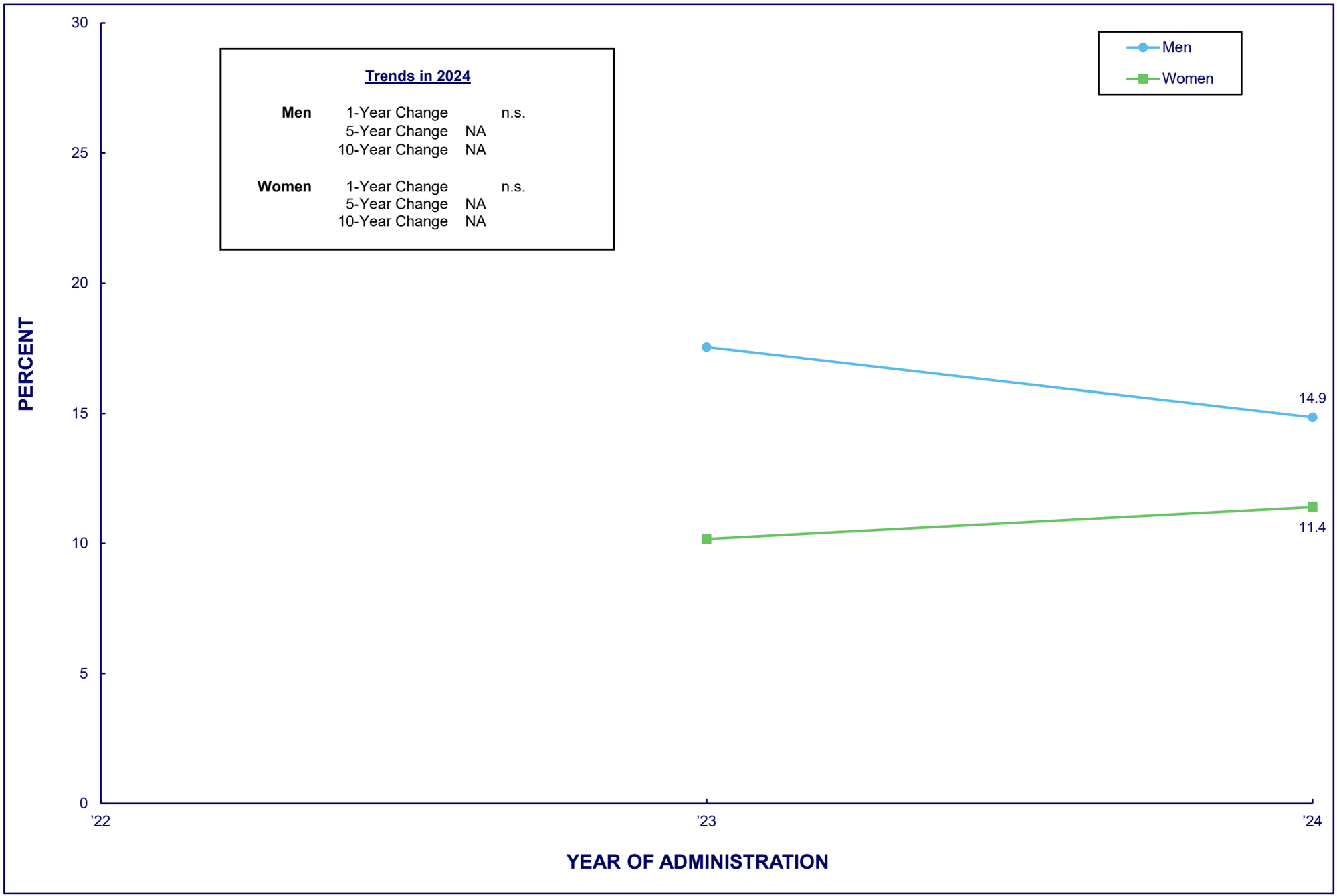
Trends in 30-Day Prevalence among Respondents of Modal Ages 35 through 50, by Race/Ethnicity



TABLE/FIGURE 139

CANNABIS

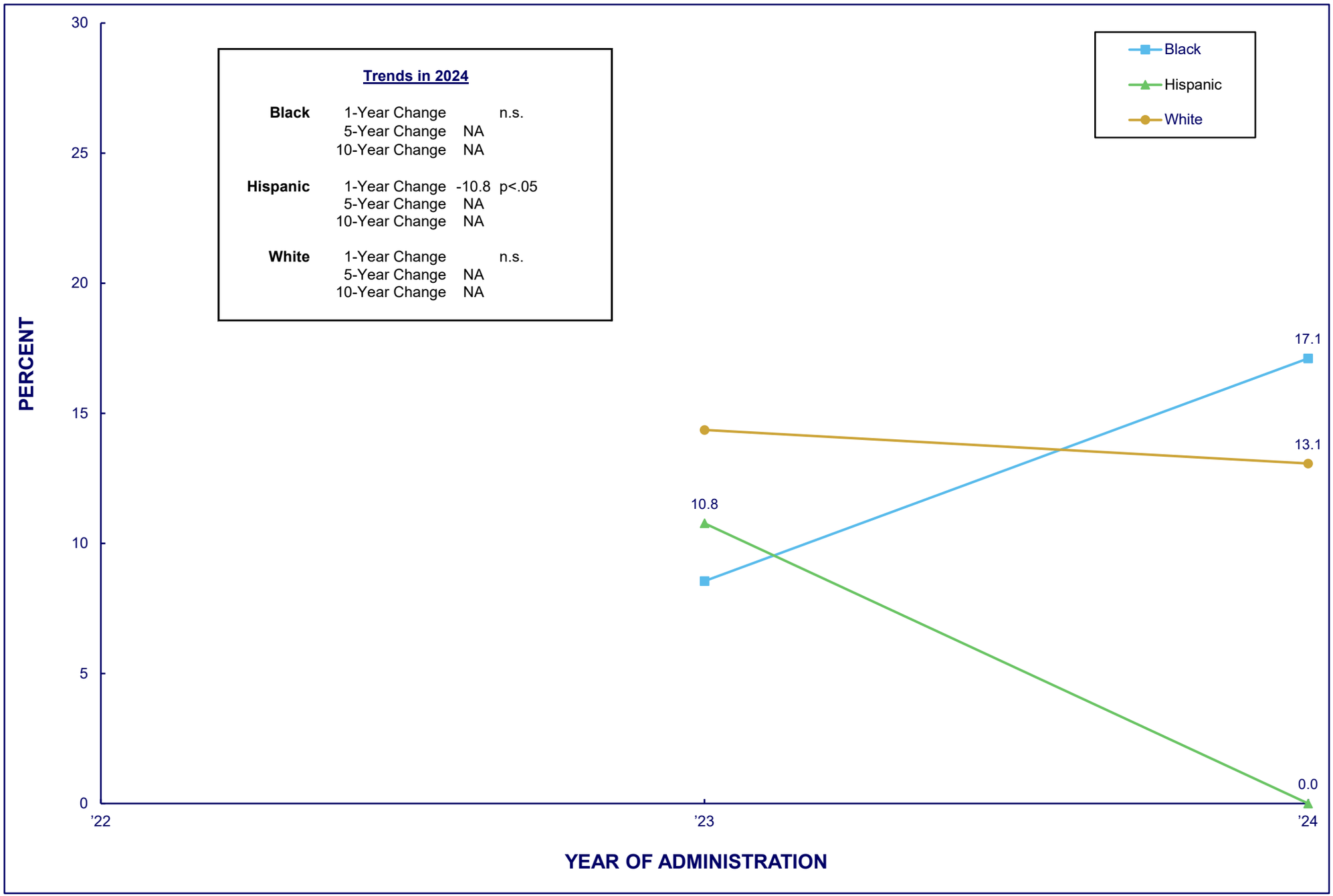
Trends in 30-Day Prevalence among Respondents of Modal Ages 55 through 65, by Sex



TABLE/FIGURE 140

CANNABIS

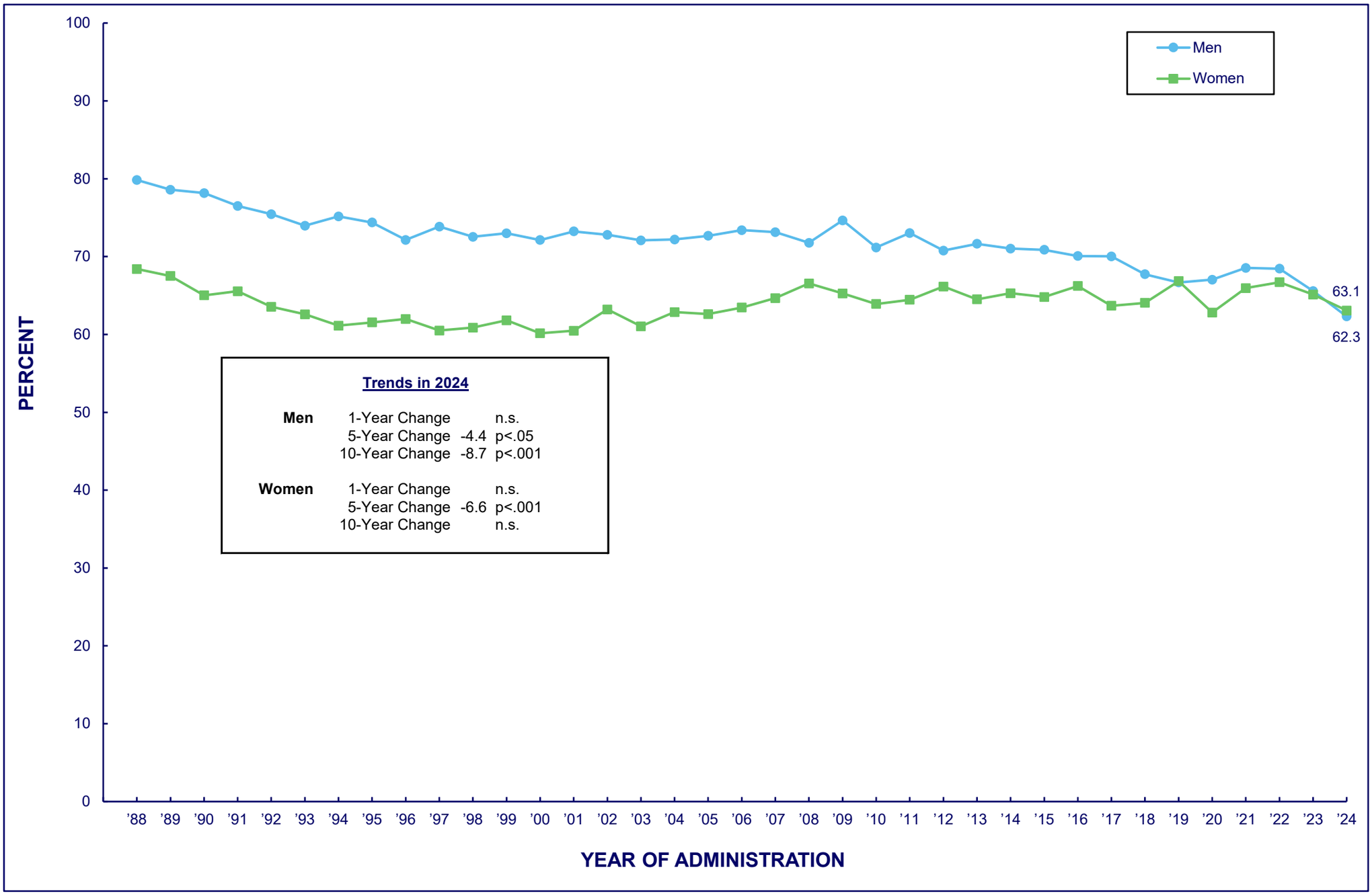
Trends in 30-Day Prevalence among Respondents of Modal Ages 55 through 65, by Race/Ethnicity



TABLE/FIGURE 141

ALCOHOL

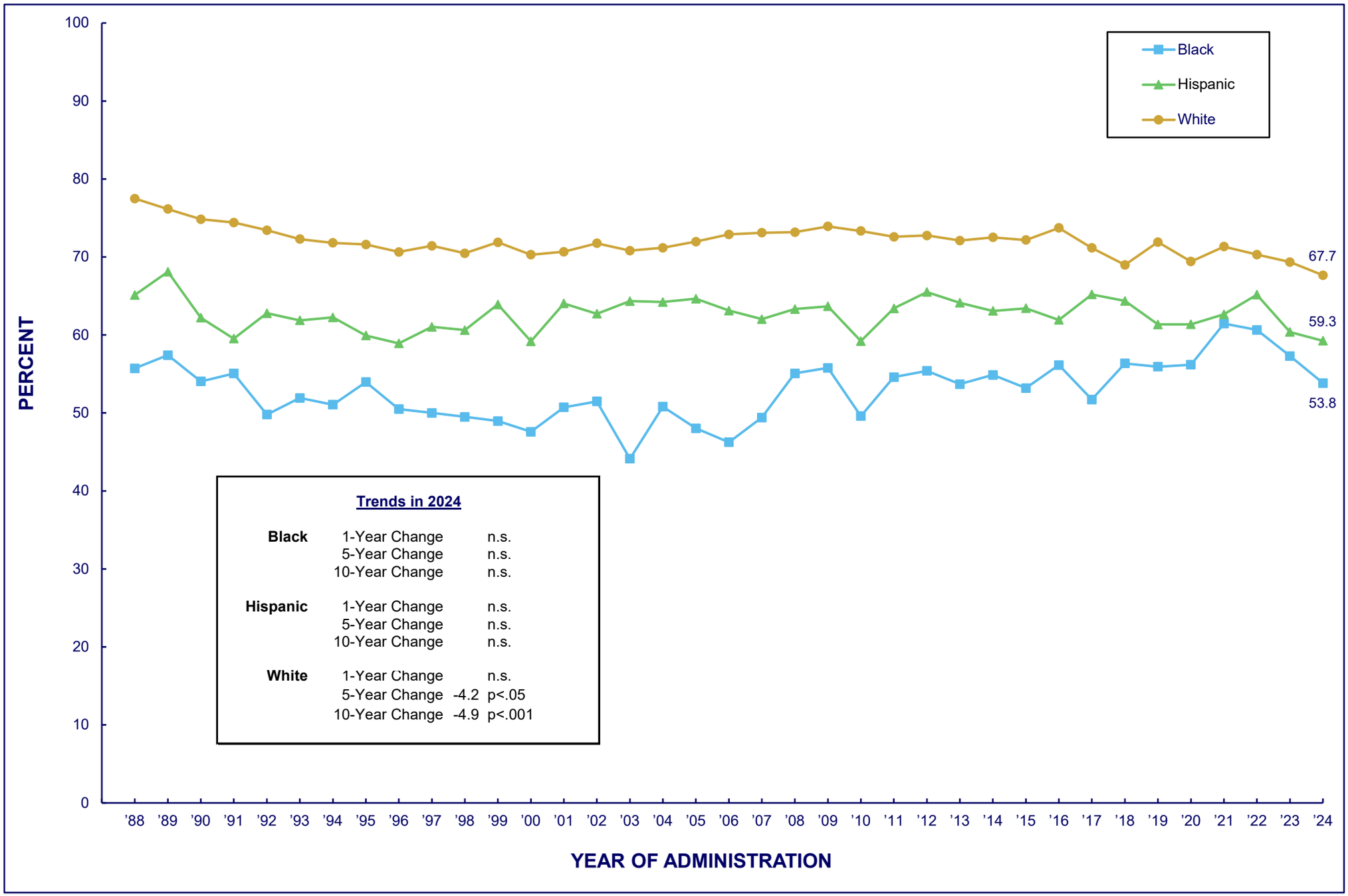
Trends in 30-Day Prevalence among Respondents of Modal Ages 19 through 30, by Sex



