MONITORING **THE FUTURE**

2024

Monitoring the Future Panel Study Annual Report

National data on substance use among adults ages 19 to 65, 1976–2023

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50 YEARS
1974–2024

MONITORING THE FUTURE

PANEL STUDY ANNUAL REPORT:

National data on substance use among adults ages 19 to 65, 1976–2023

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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 1975. 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 each year. 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 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. MTF Panel data are available through the National Addiction & HIV Data Archive Program at https://www.icpsr.umich.edu/web/pages/NAHDAP/index.html. The MTF Panel data dashboard is available at https://monitoringthefuture.org/data/panel/.

Participants

Young Adults (Ages 19 to 30)

In 2023, young adults (N=4,810) were from the 12th grade classes of 2011 to 2022 and provided data at modal ages 19 to 30 (Table/Figure 1). Each individual participates 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 of people 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 Midlife Adults (55 to 65)

In 2023, early midlife adults (N=3,328) were from the 12th grade classes of 2006, 2001, 1996, and 1991 and provided data at modal ages 35, 40, 45, and 50, respectively (Table/Figure 1). Midlife adults (N=3,011) were from the 12th grade classes of 1986, 1981, and 1976 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 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 begins with participants 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 1976. Each year's data collection of 12th graders takes place in about 100 public and private high schools selected to provide a representative cross-section of 12th graders throughout the contiguous United States (US).[1]

The final year of high school, 12th grade, is a strategic starting point at which to begin longitudinal panel surveys 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 US, 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 4.6% in 2022, according to US Census 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 strata in the US. 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 the accuracy of observed trends in any given one-year interval, schools are asked to participate in the study for two consecutive years on a staggered schedule, with one half being replaced with a new randomly-

[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. A., Leventhal, A., Johnston, L. D., 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] United States Census Bureau. CPS Historical Time Series Tables on School Enrollment. Released August 2021. Accessed June 14, 2024.

[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. (2024). Monitoring the Future national survey results on drug use, 1975–2023: Overview and detailed results for secondary school students. Monitoring the Future Monograph Series. Ann Arbor, MI: Institute for Social Research, University of Michigan.

selected half sample of schools each year. Therefore, in any given year about half of the schools in the sample are participating for the first time and the other half are participating for their second and final 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 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, a panel subsample (N~2450[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 participant is surveyed every other year through age 29/30 (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. 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 for the web and paper versions). 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.

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-

[4] Only students providing (1) contact information necessary for longitudinal follow up and (2) 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. University of Michigan Institute for Social Research: Ann
Arbor, MI.

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 oversampled 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 oversample, all 12th graders in groups 1 and 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 ages 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 the 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 are shown here.

Data collection. Using information provided by 12th grade respondents, contact is maintained with the subset of individuals selected for inclusion in the panel. 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 of both the US Postal Service and the individual.

[5] 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., 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.
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., 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).

[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.

Panel questionnaires and an incentive check (currently $25) are sent in the spring to each individual based on their scheduled panel participation. 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), and they are later offered a paper survey if they do not respond to the web survey. We ensure confidentiality of web-based responses by immediately encrypting data. By design, respondents can pause their web surveys and then easily get back into them; 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. 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,[7] and response is typically differentially associated with health risks including substance use.[8] 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.

Response Rates

Response rates by cohort and data collection wave are shown in Table/Figure 2. The largest drop in response rates occurs after the first follow up. The most recent response rates across the first six follow ups at ages 19 to 30 are 32–35%. Due to cohort differences in the propensity to respond, response rates tend to be higher among older cohorts: 35–37% at ages 35 to 45 and 35–52% at ages 50 to 65 in 2023. Response rates within each cohort tend to decline as participants age.

The impact of the change from paper to web-push methodology on response rates has been examined. We found a significant difference in response rates by survey condition combining across ages 19 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).[9] In 2020, when the web-push condition was the standard procedure for

[7] United States Bureau of Labor Statistics. Household and establishment survey response rates. Updated June 1, 2022. Accessed June 21, 2022.

[8] 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.

[9] 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.

ages 19 to 30, the overall response rate was 41%. No significant differences in response rates by survey modes were observed among respondents ages 35–60 in 2020.[10]

The response rates are respectable, especially given the relatively low data collection costs and the extended period over which respondents are followed. Weights can be used to adjust for attrition. More information on using weights to adjust back to the 12th grade probability sample is available in a study report.[11]

Panel Analysis Weights

An important purpose of the MTF Panel Study is to estimate drug prevalence levels among the nationally representative samples of US 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.[12] Detailed information on the construction of these weights is available in a separate study report.[13] Briefly, the 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 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

[10] 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.

[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. Monitoring the Future Occasional Paper No. 98. University of Michigan Institute for Social Research: Ann Arbor, MI.

[12] 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.

[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.

and trend estimates, we replicated all data included in the 2021 version of this report[14] using the new weighting procedures and determined that differences were minimal.

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 estimates. The omission of about 5–15% of each cohort[15] who dropped out prior to 12th grade might mean that drug use estimates reported here for young adults are likely 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.

[14] 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: Institute for Social Research, University of Michigan.

[15] United States Census Bureau. CPS Historical Time Series Tables on School Enrollment. Released August 2021. Accessed June 14, 2024.