TABLE/FIGURE 142

ALCOHOL

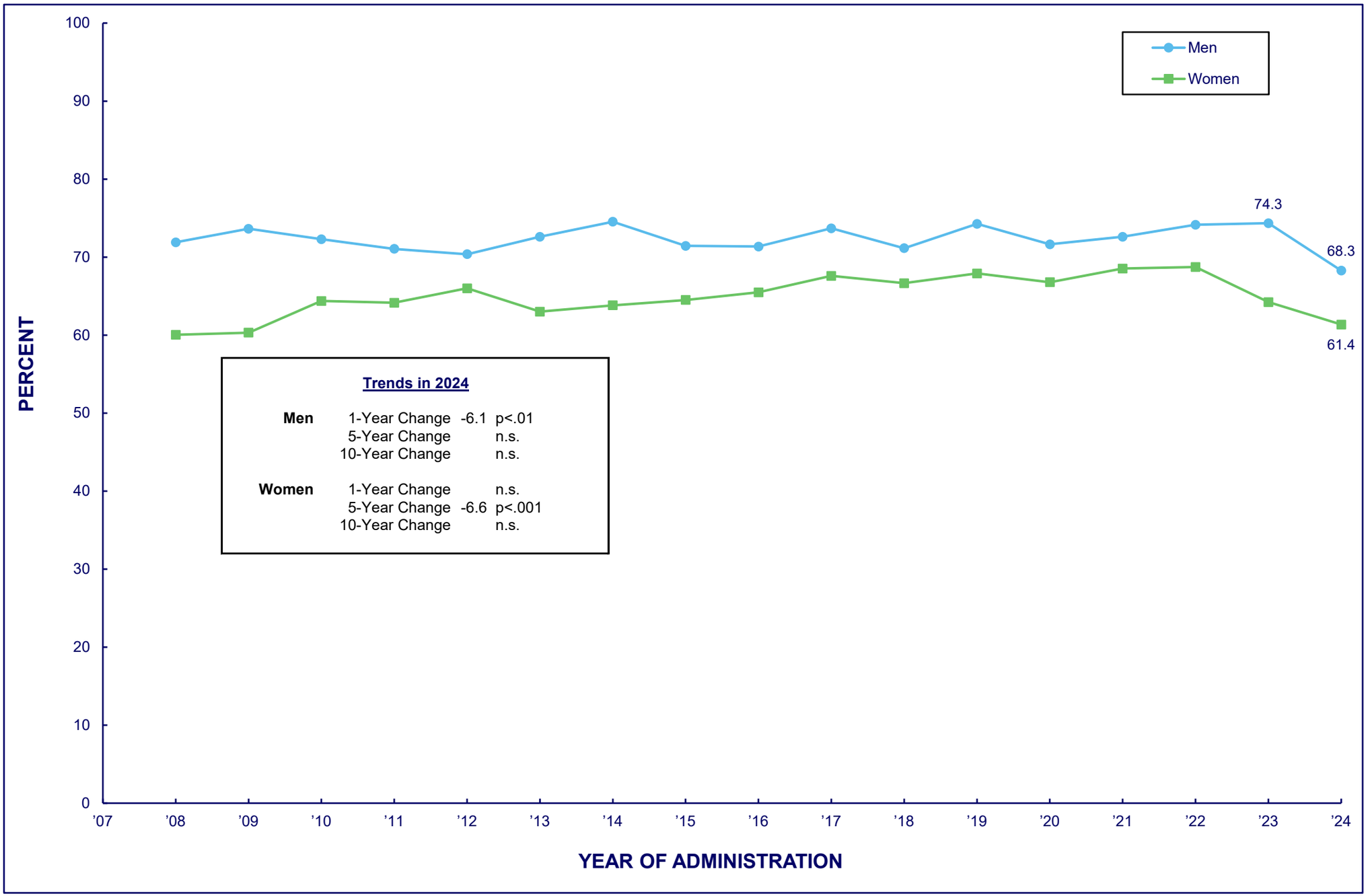
Trends in 30-Day Prevalence among Respondents of Modal Ages 19 through 30, by Race/Ethnicity



TABLE/FIGURE 143

ALCOHOL

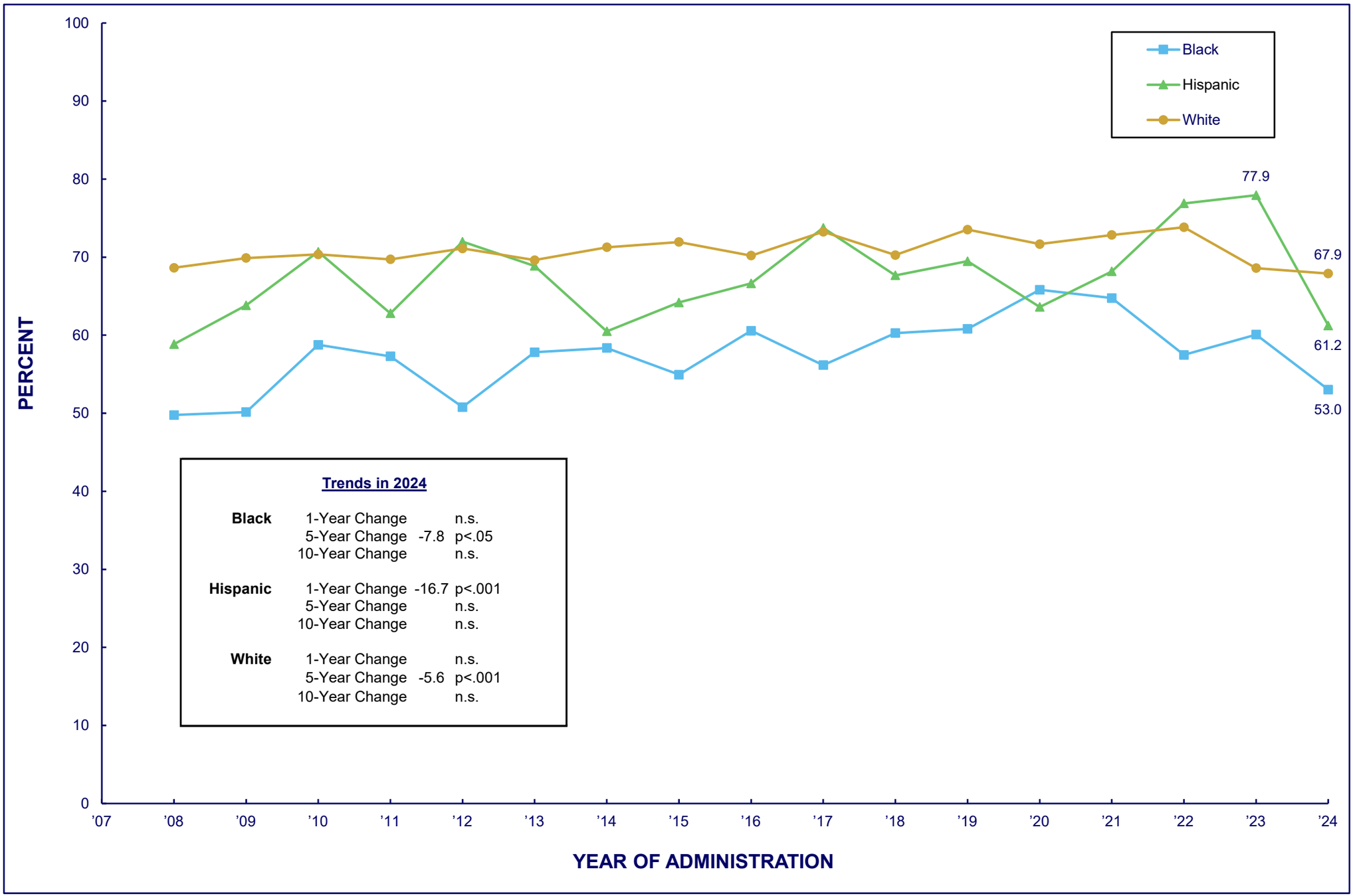
Trends in 30-Day Prevalence among Respondents of Modal Ages 35 through 50, by Sex



TABLE/FIGURE 144

ALCOHOL

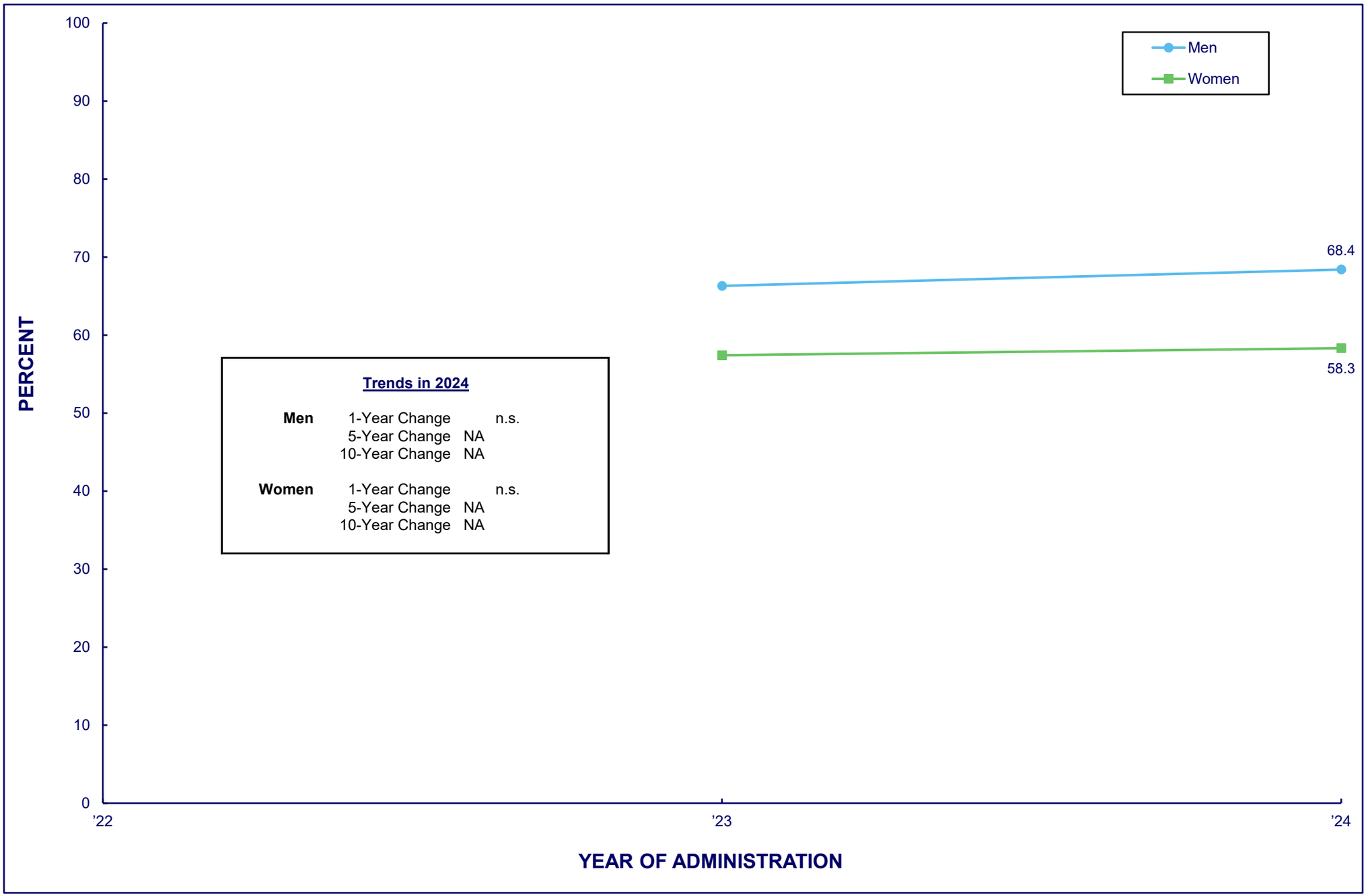
Trends in 30-Day Prevalence among Respondents of Modal Ages 35 through 50, by Race/Ethnicity



TABLE/FIGURE 145

ALCOHOL

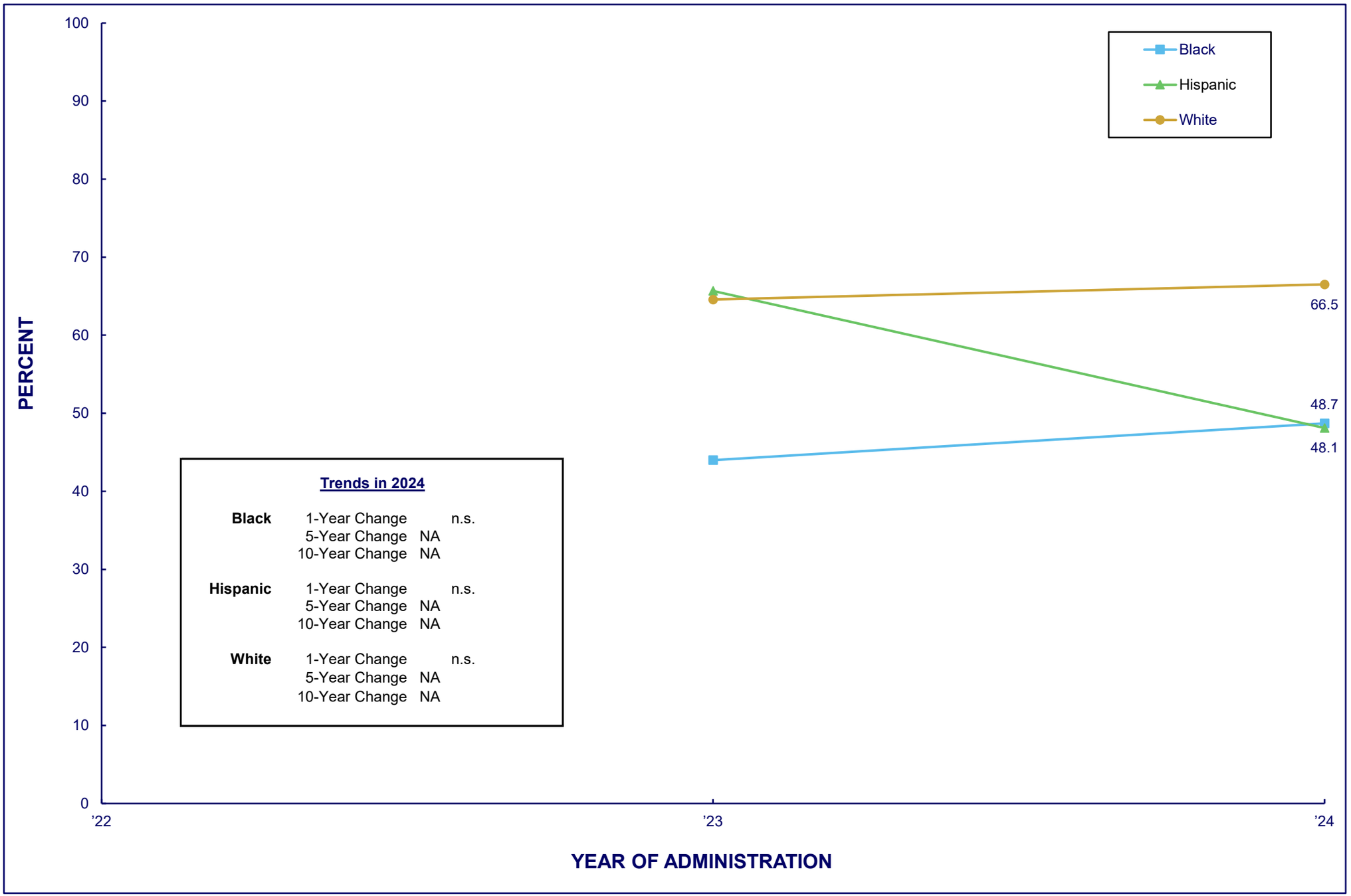
Trends in 30-Day Prevalence among Respondents of Modal Ages 55 through 65, by Sex



TABLE/FIGURE 146

ALCOHOL

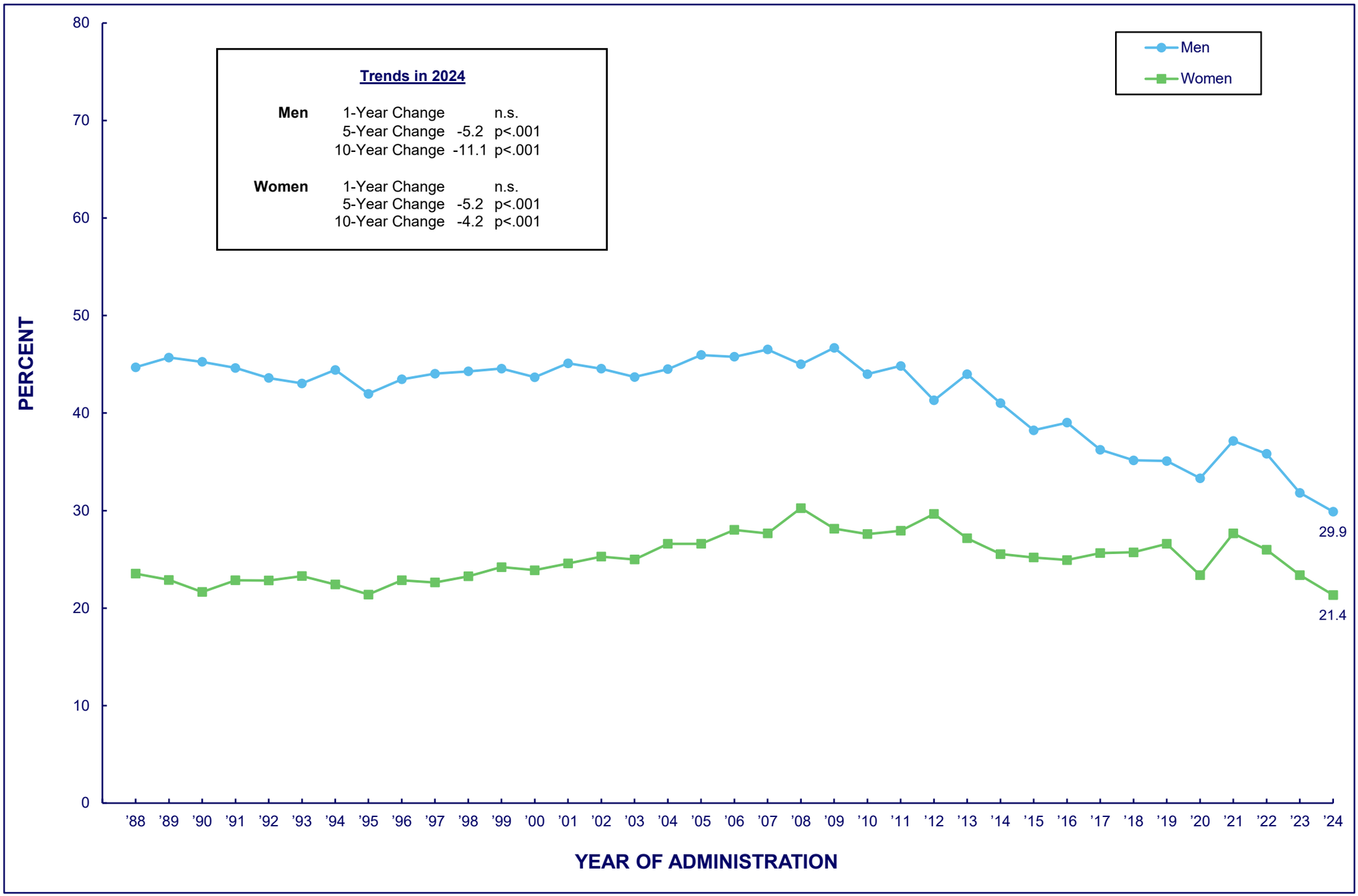
Trends in 30-Day Prevalence among Respondents of Modal Ages 55 through 65, by Race/Ethnicity



TABLE/FIGURE 147

ALCOHOL

Trends in 2-Week Prevalence of Binge Drinking (5+ Drinks in a Row) among Respondents of Modal Ages 19 through 30, by Sex

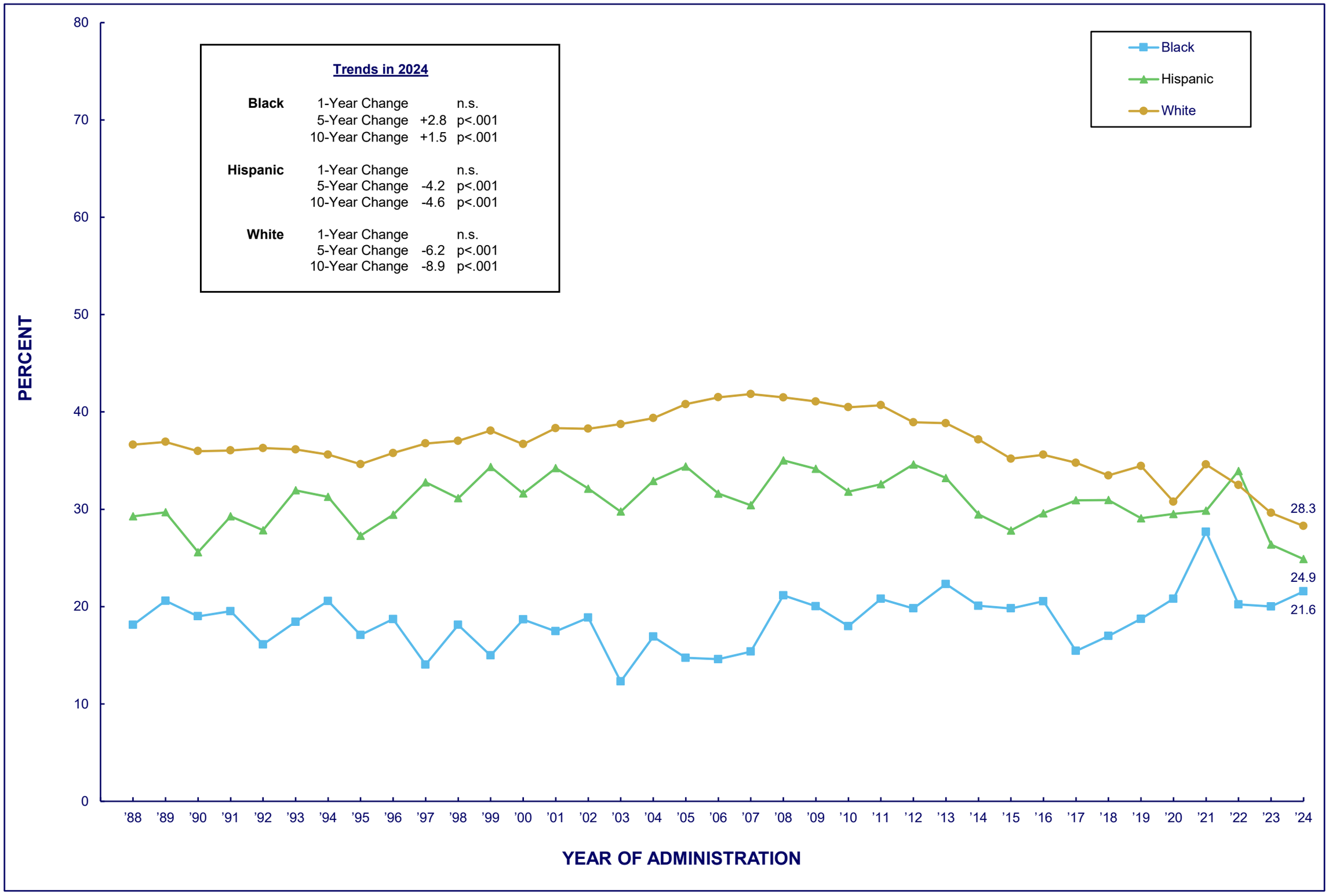


TABLE/FIGURE 148

ALCOHOL

Trends in 2-Week Prevalence of Binge Drinking (5+ Drinks in a Row) among Respondents of Modal Ages 19 through 30, by Race/Ethnicity

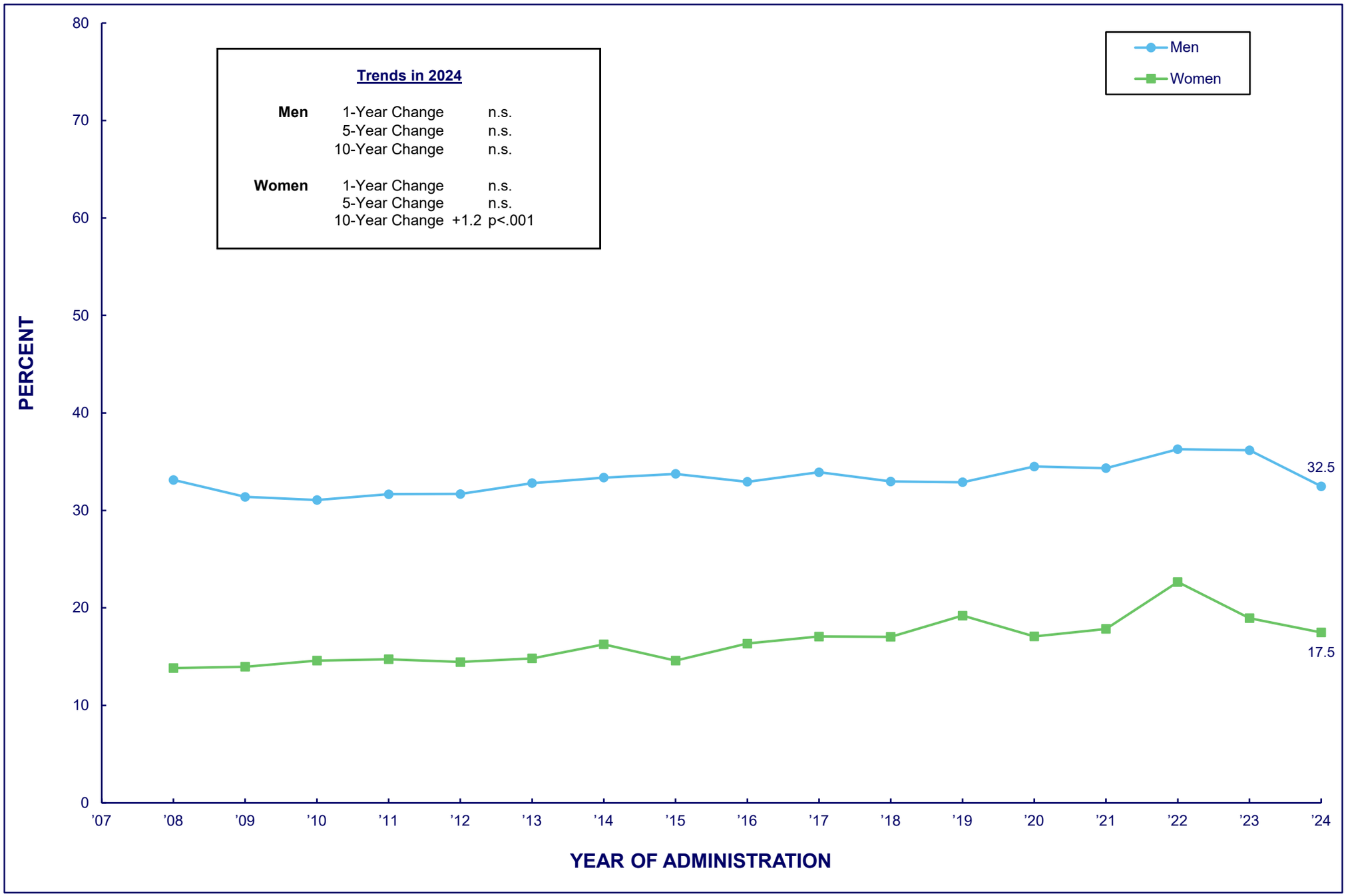
MONITORING THE FUTURE



TABLE/FIGURE 149

ALCOHOL

Trends in 2-Week Prevalence of Binge Drinking (5+ Drinks in a Row) among Respondents of Modal Ages 35 through 50, by Sex

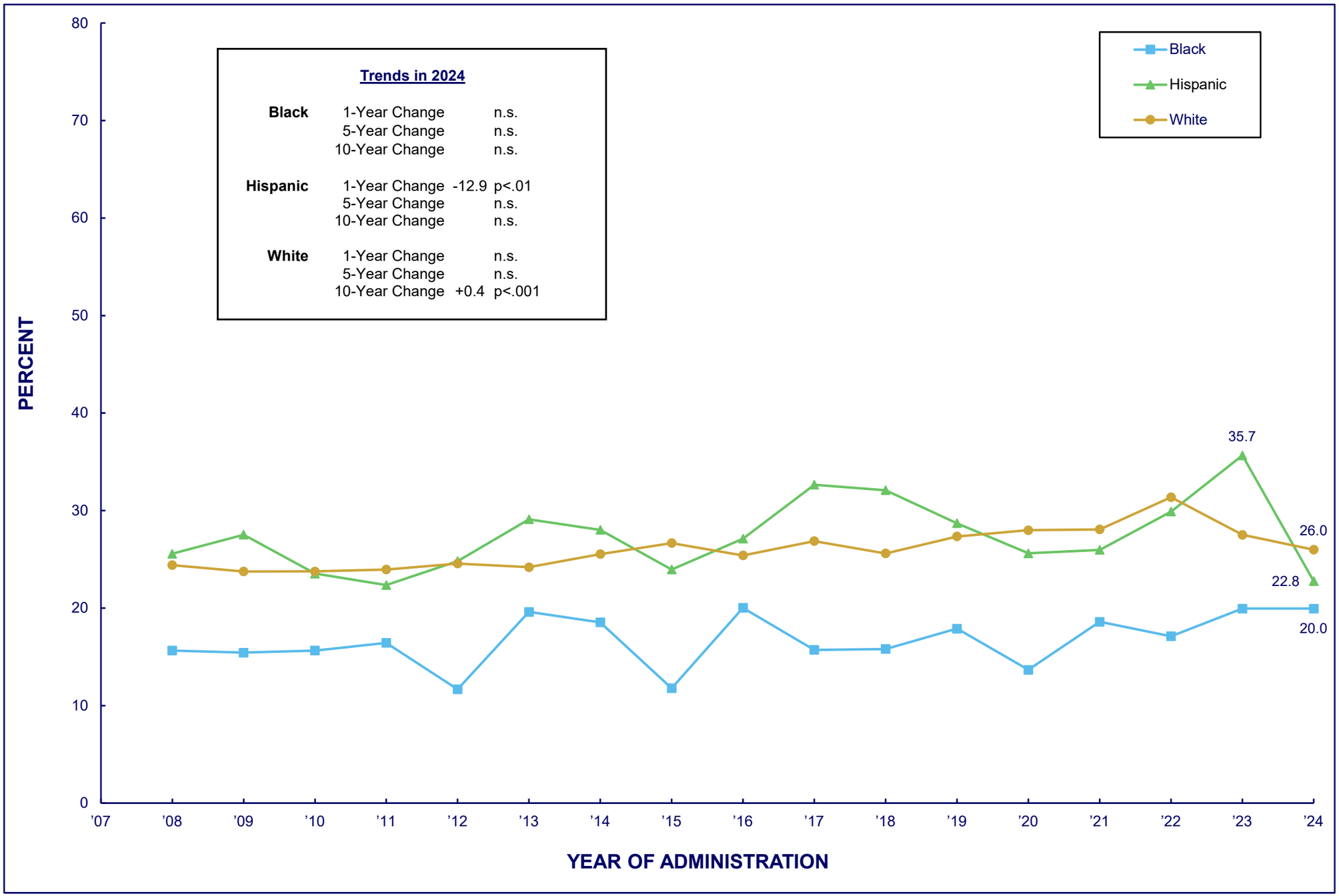


TABLE/FIGURE 150

ALCOHOL

Trends in 2-Week Prevalence of Binge Drinking (5+ Drinks in a Row) among Respondents of Modal Ages 35 through 50, by Race/Ethnicity