CHAPTER 2: Young Adult Substance Use Prevalence and Trends

Executive Summary

The most prevalent substances used by young adults ages 19 to 30 in 2023 were:

	Past 12 months	Past 30 days
Alcohol	83.9%	64.9%
Cannabis (any mode)	42.4%	28.7%
Nicotine (any mode)	40.6%	–
Vaping Nicotine	25.3%	18.7%
Vaping Cannabis	22.2%	14.4%
Cigarettes	18.8%	8.8%
Other Drugs[1]	16.6%	6.6%

In addition, binge drinking (having 5+ drinks in a row in the past 2 weeks) was reported by 27.2% and daily cannabis use (20+ occasions in the past 30 days) was reported by 10.4% of young adults in 2023.

New in 2023: Measures of nicotine use in the past 12 months were expanded in 2023.

- Any nicotine use (including vaping nicotine, cigarettes, large cigars, small cigars, tobacco using a hookah, and smokeless tobacco) in the past year was reported by 40.6% of young adults.

There were significant changes across the 1-year from 2022 to 2023 among young adults ages 19 to 30:

- Decreases in alcohol use (past 30 days), binge drinking, heroin use, and Adderall use.

[1] 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).

In 2023, 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 months, past 30 days, and daily use) in 2023 remained near the recent highest levels ever recorded in 2021 and 2022.
- Vaping cannabis: Vaping cannabis (past 12 months and past 30 days) reached the highest levels ever recorded in 2023, with prevalence in the past year doubling since it was first measured in 2017.
- Nicotine vaping: Nicotine vaping (past 12 months and past 30 days) reached the highest levels ever recorded in 2023, with prevalence in the past month tripling since it was first measured in 2017.
- Psychedelics: Use of hallucinogens other than LSD has continued to rise, reaching the highest levels ever recorded in 2023 at 8.5% of young adults in the past 12 months, which follows increases over the past 5 and 10 years.

In 2023, young adults had historically low prevalence levels of:

- Cigarette smoking: Smoking among young adults has been declining steadily, with large and 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 5 and 10 years. For example, smoking in the past 30 days decreased by more than two-thirds, from 28.8% in 2004 to 8.8% in 2023.
- Alcohol: Binge drinking in the past two weeks was reported by 27.2% of young adults in 2023, which is the lowest level the study has ever recorded. Daily use of alcohol also reached a new all time study low in 2023, reported by 3.6% of young adults. Measures of drinking in the past 30 days, daily drinking, and binge drinking have all decreased over the past 10 years.
- Nonmedical use of any prescription drug was reported by a new record low level of 7.0% of young adults in the past 12 months, following significant declines over 5 years (from 12.7% in 2018) and 10 years (from 15.6% in 2013).
    - Narcotics (opioids): Narcotics other than heroin reached an all time study low, with 1.3% of young adults reporting use in 2023. OxyContin, heroin, and Vicodin were close to all time low levels in 2023.
    - Sedatives and tranquilizers: Use of sedatives and tranquilizers in the past 12 months were at new record low levels of 1.0% and 2.1%, respectively, in 2023.
    - Use of the stimulant Adderall in the past 12 months dropped by half from 2022 (7.8%) to 3.7% in 2023.

Introduction

The multiple cohort sequential design of MTF 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 months, past 30 days). In the figures, estimates for ages 19 to 30 are combined, and the statistical significance levels of 1-year change and linear trend estimates across 5 and 10 years are provided. In the tables, estimates for young adults are provided in 2-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[2]) and adults ages 35 to 65 (discussed in Chapter 3). Tables and figures depicting prevalence levels and trends are also available as part of the MTF Panel data dashboard at https://monitoringthefuture.org/data/panel/substance-use/.

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 1 year (the percentage point change between 2022 and 2023), 5 years (based on a linear slope from 2018 to 2023), and 10 years (based on a linear slope from 2013 to 2023).

Cannabis

The term "marijuana" is increasingly being replaced with the term "cannabis." In our surveys, we now use both terms.[3] We continue to update our surveys about modes of use; 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 42.4% of young adults in 2023 (Table/Figure 3), with the highest prevalence at ages 23–24 (45.6%; Table/Figure 4).

[2] 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.

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

30 day. Cannabis use in the past 30 days was reported by 28.7% of young adults in 2023 (Table/Figure 5), with the highest levels for ages 23–24 at 32.2% (Table/Figure 6).

Daily. Daily cannabis use (defined as using on 20 or more occasions in the past 30 days) was reported by 10.4% of young adults in 2023 (Table/Figure 7), with the highest levels at ages 23–24 at 11.8% (Table/Figure 8).

Vaping cannabis in the past 12 months was reported by 22.2% of young adults in 2023 (Table/Figure 9), with the highest prevalence at ages 19–20 at 26.8% (Table//Figure 10). Vaping cannabis in the past 30 days was reported by 14.4% of young adults in 2023 (Table/Figure 11), with the highest prevalence at ages 21–22 at 17.0% (Table/Figure 12).

Delta-8 THC. For the first time in 2023, young adults were asked about their use of delta-8 THC; 12.4% of young adults reported using delta-8 in the past 12 months (Table/Figure 13), with the highest prevalence at ages 21–22 at 15.1% (Table/Figure 14).

Trends. Cannabis use among young adults (including in the past 12 months, 30 days, and daily) has increased over the past 5 years and 10 years, although there was a slight nonsignificant decrease from the record-high prevalence levels in 2022 (Tables/Figures 3–8). Cannabis use in the past 12 months among young adults has increased over the past 10 years (from 30.6% in 2013) and past 5 years (from 38.7% in 2018) to 42.4% in 2023 (Table/Figure 3). Similarly, cannabis use in the past 30 days increased over the past 5 years (from 24.3% in 2018) and the past 10 years (from 18.3% in 2013) to 28.7% in 2023 (Table/Figure 5). Current daily cannabis use among young adults increased to 10.4% in 2023, reflecting significant change over the past 5 years (from 8.6% in 2018) and 10 years (from 5.9% in 2013; Table/Figure 7).