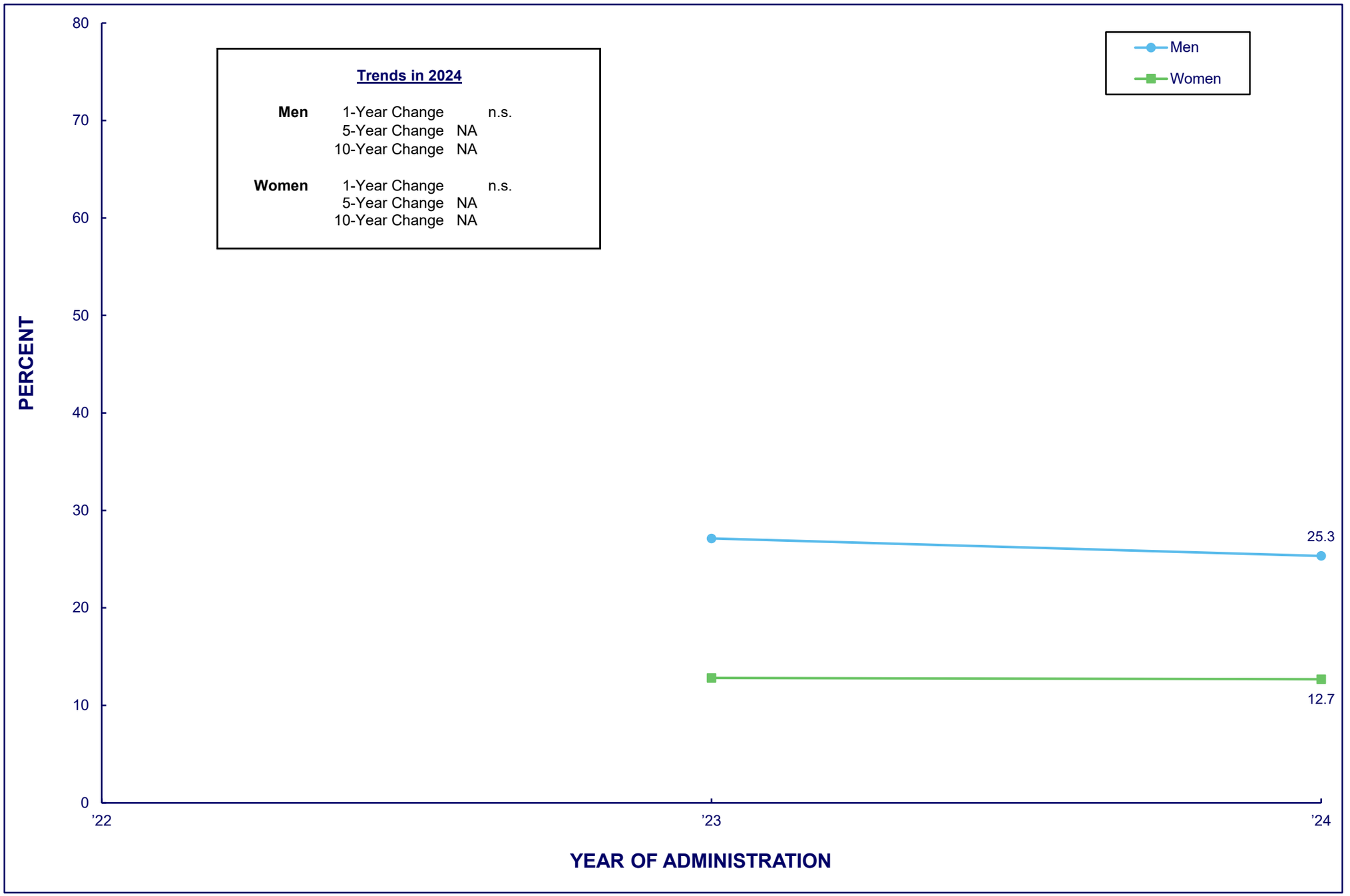
MONITORING THE FUTURE



TABLE/FIGURE 151

ALCOHOL

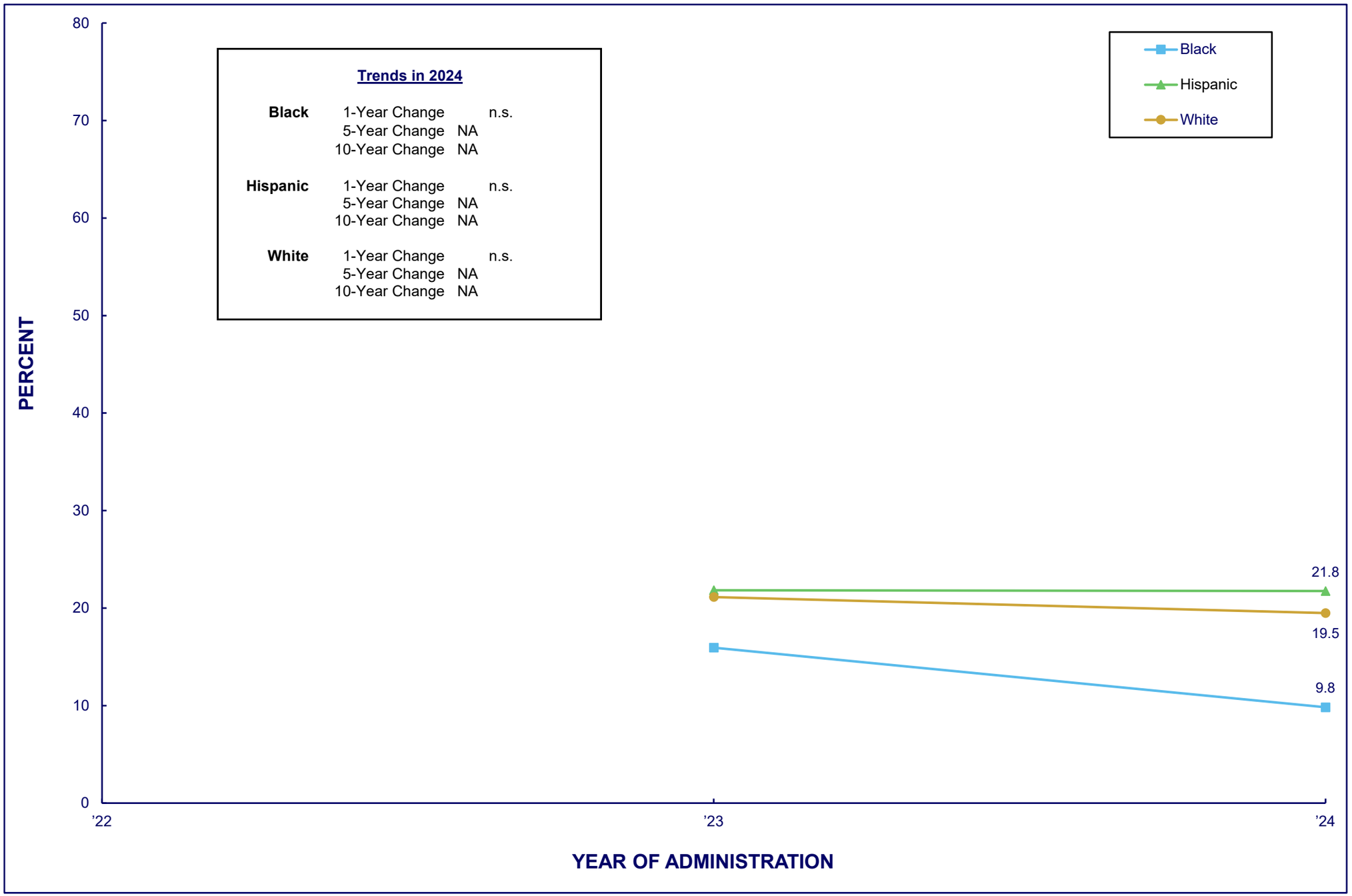
Trends in 2-Week Prevalence of Binge Drinking (5+ Drinks in a Row) among Respondents of Modal Ages 55 through 65, by Sex



TABLE/FIGURE 152

ALCOHOL

Trends in 2-Week Prevalence of Binge Drinking (5+ Drinks in a Row) among Respondents of Modal Ages 55 through 65, by Race/Ethnicity

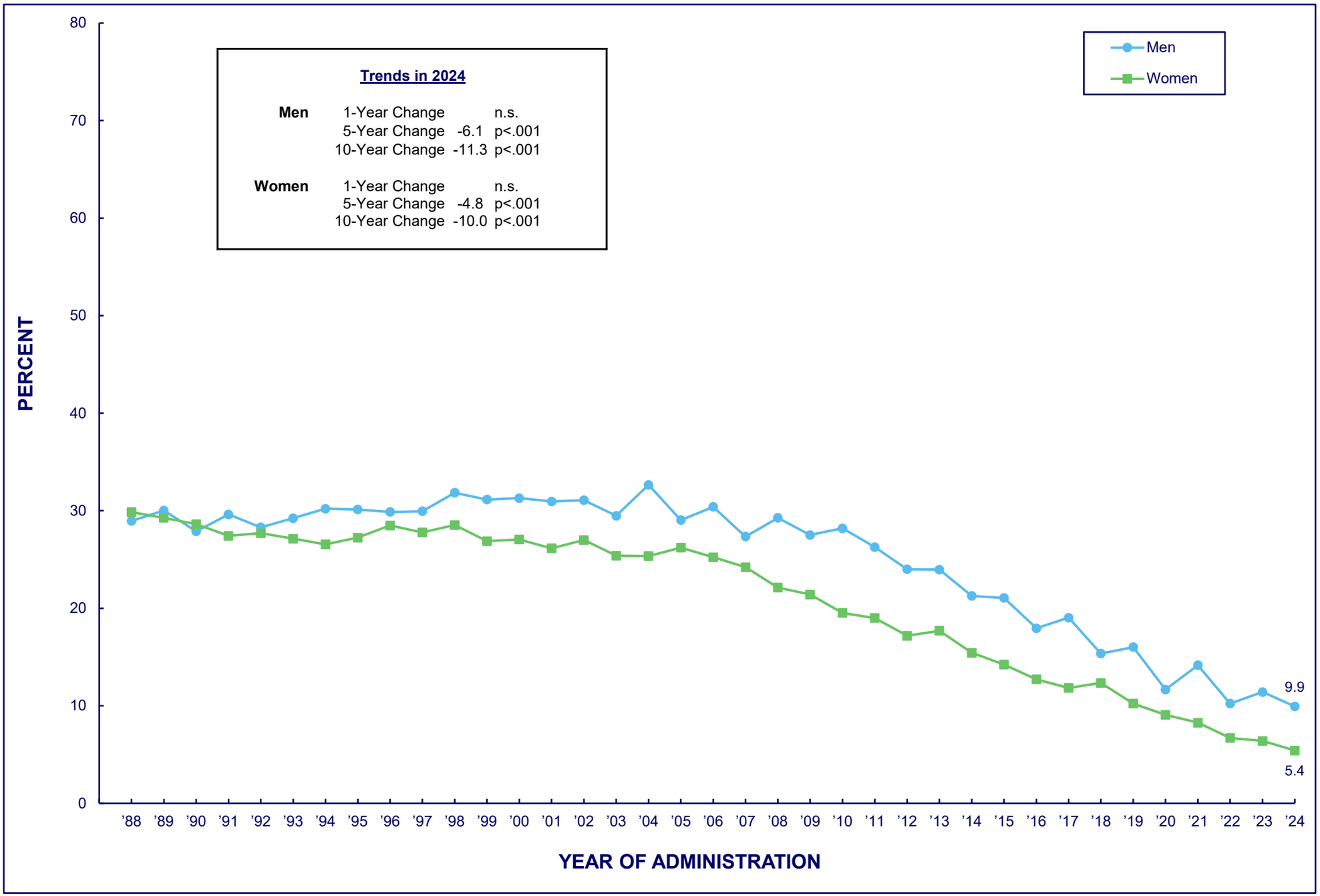


TABLE/FIGURE 153

CIGARETTES

Trends in 30-Day Prevalence among Respondents of Modal Ages 19 through 30, by Sex

MONITORING THE FUTURE

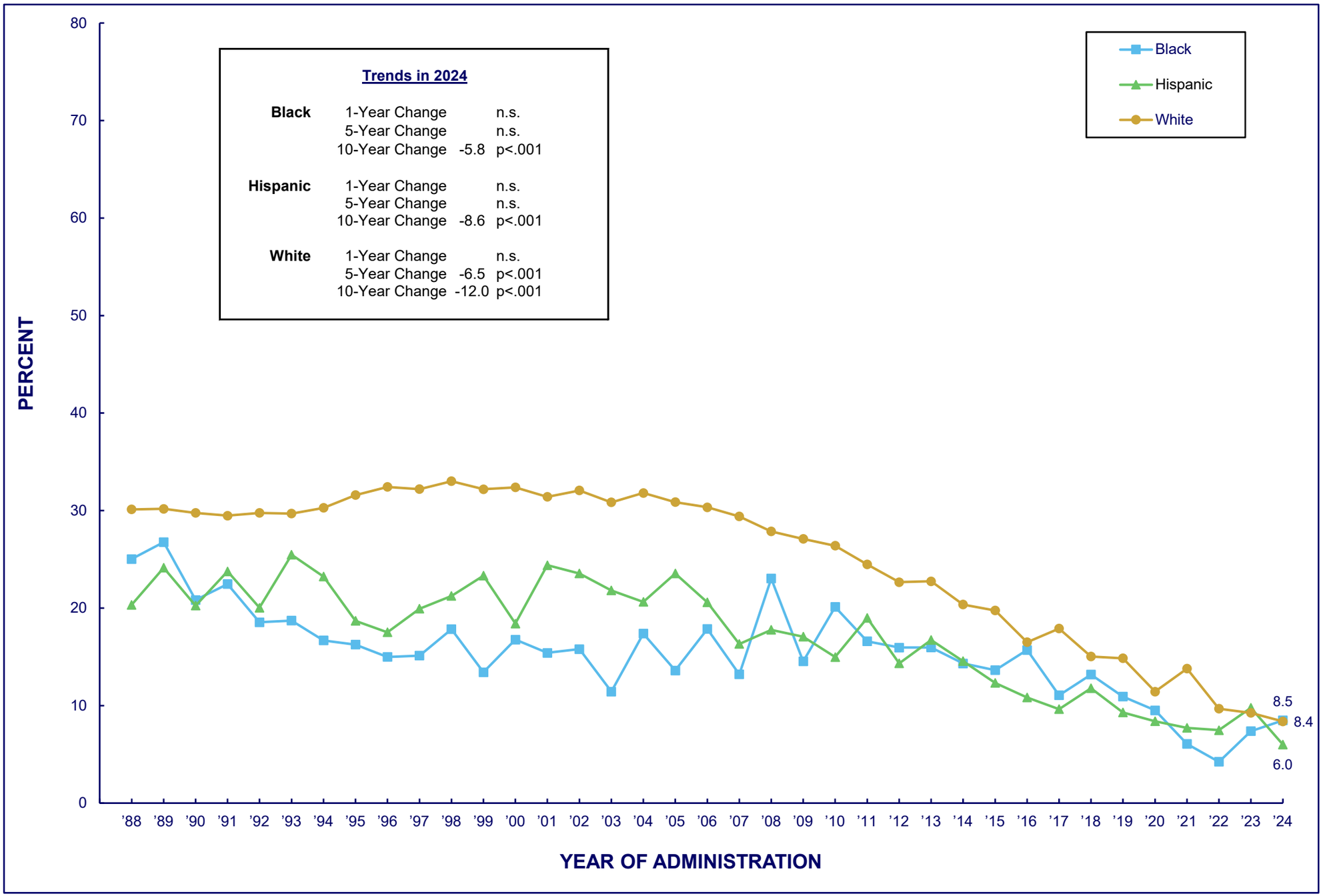


TABLE/FIGURE 154

CIGARETTES

Trends in 30-Day Prevalence among Respondents of Modal Ages 19 through 30, by Race/Ethnicity

MONITORING THE FUTURE

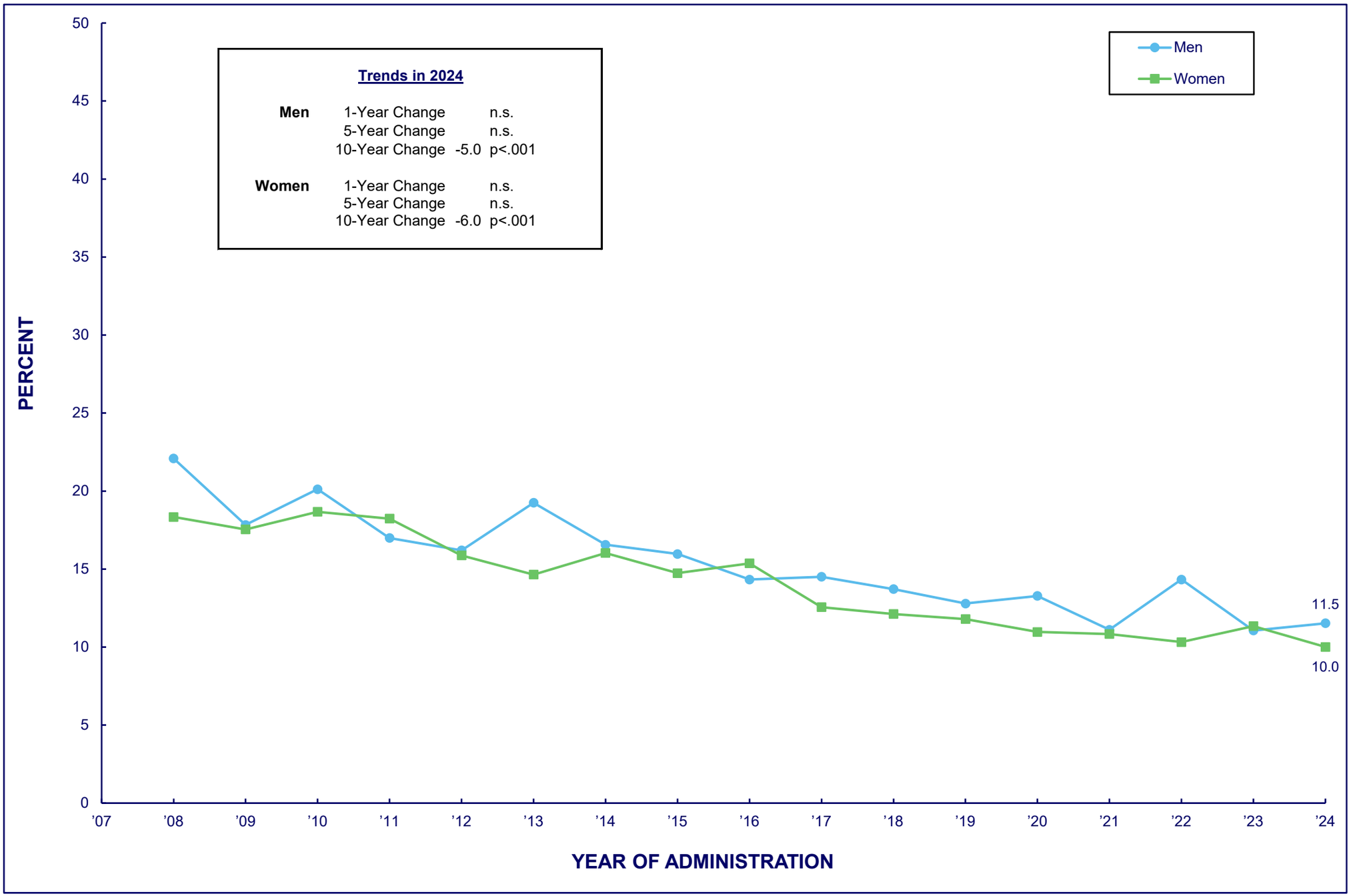


TABLE/FIGURE 155

CIGARETTES

Trends in 30-Day Prevalence among Respondents of Modal Ages 35 through 50, by Sex

MONITORING THE FUTURE

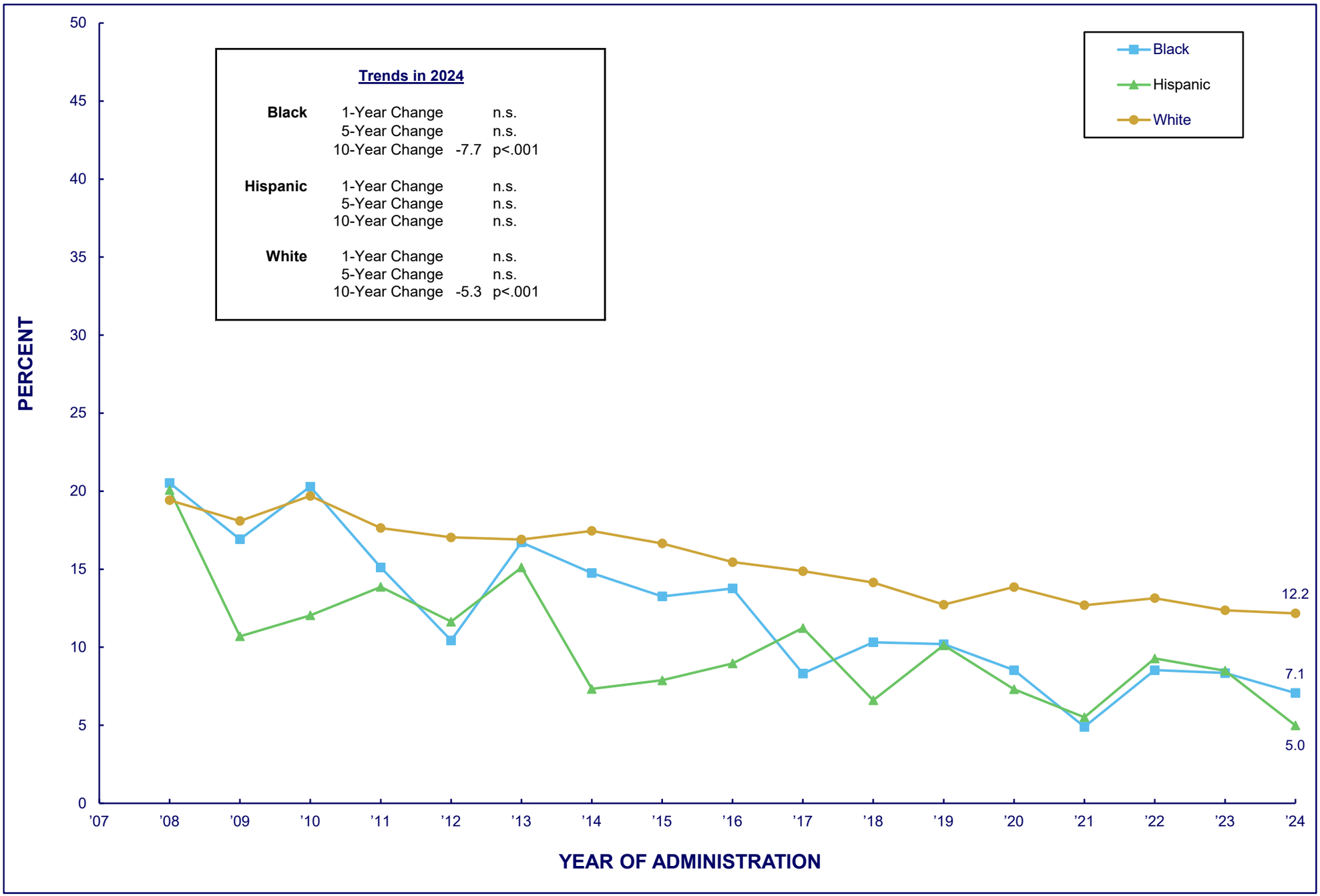


TABLE/FIGURE 156

CIGARETTES

Trends in 30-Day Prevalence among Respondents of Modal Ages 35 through 50, by Race/Ethnicity

MONITORING THE FUTURE

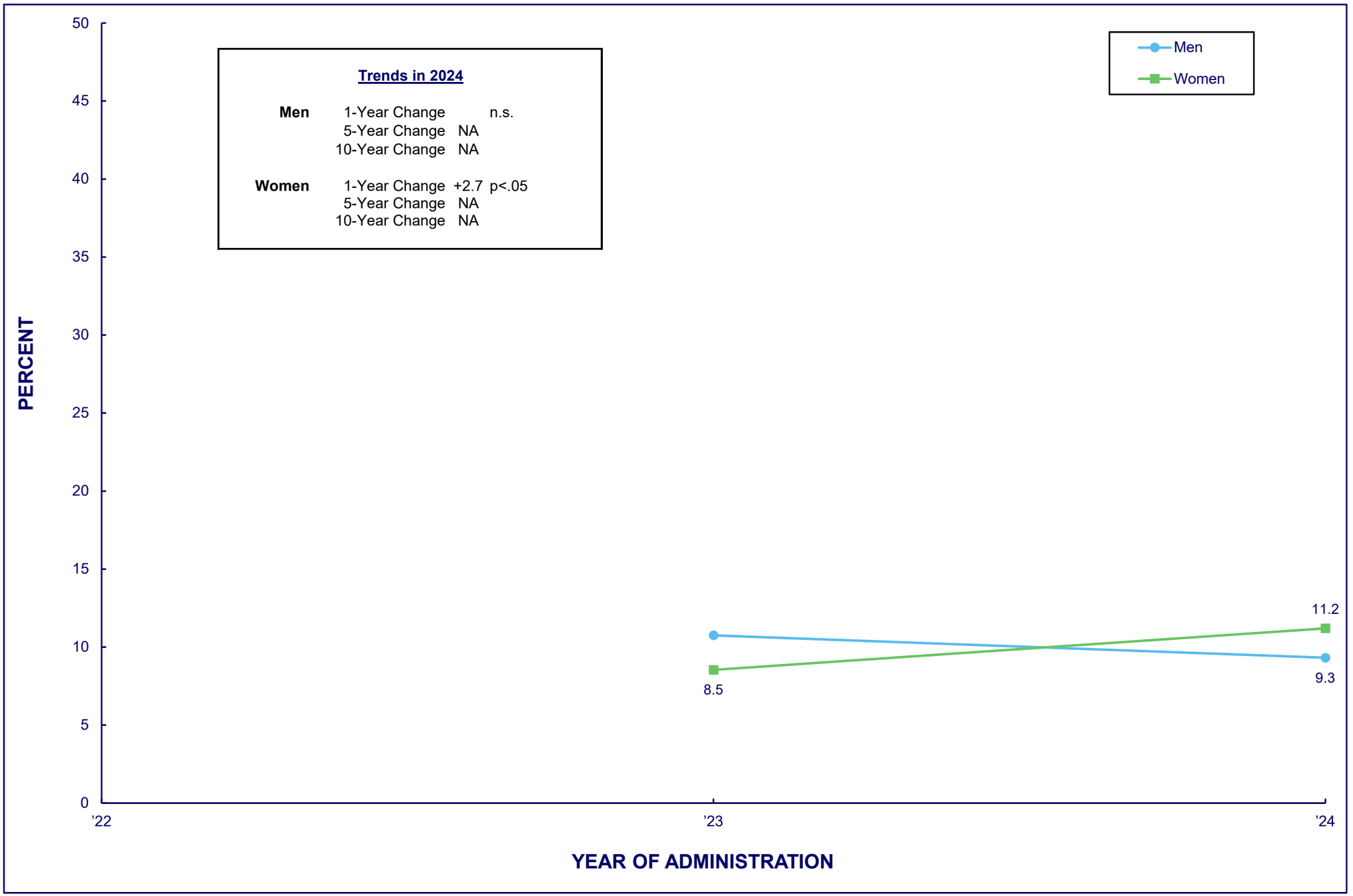


TABLE/FIGURE 157

CIGARETTES

Trends in 30-Day Prevalence among Respondents of Modal Ages 55 through 65, by Sex