Vaping cannabis, in particular, has increased among young adults and 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 5 years, from 15.7% in 2018 to 22.2% in 2023 (Table/Figure 9). Vaping cannabis in the past 30 days also increased over the past 5 years, from 9.2% in 2018 to 14.4% in 2023 (Table/Figure 11).

Alcohol

12 month. Alcohol use in the past 12 months was reported by 83.9% of young adults in 2023 (Table/Figure 15); it generally rose with age, reaching 88.7% at ages 27–28 (Table/Figure 16).

30 day. Almost two-thirds (64.9%) of young adults reported drinking in the past 30 days in 2023 (Table/Figure 17), peaking during young adulthood at 69.2% at ages 27–28 (Table/Figure 18).

Daily. Daily drinking (defined as 20 or more occasions in the past 30 days) was reported by 3.6% of young adults in 2023 (Table/Figure 19). It generally increased across the age strata, reaching 5.8% at ages 29–30 (Table/Figure 20).

Binge drinking (i.e., having 5+ drinks in a row) in the past 2 weeks was reported by 27.2% of young adults in 2023 (Table/Figure 21). Prevalence was 15.0% at ages 19–20 and ranged from 27.7%–30.5% across ages 21–30 (Table/Figure 22), reflecting a recent shift upward in the peak age.[4]

High-intensity drinking[5] (i.e., having 10+ drinks in a row) was reported by 8.5% of young adults in the past 2 weeks (Table/Figure 23). The highest level across young adulthood was 12.7% at ages 27–28 (Table/Figure 24).

Trends. Alcohol use in the past 12 months among young adults in 2023 was 83.7%, which is not a significant change from 2022 (Table/Figure 15), although there was a slight upward trend over the past 5 years (from 82.1% in 2018). Alcohol use in the past 30 days declined significantly from 2022 (67.5%) to 2023 (64.9%); there was also a downward linear trend over the past 10 years (from 67.7% in 2013; Table/Figure 17). Among young adults, daily drinking has also decreased over the past 5 years (from 4.8% in 2018) and 10 years (from 5.5% in 2013) to 3.6% in 2023 (Table/Figure 19).

Binge drinking among young adults reached a new historic low in 2023; at 27.2%, it is lower even than it was during the COVID-19 pandemic in 2020 (when it reached 28.1%; Table/Figure 21). This is a significant decrease from 2022 (30.5%) and across the past 10 years (from 35.1% in 2013; Table/Figure 21). High-intensity drinking (10+ drinks in a row in the past two weeks) has decreased significantly over the past 10 years, from 11.1% in 2013 to 8.5% in 2023 (Table/Figure 23).

Any Nicotine Use

Any nicotine use (including vaping nicotine, cigarettes, large cigars, small cigars, tobacco using a hookah, and smokeless tobacco) in the past year was a new index added in 2023. It was reported by 40.6% of young adults (Table/Figure 25). Across young adulthood, prevalence was highest at ages 25–26, with nearly half (47.6%) reporting nicotine use in the past year (Table/Figure 26).

Cigarettes

12 month. Cigarette use in the past 12 months was reported by 18.8% of young adults in 2023 (Table/Figure 27), with a peak at ages 21–22 of 21.9% (Table/Figure 28).

[4] 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.

[5] 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.

30 day. Cigarette use in the past 30 days was reported by 8.8% of young adults in 2023 (Table/Figure 29), with the prevalence level generally increasing across age to 10.6% at ages 29–30 (Table/Figure 30).

Daily. Daily smoking continues to reach new historic low levels among young adults; it was reported by 3.6% of young adults in 2023 (Table/Figure 31), rising across ages from 1.7% at ages 19–20 to 6.1% at ages 29–30 (Table/Figure 32). Smoking a half pack or more per day was reported by 2.0% of young adults (Table/Figure 33), with the highest prevalence during young adulthood at ages 29–30 at 4.6% (Table/Figure 34).

Trends. Before 2023, cigarette smoking among young adults had been declining steadily since 2004 and reached new historic lows for use in the past 12 months in 2022. In 2023, there was a slight but not significant shift upward to 18.8% reporting smoking in the past 12 months (Table/Figure 27). 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 5 years and 10 years (Tables/Figures 27–34). For example, cigarette use in the past 30 days decreased by more than two-thirds since 2004, when it was 28.8% (Table/Figure 29).

Vaping Nicotine

12 month. Vaping nicotine in the past 12 months was reported by 25.3% of young adults in 2023 (Table/Figure 35), and most prevalent at ages 19–22 (30.4%–30.5%; Table/Figure 36).

30 day. Vaping nicotine in the past 30 days was reported by 18.7% of young adults in 2023 (Table/Figure 37) and was highest at ages 21–22 (24.2%; Table/Figure 38).

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 25.3% in 2023; Table/Figure 35) and more than doubling prevalence in the past 30 days (from 6.1% in 2017 to 18.7% in 2023, Table/Figure 37). The linear trends are significant over the past 5 years, although there were no significant 1-year increases in 2023.

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 16.6% of young adults (Table/Figure 39), peaking at ages 27–28 at 19.5% (Table/Figure 40).

30 day. In the past 30 days, 6.6% of young adults report using any drug other than cannabis (Table/Figure 41), with the highest prevalence at ages 27–28 at 9.5% (Table/Figure 42).