MONITORING THE FUTURE

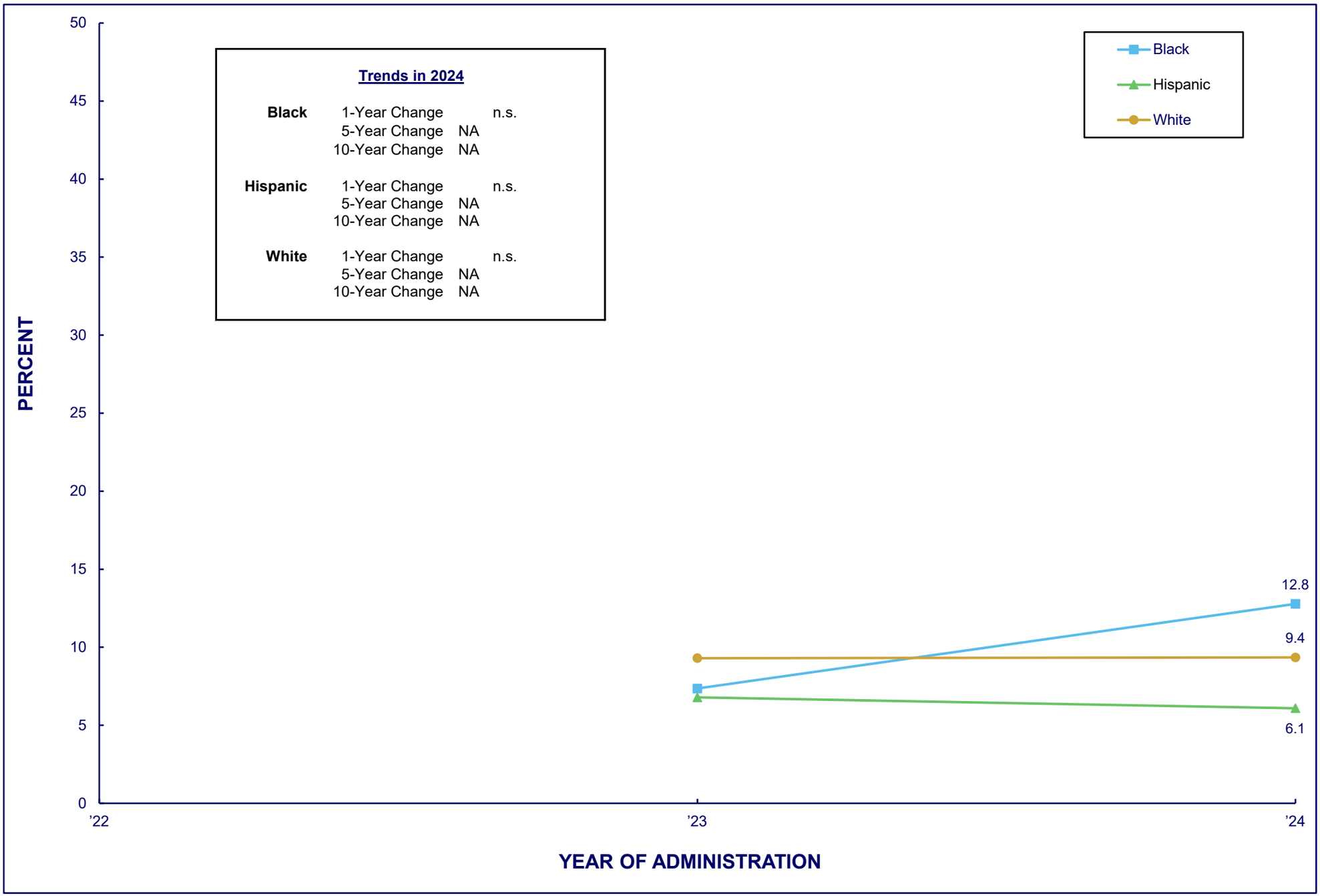


TABLE/FIGURE 158

CIGARETTES

Trends in 30-Day Prevalence among Respondents of Modal Ages 55 through 65, by Race/Ethnicity

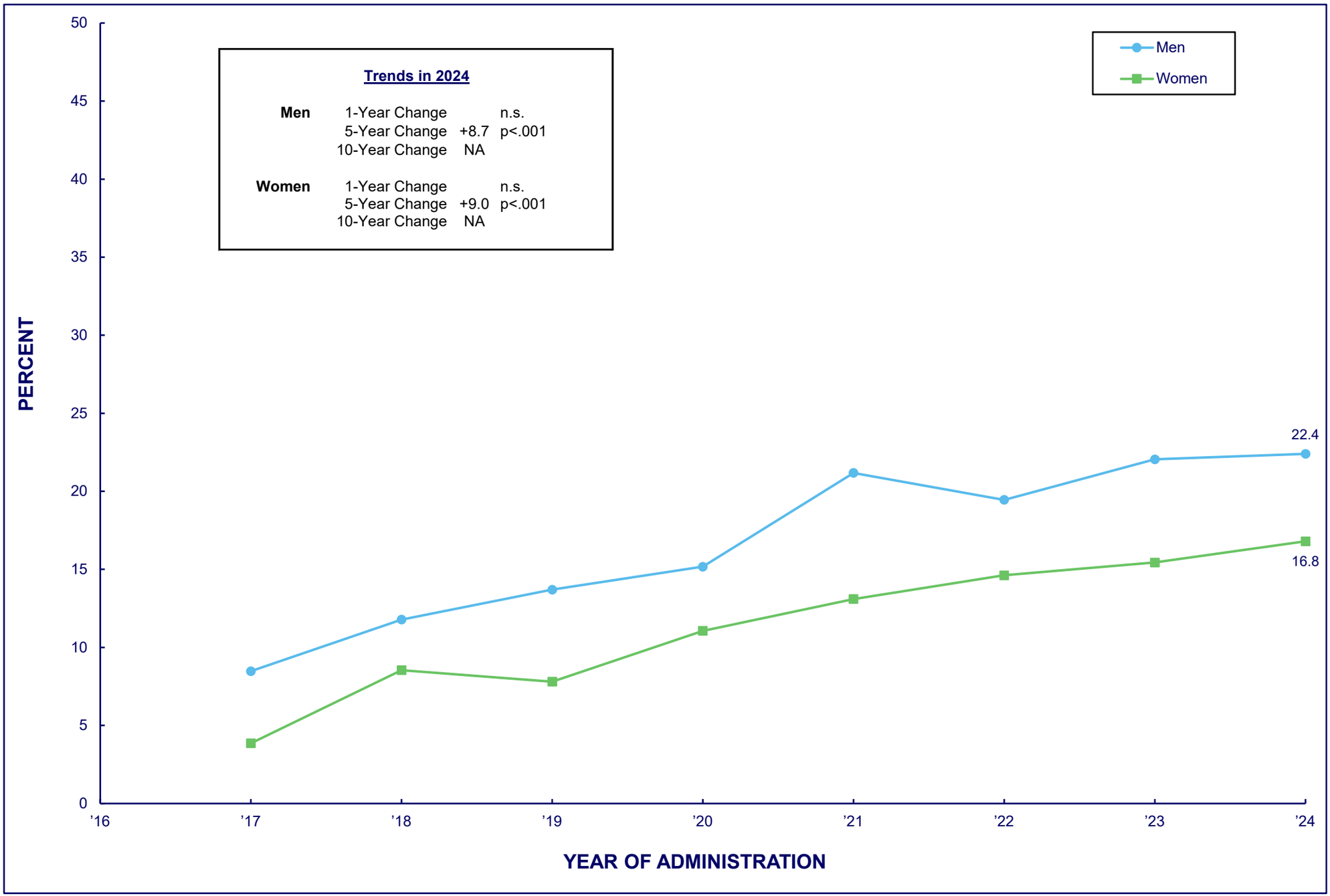
MONITORING THE FUTURE



TABLE/FIGURE 159

VAPING NICOTINE

Trends in 30-Day Prevalence among Respondents of Modal Ages 19 through 30, by Sex

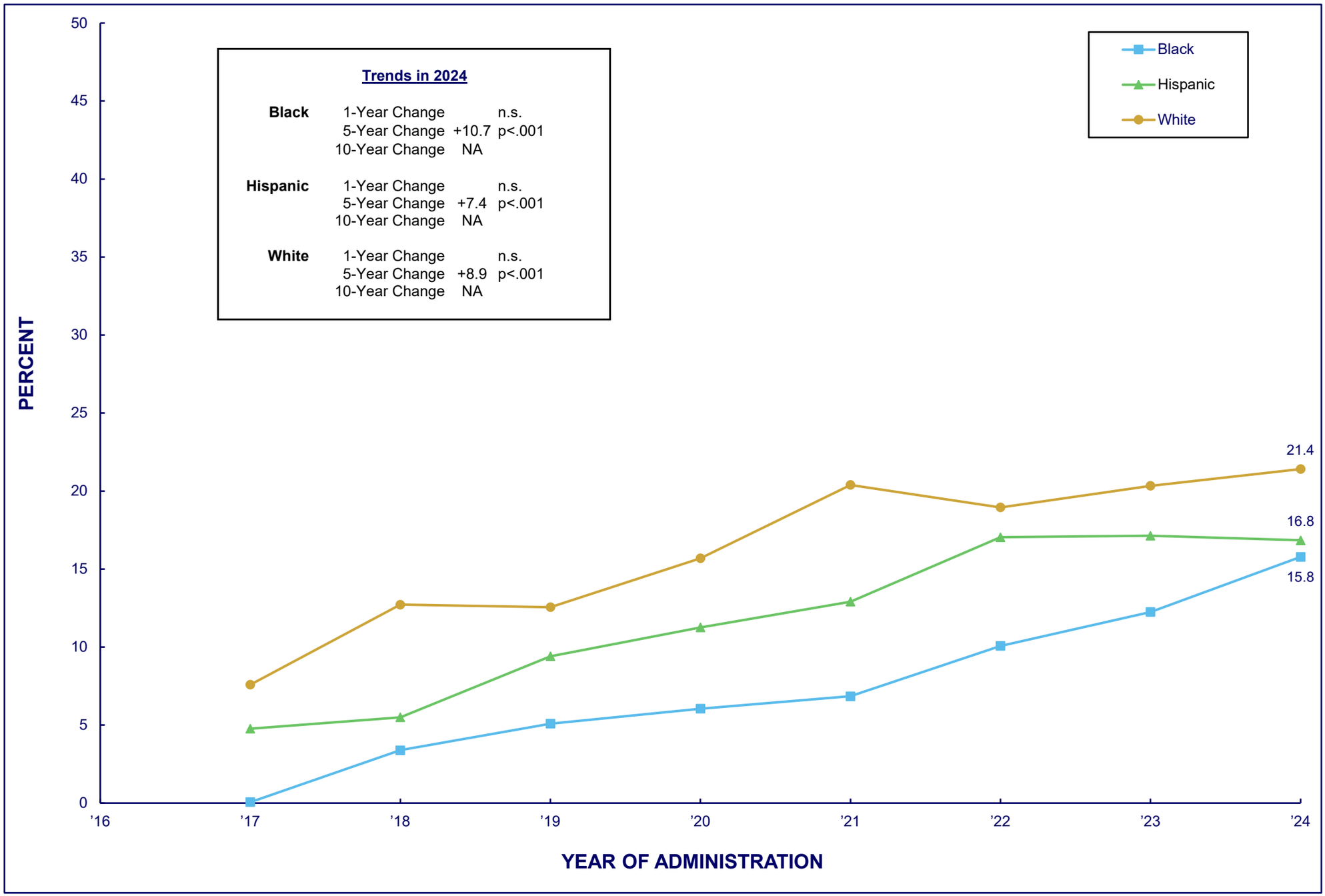


TABLE/FIGURE 160

VAPING NICOTINE

Trends in 30-Day Prevalence among Respondents of Modal Ages 19 through 30, by Race/Ethnicity

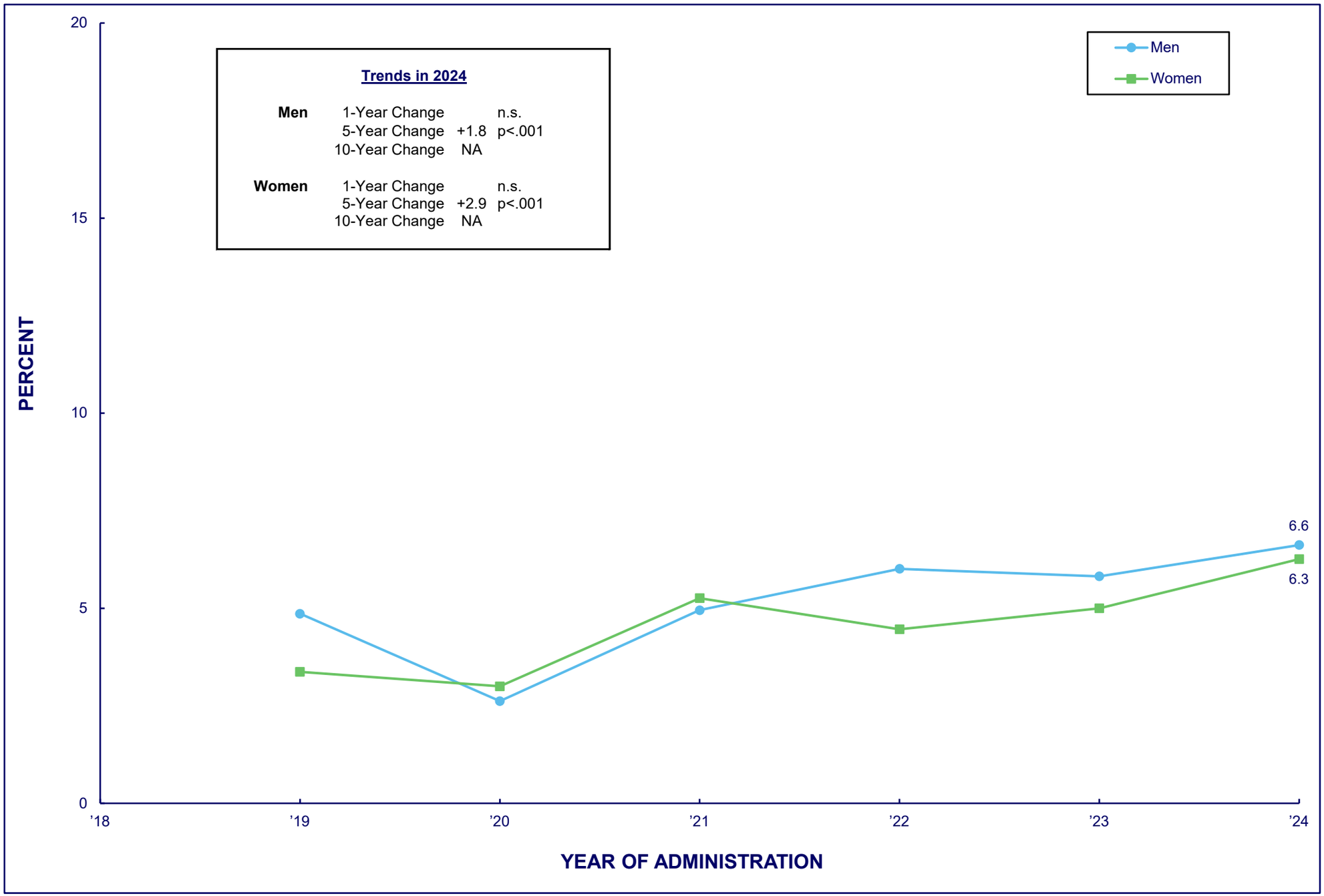
MONITORING THE FUTURE



TABLE/FIGURE 161

VAPING NICOTINE

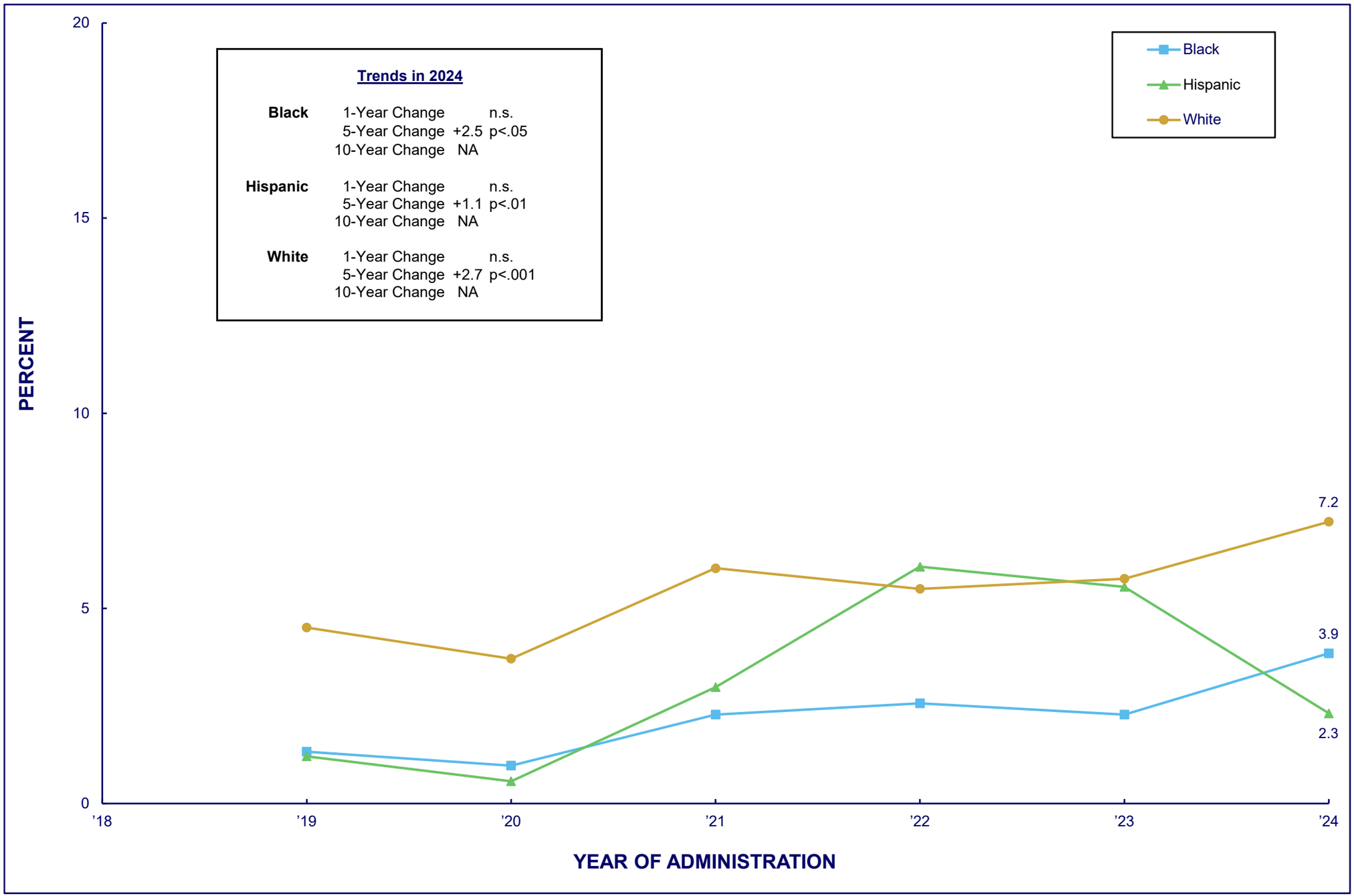
Trends in 30-Day Prevalence among Respondents of Modal Ages 35 through 50, by Sex



TABLE/FIGURE 162

VAPING NICOTINE

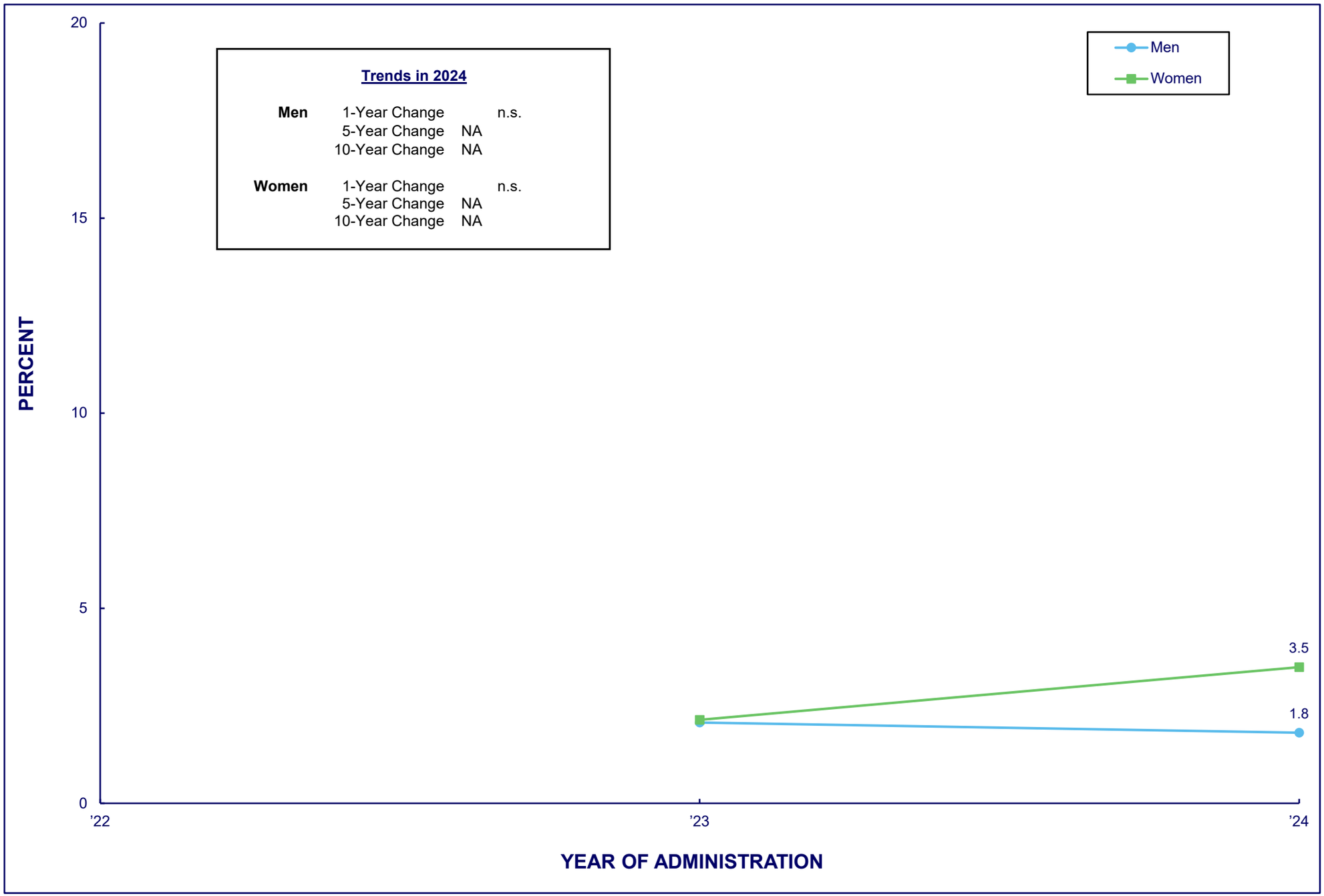
Trends in 30-Day Prevalence among Respondents of Modal Ages 35 through 50, by Race/Ethnicity



TABLE/FIGURE 163

VAPING NICOTINE

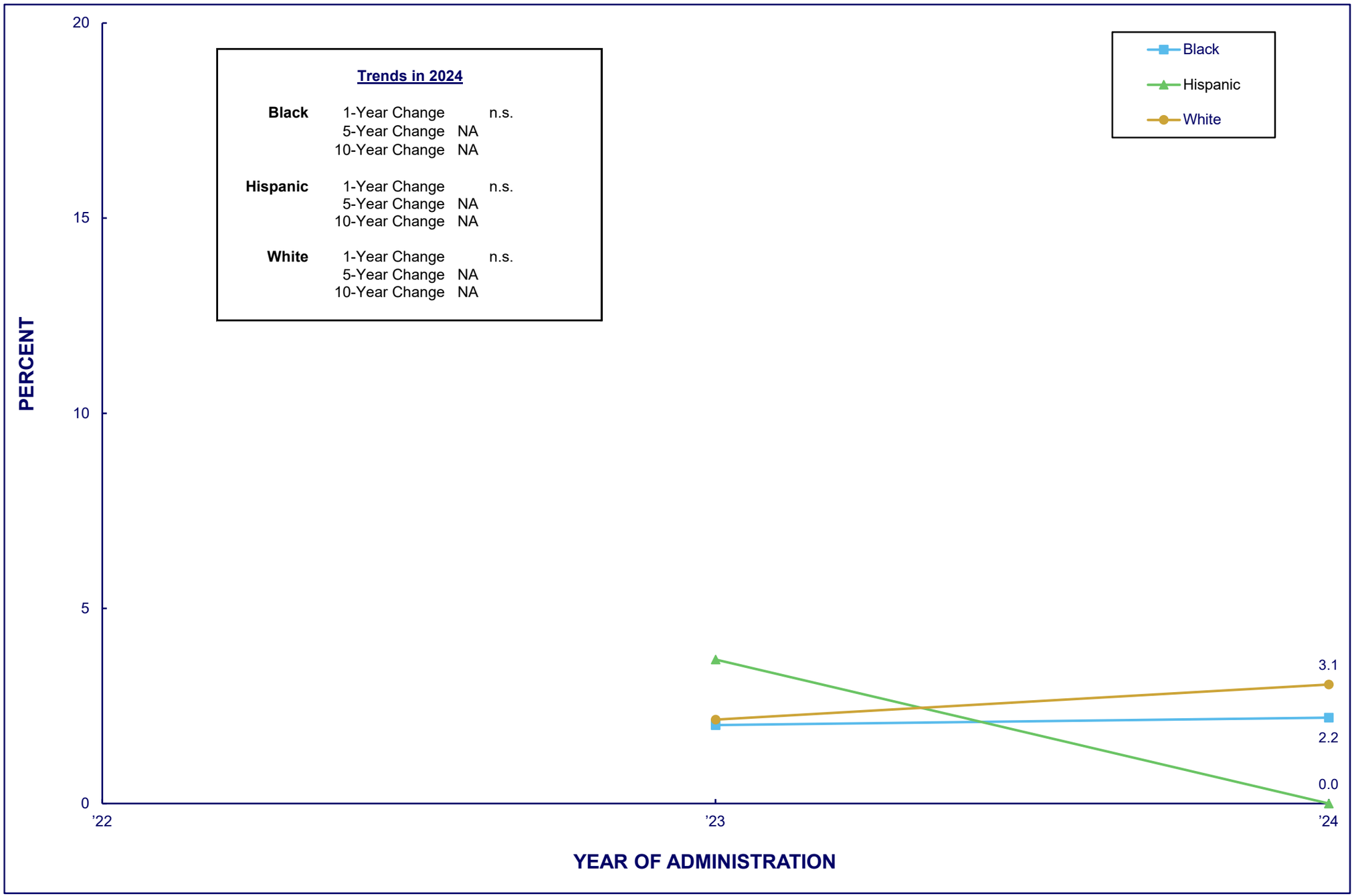
Trends in 30-Day Prevalence among Respondents of Modal Ages 55 through 65, by Sex



TABLE/FIGURE 164

VAPING NICOTINE

Trends in 30-Day Prevalence among Respondents of Modal Ages 55 through 65, by Race/Ethnicity

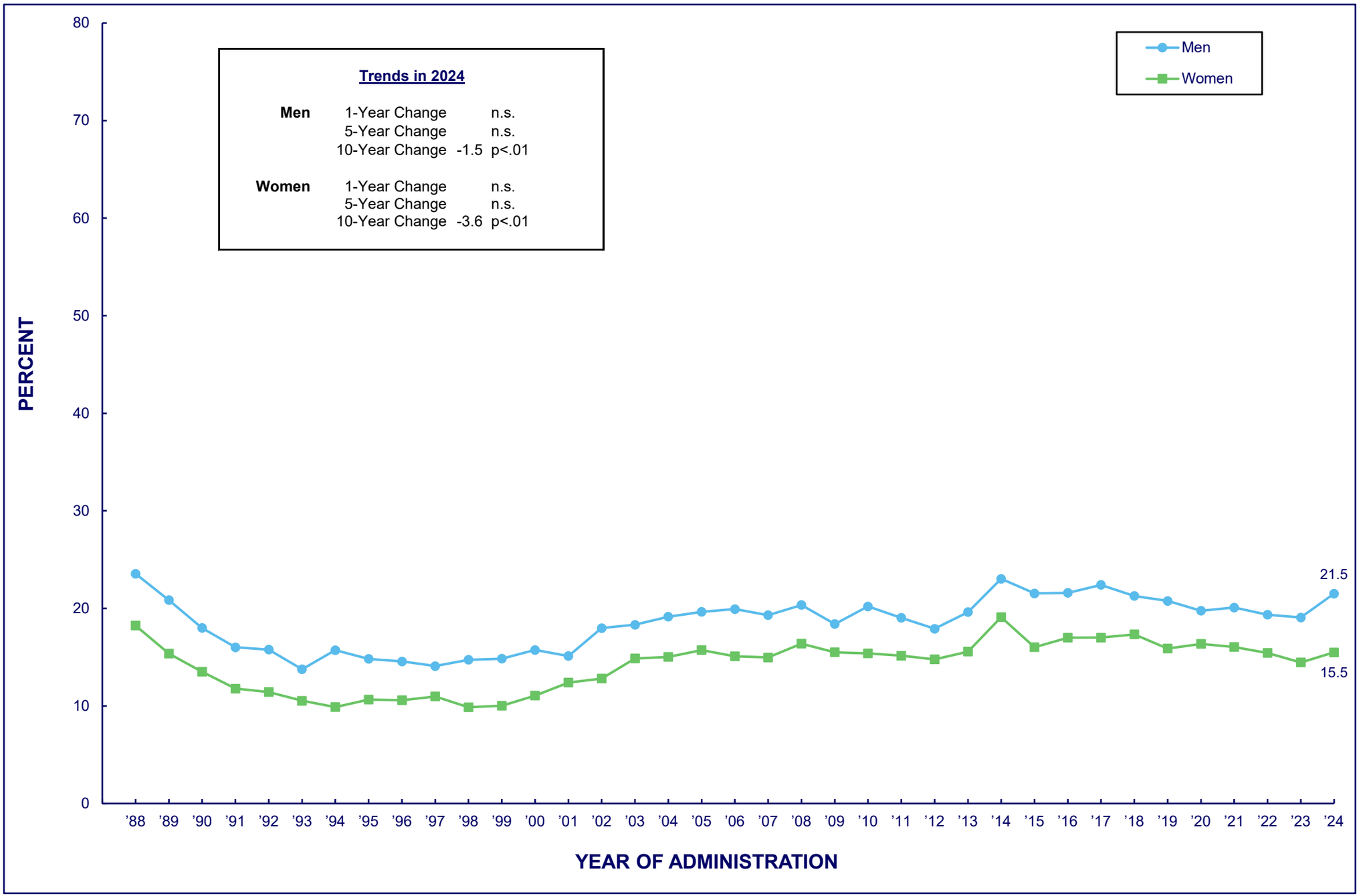


TABLE/FIGURE 165

ANY DRUG OTHER THAN CANNABIS

Trends in 12-Month Prevalence among Respondents of Modal Ages 19 through 30, by Sex