Trends. Nonmedical use of any drug other than cannabis remained steady among young adults in 2023. However, there have been significant decreases over the past 5 and 10 years for use in the past 12 months and past 30 days (Tables/Figures 39 and 41).

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.[6]

Any Prescription Drug

Nonmedical use (that is, use without medical prescription) of any prescription drug (including narcotics, sedatives, tranquilizers, and stimulants) was reported by a new record low level of 7.0% of young adults in the past 12 months, following significant declines over 5 years (from 12.7% in 2018) and 10 years (from 15.6% in 2013; Table/Figure 43). Prevalence during young adulthood was highest at ages 27–28 at 10.9% (Table/Figure 44).

Hallucinogens (Psychedelics)

Hallucinogen use reached a new all time study high in 2023, reported by 8.9% of young adults (Table/Figure 45). Across ages 19–30, prevalence ranged from 6.7%–10.5% (Table/Figure 46). The 1-year change was not significant, although there were significant longer term increases across the past 5 years (from 5.3% in 2018) and 10 years (from 3.8% in 2013; Table/Figure 45). This increase was driven by hallucinogens other than LSD, the prevalence of which significantly increased from over the past 5 years (from 3.4% in 2018) and 10 years (from 3.2% in 2013) to 8.5% in 2023 (Table/Figure 49), which is also an all time study high level.

LSD use was reported by 2.5% of young adults in 2023 and has not seen the same dramatic increase over the past few years. In fact, there is a decreasing linear trend for LSD use over the past 5 years (from 3.7% in 2018 and with a high level of 4.7% in 2020)—but in the context of a positive trend over the past 10 years (1.8% in 2013; Table/Figure 47).

Use of MDMA (ecstasy, Molly) was reported by 2.9% of young adults in 2023, following a significant negative trend over the past 5 years (from 3.8% in 2018; Table/Figure 51).

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

Narcotics (Opioids)

Heroin use was uncommon, with an estimate of 0.0% of young adults reporting past 12 month use (Table/Figure 53), and has significantly decreased over the past 1, 5, and 10 years (from 0.2% in 2022, 0.4% in 2018, and 0.7% in 2013).

Use of narcotics other than heroin was reported by 1.3% of young adults in the past 12 months (Table/Figure 55), which follows significant decreases over the past 5 years (from 3.8% in 2018) and 10 years (from 7.6% in 2013). Its peak was 9.2% in 2010 (Table/Figure 55).

Correspondingly, OxyContin appeared to have leveled (1.5% in 2023) after a decrease over the past 10 years (from 2.8% in 2013; Table/Figure 57). Past 12 month use of Vicodin was 0.7% in 2023 (Table/Figure 59) after significant declines over the past 5 years (from 2.8% in 2018) and 10 years (from 6.3% in 2013; Table/Figure 59).

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

Sedative (barbiturate) nonmedical use was reported by 1.0% of young adults in 2023 (Table/Figure 61), with significant decreases over the past 5 years (from 2.8% in 2018) and 10 years (from 3.4% in 2013). In 2023, prevalence was at an all time low for young adults.

Tranquilizer use was reported by 2.1% of young adults in 2023 (Table/Figure 63), which is an all time low for young adults. Significant decreases have been observed over the past 5 years (from 4.4% in 2018) and 10 years (from 5.6% in 2013).

Stimulants

Amphetamine nonmedical use was reported by 4.5% of young adults in 2023 (Table/Figure 65), ranging from 3.1% at ages 19–20 to 6.2% at ages 27–28 (Table/Figure 66). Use has declined significantly among young adults over the past 5 years (from 7.8% in 2018) and 10 years (from 7.3% in 2013; Table/Figure 65).

Nonmedical use of Adderall, an amphetamine stimulant also used in the treatment of attention-deficit/hyperactivity disorder (ADHD), dropped precipitously in 2023, reaching a new all time low of 3.7% of young adults in 2023 (Table/Figure 67). This is a drop by over half and reflects a significant change from 2022 (7.8%) and across the past 5 years (from 8.3% in 2018).

Nonmedical use of Ritalin, a stimulant widely prescribed for the treatment of ADHD, was reported by 1.2% of young adults in 2023 (Table/Figure 69), with no significant change over the past decade.

Cocaine use was reported by 5.3% of young adults in 2023 (Table/Figure 71), peaking at 8.3% at ages 29–30 (Table/Figure 72). The prevalence declined significantly over the past 5 years (from 7.0% in 2018; Table/Figure 71).

Methamphetamine use reached a new all time study low in 2023, with 0.4% of young adults in 2023 (Table/Figure 73). There was a significant decrease over the past 5 years (from a recent high of 1.5% in 2018; Table/Figure 73).

Tobacco, Other Forms

The measures of tobacco use in the past 12 months were expanded in 2023. Use of large cigars was reported by 10.2% (Table/Figure 75), small cigars by 10.8% (Table/Figure 77), and tobacco using a hookah by 7.9% (Table/Figure 79) of young adults. Less common forms of use included smokeless tobacco (3.3%; Table/Figure 81), nicotine pouches (4.8%; Table/Figure 83), and snus (1.8%; Table/Figure 85).