MONITORING THE FUTURE

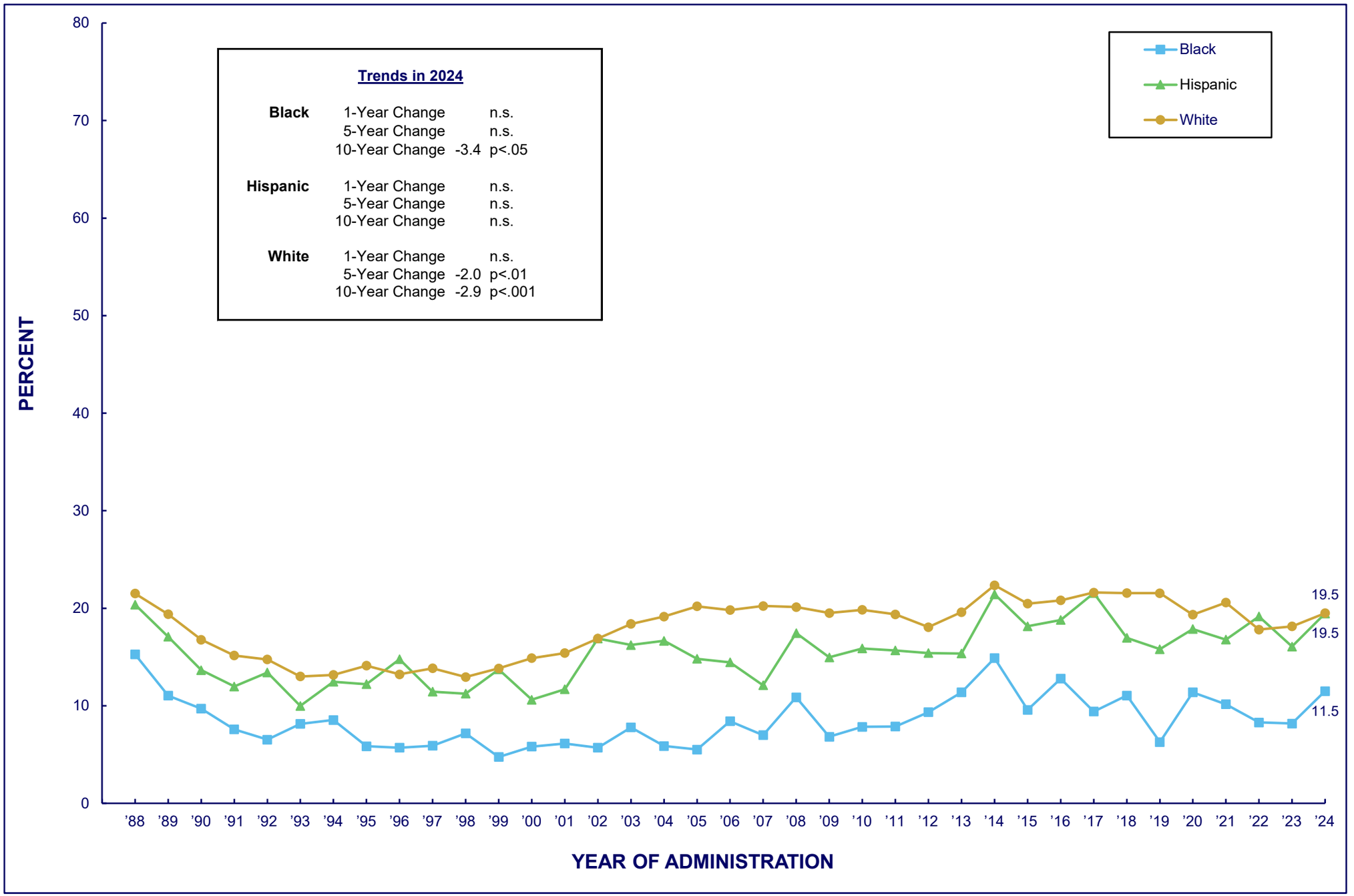


TABLE/FIGURE 166

ANY DRUG OTHER THAN CANNABIS

Trends in 12-Month Prevalence among Respondents of Modal Ages 19 through 30, by Race/Ethnicity

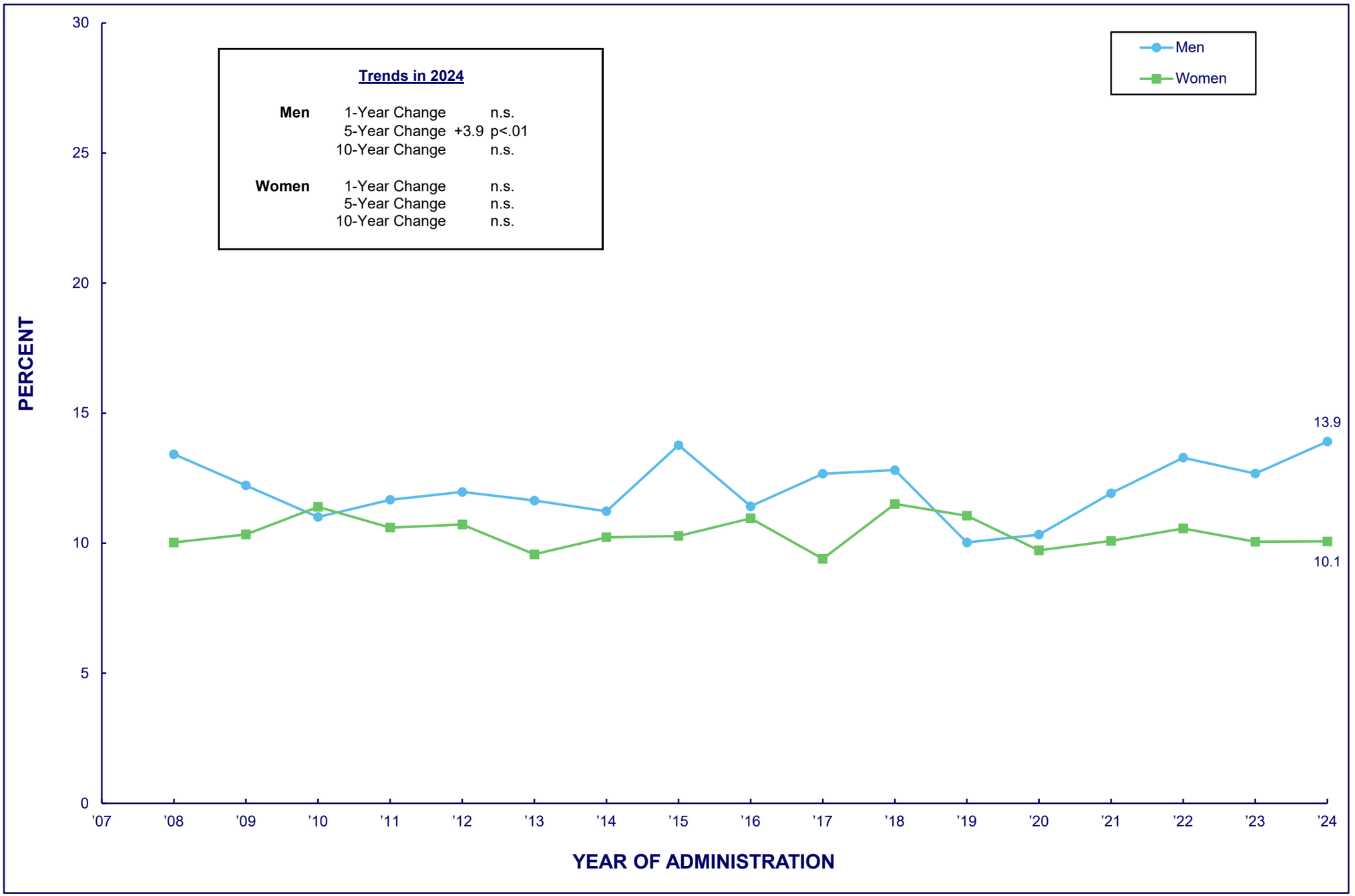
MONITORING THE FUTURE



TABLE/FIGURE 167

ANY DRUG OTHER THAN CANNABIS

Trends in 12-Month Prevalence among Respondents of Modal Ages 35 through 50, by Sex

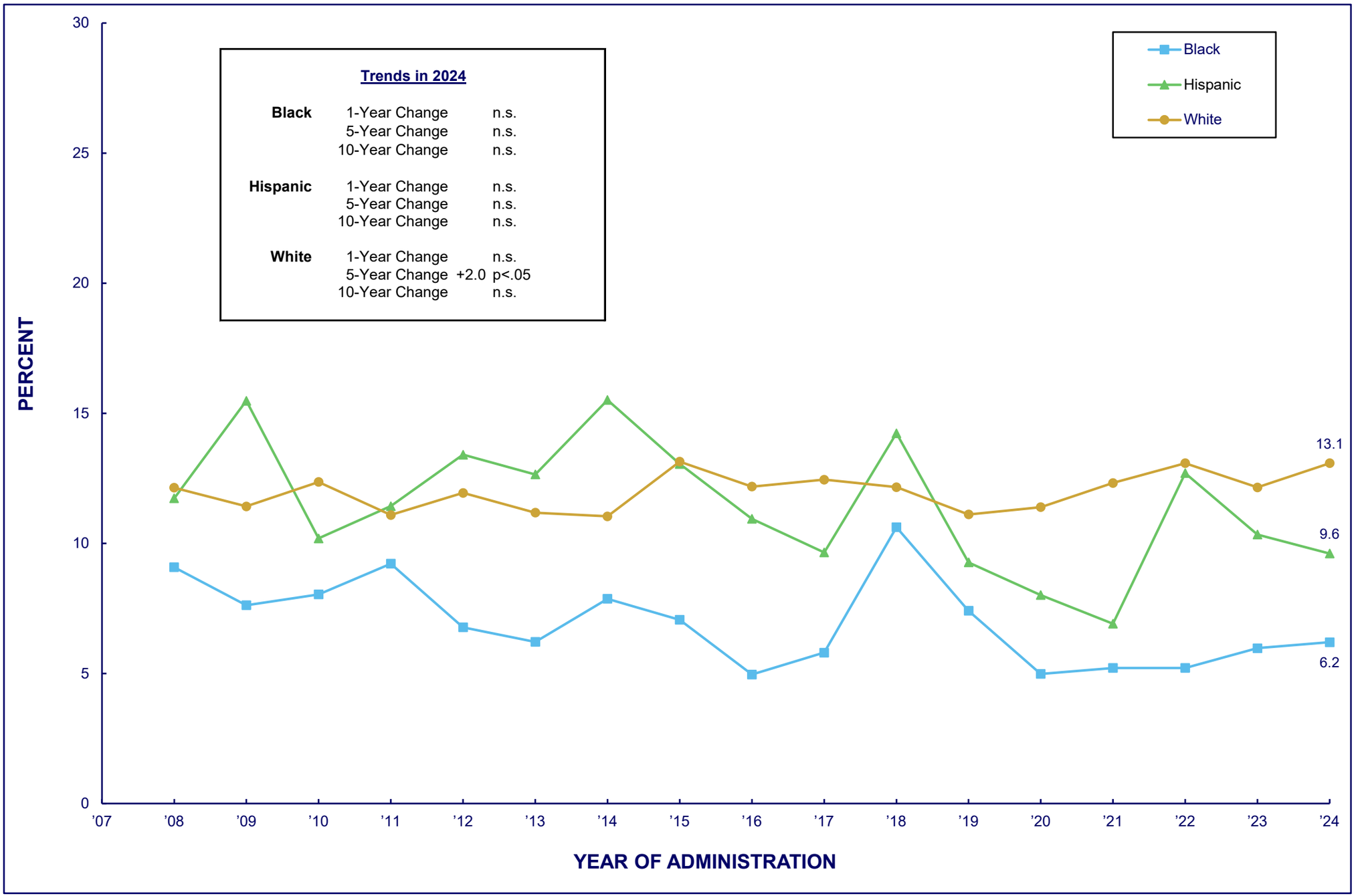


TABLE/FIGURE 168

ANY DRUG OTHER THAN CANNABIS

Trends in 12-Month Prevalence among Respondents of Modal Ages 35 through 50, by Race/Ethnicity

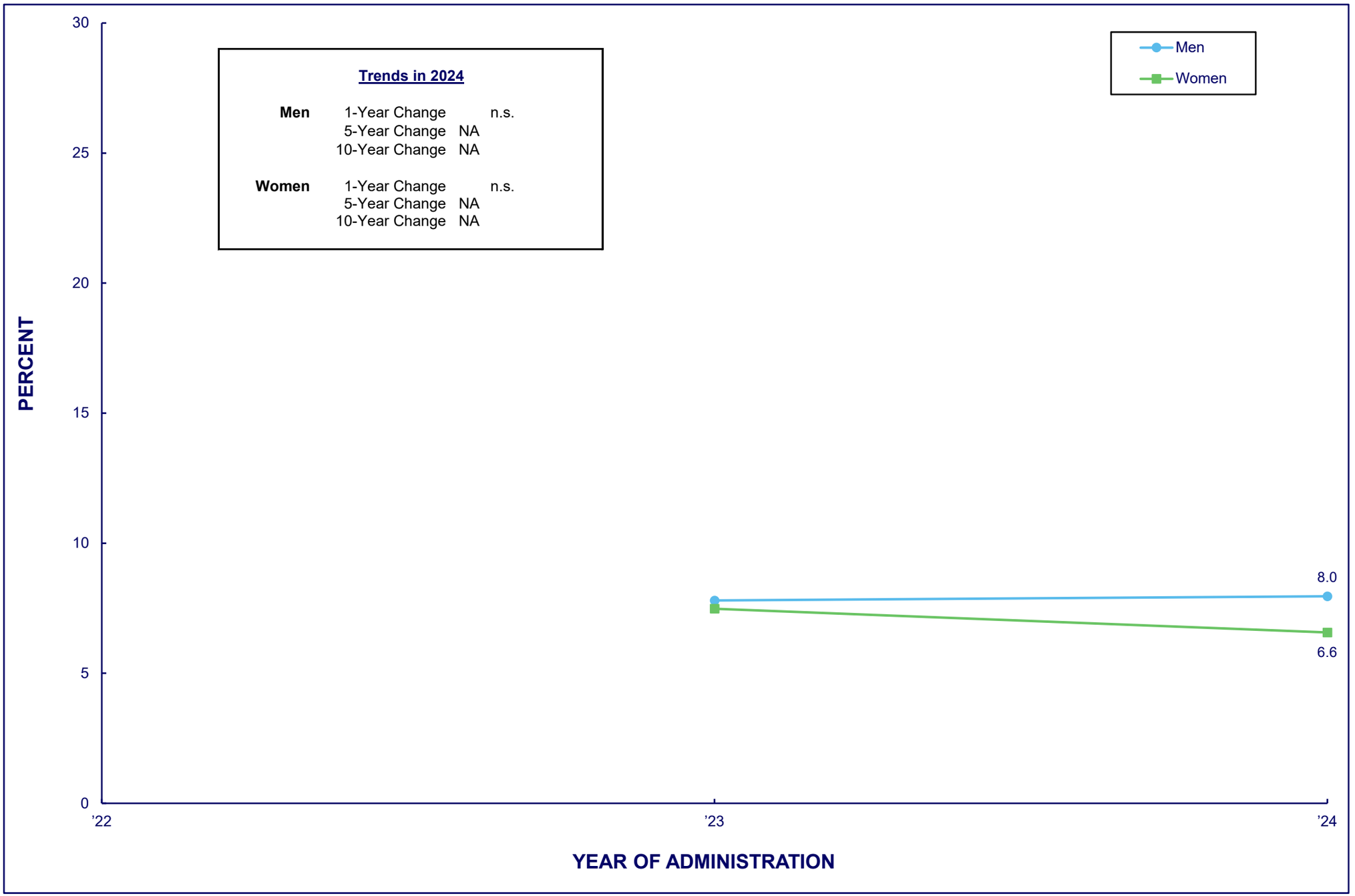
MONITORING THE FUTURE



TABLE/FIGURE 169

ANY DRUG OTHER THAN CANNABIS

Trends in 12-Month Prevalence among Respondents of Modal Ages 55 through 65, by Sex



TABLE/FIGURE 170

ANY DRUG OTHER THAN CANNABIS

Trends in 12-Month Prevalence among Respondents of Modal Ages 55 through 65, by Race/Ethnicity

MONITORING THE FUTURE