CHAPTER 3: Midlife Adult Substance Use Prevalence and Trends

Executive Summary

The most prevalent substances used by midlife adults in 2023 were:

	Early Midlife Adults (ages 35–50)		Midlife Adults (ages 55–65)	
	Past 12 months	**Past 30 days**	**Past 12 months**	**Past 30 days**
Alcohol	83.9%	69.1%	77.2%	61.8%
Nicotine (any mode)	29.6%	–	22.1%	–
Cannabis (any mode)	29.3%	19.2%	19.0%	13.7%
Cigarettes	16.2%	10.2%	14.0%	9.5%
Other Drugs[1]	11.3%	4.7%	7.4%	4.2%

In addition, binge drinking (having 5+ drinks in a row in the past 2 weeks) was reported by 27.0% of early midlife and 19.7% of midlife adults in 2023. Daily cannabis use (20+ occasions in the past 30 days) was reported by 7.5% of early midlife adults and 5.2% of midlife adults in 2023.

Trends are not yet available for midlife adults ages 55 to 65. Trends for early midlife adults ages 35 to 50 are included.

A significant 1-year change from 2022 to 2023 indicated:

- Cigarette use in the past 30 days decreased to its lowest level recorded in the study. In 2023, 10.2% of those ages 35 to 50 reported smoking in the past 30 days, a decrease from 12.2% in 2022.

[1] An index of nonmedical 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.

Long term trends among early midlife adults ages 35 to 50 have been available for the full age band since 2008 (unless otherwise noted) and indicate **increases** in the prevalence of some substance use:

- Cannabis: Cannabis use reached new all time high levels in 2023. Use in the past 12 months and past 30 days have increased significantly over the past 5 and 10 years, reaching 29.3% and 19.2% in 2023. However, the increase from 2022 to 2023 was not statistically significant.
- Alcohol: Alcohol use in the past 30 days slightly increased over the past 10 years (from 67.7% in 2013 to 69.1% in 2023). Binge drinking has increased over the past 5 years (from 24.8% in 2018) and 10 years (from 23.6% in 2013) to 27.0% in 2023; this is a slight and not significant decrease from a study high of 29.2% in 2022. However, daily drinking has decreased over the past 5 years and is at its lowest level ever recorded (7.6%), after a peak during the pandemic in 2020 at 12.0%.
- Psychedelics: Hallucinogen use has reached a new all time study high level among those in early midlife. Use increased over the past 5 years (from 1.4% in 2018) and 10 years (from 0.6% in 2013), to 4.2% in 2023 among those ages 35 to 50.
- Stimulants: Over the past 10 years, there have been significant increases in amphetamine use (from 1.5% in 2013 to 2.6% in 2023) and cocaine use (from 2.5% in 2013 to 2.9% in 2023).

Historical **decreases** in the prevalence of other substance use by early midlife adults have also been observed:

- Cigarette smoking has decreased over the past decade, including smoking in the past 12 months (from 21.3% in 2013 to 16.2% in 2023), past 30 days (from 16.9% to 10.2%), daily (13.3% to 7.8%), and a half pack or more daily (from 10.1% to 5.9%). Significant decreases over the past 5 years were also seen for cigarette use in the past 30 days and daily smoking.
- Nonmedical use of prescription drugs (that is, use without medical supervision): Over the past 5 years and 10 years, past 12 month prevalence of nonmedical use of any prescription drug has decreased (from 9.0% in 2013 and 10.1% in 2018 to 7.7% in 2023).
    - Sedatives: Nonmedical use of sedatives has decreased (from 2.6% in 2013 to 2.0% in 2023).
    - Opioids: Nonmedical use of narcotics other than heroin is at the lowest level recorded by the study (tied with 2020) at 2.7% in 2023. This follows significant decreases over the past 5 years (from 4.7% in 2018) and 10 years (from 4.4% in 2013).

Introduction

MTF has been following individuals from a modal age of 18 throughout adulthood since 1976. In 2023, these surveys included follow ups at age 65 for the first time. In this chapter, we present the most recent prevalence estimates of substance use among early midlife adults ages 35 to 50 combined, midlife adults ages 55 to 65 combined, and for separate age groups. We describe recent historical trends comparing these estimates to previous years, when possible. (The full age span for midlife adults ages 55 to 65 was first reached in 2023, so their combined data are only 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 1-year change and linear trend estimates across 5 and 10 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. Tables and figures depicting prevalence levels and trends are also available as part of the MTF Panel data dashboard at https://monitoringthefuture.org/data/panel/substance-use/.

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 87–95.

To be categorized as a lifetime user for the adjusted lifetime prevalence estimate, a participant must have reported either lifetime use in the most recent data collection and/or reported some use in their lifetime on 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.

The truth likely lies somewhere between the two estimates: the lower estimate may be depressed by tendencies to forget, forgive, repress, or conceal earlier use, whereas the upper estimate may include earlier response errors, intentional exaggerations, or incorrect definitions of drugs that respondents appropriately revised in later surveys.[2]

[2] For a more detailed discussion see Johnston, L. D., & O'Malley, P. M. (1997). The recanting of earlier-reported drug use by young adults. In L. Harrison & A. Hughes (Eds.), The validity of self-reported drug use: Improving the accuracy of survey estimates (NIDA Research Monograph No-167). Washington, DC: National Institute on Drug Abuse.

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 1 year, past 5 years, and past 10 years in substance use among early midlife adults ages 35 to 50 combined (shown in Tables/Figures 3–86); data points for midlife adults ages 55 to 65 are available for the first time in 2023, and trends are not yet 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 2022 and 2023), 5 years (based on a linear slope from 2018 to 2023), and 10 years (based on a linear slope from 2013 to 2023).

Cannabis

The term "marijuana" is increasingly being replaced with the term "cannabis." In our surveys we now use both terms.[3] We continue to update our surveys about modes of use; 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 those ages 35 and 50 (at 74%; Table/Figure 87). The highest adjusted lifetime prevalence levels were for those ages 55 (78%), 60 (85%), and 65 (82%), who were in high school during years of peak cannabis use.[4]

12 month. Prevalence of cannabis use in the past 12 months for midlife adults ages 35 to 50 combined was 29.3% in 2023 (Table/Figure 3) and declined with age from 38.2% at age 35 to 18.3% at age 65 (Table/Figure 4). Nearly one-fifth (19.0%) of midlife adults ages 55 to 65 reported using cannabis in the past 12 months (Table/Figure 3).

30 day. Cannabis use in the past 30 days was reported by 19.2% of midlife adults ages 35 to 50 and 13.7% of midlife adults ages 55 to 65 in 2023 (Table/Figure 5) and ranged from 26.1% at age 35 to 12.9% at age 60 (Table/Figure 6).

Daily. Current daily cannabis use (defined as using on 20 or more occasions in the past 30 days) for ages 35 to 50 was 7.5% and for ages 55 to 65 was 5.2% in 2023 (Table/Figure 7), ranging from 11.2% at age 35 to 3.8% at age 60 (Table/Figure 8).

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

[4] 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, University of Michigan.

Vaping cannabis in the past 12 months was reported by 8.7% of early midlife adults and 3.5% of midlife adults (Table/Figure 9); 6.3% and 2.3% vaped cannabis in the past 30 days (Table/Figure 11). (This was far lower than the 22.2% of young adults.) However, there were marked age differences, with a general decrease in prevalence in past 12 month use observed across ages ranging from age 35 (13.6%) to age 60 (2.7%; Table/Figure 10).

Trends. Cannabis use (12 month, 30 day, and daily) among early midlife adults ages 35 to 50 has reached new historic peaks in 2023. The prevalence of cannabis use in the past 12 months has more than doubled in the past 10 years to 29.3% in 2023. In fact, there have been significant increases over the past 5 years (from 19.0% in 2018) and past 10 years (from 14.4% in 2013; Table/Figure 3). A similar pattern was seen for cannabis use in the past 30 days, which was 8.3% in 2013, 12.1% in 2018, and 19.2% in 2023 (Table/Figure 5). Again following the same pattern, daily cannabis use significantly increased over the past 5 years and 10 years (2.8% in 2013, 4.3% in 2018, 7.5% in 2023; Table/Figure 7). There were no significant increases in cannabis use from 2022 to 2023 among midlife adults. Vaping cannabis did not increase significantly from 2022 to 2023 but remained at or near its all time high prevalence levels (at 8.7% in the past 12 months, Table/Figure 9; and at 6.3% in the past 30 days, Table/Figure 11).

Alcohol

Lifetime. The vast majority of adults reported lifetime alcohol use, with 96–99% of those ages 35 to 65 ever drinking (Table/Figure 88).

12 month. Alcohol use in the past 12 months was also very high, with 83.9% of early midlife adults ages 35 to 50 and 77.2% of midlife adults ages 55 to 65 reporting it in 2023 (Table/Figure 15). Across age, past 12-month alcohol use ranged from 85.6% of those at age 35 to 74.1% at age 65 (Table/Figure 16).

30 day. In 2023, 69.1% of early midlife adults ages 35 to 50 and 61.8% of midlife adults ages 55 to 65 used alcohol in the past 30 days (Table/Figure 17), ranging from 71.0% at age 45 to 59.0% of those at age 65 (Table/Figure 18).

Daily. Current daily drinking (defined as 20 or more occasions in the past 30 days) was 7.6% for early midlife adults ages 35 to 50 and 11.4% for midlife adults ages 55 to 65 in 2023 (Table/Figure 19). Unlike other measures of alcohol use, daily drinking generally increased across age stratum, from 6.6% at age 35 to a high of 12.1% at age 55 (Table/Figure 20).

Binge drinking (i.e., having 5+ drinks in a row in the past 2 weeks) was reported by 27.0% of early midlife adults ages 35 to 50 and 19.7% of midlife adults ages 55 to 65 in 2023 (Table/Figure 21). Its prevalence ranged from 27.6% at age 35 to 17.2% at age 65 (Table/Figure 22).

Trends. Alcohol use in the past 30 days among early midlife adults ages 35 to 50 has shown a slight increase over the past 10 years, from 67.7% in 2013 to 69.1% in 2023 (Table/Figure 17).

Binge drinking among early midlife adults has increased over the past 5 and 10 years (from 23.6% in 2013 to 27.0% in 2023; Table/Figure 21).

There have been no significant trends in past 12-month alcohol use (Table/Figure 15). Following an elevated estimate during the pandemic in 2020, there is a significant decrease in daily drinking over the past 5 years to 7.6% in 2023 (Table/Figure 19). This is the lowest level the study has recorded among early midlife adults.

Any Nicotine Use

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. It was reported by 29.6% of early midlife adults ages 35 to 50 and 22.1% of midlife adults ages 55 to 65 (Table/Figure 25). Prevalence during midlife was highest at age 40, with 34.0% reporting nicotine use in the past year (Table/Figure 26).

Cigarettes

12 month. Cigarette use in the past 12 months was reported by 16.2% of early midlife adults ages 35 to 50 and 14.0% of midlife adults ages 55 to 65 in 2023 (Table/Figure 27), with prevalence across age ranging from 13.8% at age 50 to 18.3% at age 35 (Table/Figure 28).

30 day. 10.2% of early midlife adults ages 35 to 50 and 9.5% of midlife adults ages 55 to 65 smoked cigarettes in the past 30 days in 2023 (Table/Figure 29), with prevalence across age ranging 8.8% at age 35 to 12.0% at age 50 (Table/Figure 30).

Daily. Daily smoking in the past 30 days was reported by 7.8% of those ages 35 to 50 and ages 55 to 65 (Table/Figure 31), with relatively similar prevalence levels across age ranging from 6.0% at age 35 to 10.6% at age 50 (Table/Figure 32). Smoking a half pack or more per day was reported by 5.9% of those ages 35 to 50 (Table/Figure 33) but was highest among those ages 55–65 (6.2%). Of all daily smokers at age 65, about 78% were smoking half a pack a day or more.

Trends. Cigarette use has been steadily declining among early midlife adults ages 35 to 50. Smoking in the past 12 months decreased over the past 10 years, and smoking in the past 30 days, daily, and half a pack or more per day decreased over the past 5 and 10 years. Cigarette smoking in the past 12 months has decreased from 21.3% in 2013 to 16.2% in 2023 (Table/Figure 27) and in the past 30 days has decreased from 16.9% in 2013 to 10.2% in 2023 (Table/Figure 29). Daily smoking has decreased from 13.3% of midlife adults in 2013 to 7.8% in 2023 (Table/Figure 31). Prevalence of midlife adults ages 35 to 50 smoking half a pack or more per day has trended downward in the past 5 and 10 years, to 5.9% in 2023 (Table/Figure 33).

Vaping Nicotine

12 month & 30 day. In 2023, vaping nicotine in the past 12 months was reported by 7.0% of early midlife adults and 2.6% of midlife adults (Table/Figure 35), with the highest level at age 35 (10.6%) and a decrease through age 60 (2.0%; Table/Figure 36). In the past 30 days, 5.4% of early midlife adults ages 35 to 50 and 2.1% of midlife adults ages 55 to 65 vaped nicotine (Table/Figure 37).

Trends. Reports of vaping nicotine among midlife adults ages 35 to 50 did not significantly increase from 2022 to 2023 or over the past 5 years (Table/Figure 35 and Table/Figure 37).

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 differs slightly because hallucinogen use is not assessed after age 55, so hallucinogens are not included.

Lifetime. Adjusted lifetime prevalence of using any drug other than cannabis ranged from 54% at age 35 to 68% at age 50 (Table/Figure 89).

12 month. 11.3% of early midlife adults ages 35 to 50 and 7.4% of midlife adults ages 55 to 65 reported using any drug in the index other than cannabis in the past 12 months (Table/Figure 39), ranging from 16.7% at age 35 to 7.5% at age 50 (Table/Figure 40).

Trends. There have been no significant changes in this index among early midlife adults over the past 10 years (Tables/Figures 39 and 41).

Other Substances: Prevalence & Trends

MTF includes specific questions about many individual substances. Below are prevalence levels and trends 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. Additional data are also available.[5]

Any Prescription Drug

Nonmedical use of any prescription drug (including narcotics, sedatives, tranquilizers, and stimulants) in the past 12 months was reported by 7.7% of early midlife adults ages 35 to 50 and 6.6% of midlife adults ages 55 to 65 in 2023 (Table/Figure 43). There have been significant

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

declines over the past 5 years (from 10.1% in 2018) and 10 years (from 9.0% in 2013; Table/Figure 43). Prevalence during midlife was highest at age 35 at 10.1% (Table/Figure 44).

Hallucinogens (Psychedelics)

Hallucinogen use in the past 12 months was reported by 4.2% of early midlife adults ages 35 to 50 in 2023, which is the highest level recorded since it was first available for the full age range in 2008 (Table/Figure 45). There have been significant increases over the past 5 years and 10 years (from 0.6% in 2013, and 1.4% in 2018; Table/Figure 45). Use ranged from 2.8% at age 50 to 9.6% at age 35 (Table/Figure 46).

Narcotics (Opioids)

Heroin use among early midlife adults ages 35 to 50 was 0.2% in 2023 and 0.1% for midlife adults, with no significant change among early midlife adults over the past 10 years (Table/Figure 53). Heroin use was more prevalent among previous cohorts, with adjusted lifetime prevalence as high as 6% among those who are 65 (Table/Figure 90).

Use of narcotics other than heroin in the past 12 months was reported by 2.7% of early midlife adults and 2.0% of midlife adults in 2023, with a decrease among early midlife adults over the past 5 years (from 4.7% in 2018) and 10 years (from 4.4% in 2013; Table/Figure 55). Use of heroin (Table/Figure 54) and narcotics other than heroin (Table/Figure 56) were generally lower for those in older strata in midlife.

Adjusted lifetime prevalence of using narcotics other than heroin reaches as high as 41% of those who were 65 in 2023 (Table/Figure 91).

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

Sedative use in the past 12 months was reported by 2.0% of early midlife adults ages 35 to 50 and 2.6% of midlife adults ages 55 to 65 in 2023 (Table/Figure 61), which was a decrease among early midlife adults over the past 10 years from 2.6% in 2013. Use was between 1.5% and 3.4% at each age (Table/Figure 62).

Tranquilizer use in the past 12 months was reported by 3.4% of early midlife adults ages 35 to 50 and 2.6% of midlife adults ages 55 to 65, with no significant changes in the past 10 years (Table/Figure 63). Use ranged from 2.1% to 4.0% across ages from 35 to 65 (Table/Figure 64).

These substances are also more prevalent among the older cohorts, with adjusted lifetime prevalence as high as 37% for sedatives (Table/Figure 92) and 47% for tranquilizers (Table/Figure 93) among those who were 65 in 2023.

Stimulants

Amphetamine nonmedical use was reported by 2.6% of early midlife adults ages 35 to 50 and 0.9% of midlife adults ages 55 to 65 in 2023 (Table/Figure 65), ranging from 4.0% at age 35 to 0.4% at age 65 (Table/Figure 66). There was an increase over the past 10 years (from 1.5% in 2013) but no additional significant increases from 2022 to 2023.

Cocaine use was reported by 2.9% of early midlife adults ages 35 to 50 and 1.1% of midlife adults ages 55 to 65 in 2023 (Table/Figure 71). There has been an increase in cocaine use among midlife adults over the past 10 years, from 2.5% in 2013 (Table/Figure 71). By age stratum, there was a range of 4.4% at age 35 descending to 1.1% at age 65 (Table/Figure 72).

Adjusted lifetime prevalence estimates are again much higher among the older cohorts, reaching 55% for amphetamines (Table/Figure 94) and 51% for cocaine use (Table/Figure 95) among those who were 65 in 2023.

Tobacco, Other Forms

The measures of tobacco use in the past 12 months were expanded in 2023 for early midlife adults ages 35 to 50 and midlife adults ages 55 to 65. Use of large cigars was reported by 7.8% and 6.4% (Table/Figure 75) and small cigars by 7.2% and 5.3% (Table/Figure 77), respectively. Less common forms of use included tobacco using a hookah by 3.0% and 2.0% (Table/Figure 79), smokeless tobacco (4.7% and 3.5%; Table/Figure 81), and nicotine pouches (3.3% and 2.2%; Table/Figure 83).

CHAPTER 4: College and Noncollege Young Adult Substance Use

Executive Summary

In 2023, differences in substance use for college vs. noncollege young adults ages 19 to 22 showed:

- Cigarettes: Noncollege young adults had higher prevalence of smoking cigarettes (12 months, 30 days, daily).
- Vaping nicotine: Noncollege young adults had higher prevalence of vaping nicotine (12 months, 30 day). This follows significant increases over the past 5 years for vaping nicotine in the past 30 days among noncollege, but not college, young adults.
- Cannabis: Noncollege young adults had higher prevalence of vaping cannabis (30 day) and using any form of cannabis daily, compared to college students.

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

- Cannabis: Daily cannabis use has risen among noncollege young adults but not for college students over the past 10 years.
- Alcohol: In 2023, alcohol use in the past 30 days reached a new historic low level among college students, following significant 10-year downward trends and a significant decrease from 62.0% in 2022 to 55.0% in 2023. (This is slightly but not significantly above the prevalence among noncollege young adults, at 51.9% in 2023.)
    - For college men, the prevalence of binge drinking is a new all time study low of 24.4% in 2023.
    - For college women, there was a significant decrease from 26.8% in 2022 to 19.9% in 2023, but the prevalence remains above the all time low of 18.2% during the pandemic in 2020.
    - There has been convergence between college and noncollege young adults and between men and women. In 2023, there were no significant differences in binge drinking by college status or sex.
- Other drug use:[1] Following all time study lows in the use of drugs other than cannabis in 2022, there were slight but not significant increases among college and noncollege young adults in 2023.
    - There were no differences by college status in 2023.

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

- Use of any drug other than cannabis was more prevalent among college men than college women in 2023.

Introduction

The Monitoring the Future (MTF) study tracks multiple forms of substance use among US 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 graduated from high school), 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 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 US college student population for nearly four and a half decades (1980–2023); previous results are available elsewhere.

MTF draws the 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[2] and the National Center on Education Statistics,[3] this age band encompasses about 73% of all undergraduate college students enrolled full time in 2019.

Full time 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 2-year or 4-year college or university at the beginning of March of the year in question. In other words, we consider full time students at 2-year colleges, such as community colleges, and 4-year colleges and universities as college students. Nonstudents include those who are attending part time and those who previously

[2] U.S. Census Bureau.

[3] National Center on Education Statistics. Fall 2019 Enrollment.

attended college but are not currently attending. Full time college students as defined here constitute about three-fifths (60%) of the entire follow up sample one to four years past high school in 2023, 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 2023 they were 67%. 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.[4]

Noncollege young adults. The MTF panels also include high school graduates one to four years past high school who were not attending college full time. Having data for both groups is a rare and valuable feature of the MTF Panel Study. 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 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[5]—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, 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. Tables and figures depicting differences for college and noncollege young adults are also available as part of the MTF Panel data dashboard at https://monitoringthefuture.org/data/panel/college-noncollege/.

Cannabis

12 month & 30 day. Prevalence of cannabis use (in any form) in the past 12 months was similar for college (39.5%) and noncollege (38.9%) young adults in 2023 (Table/Figure 96). Likewise,

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

[5] National Center for Education Statistics. (2024, May). Status Dropout Rates. Condition of Education. U.S. Department of Education, Institute of Education Sciences. Accessed July 13, 2024.

prevalence of cannabis use in the past 30 days was similar for college (26.1%) and noncollege (28.8%) young adults in 2023 (Table/Figure 97).

Daily. The prevalence of current daily cannabis use was higher for noncollege (11.6%) compared to college (6.3%) young adults in 2023 (Table/Figure 98).

Vaping cannabis. Prevalence of vaping cannabis was higher for noncollege than for college young adults in the past 12 months (26.4% vs. 24.7%) and in the past 30 days (19.6% vs. 14.2%; Tables/Figures 96 and 97).

Trends. Cannabis use trends showed that, for both college and noncollege young adults, there were no significant changes over the past 1 or 5 years. However, there has been an increase over the past 10 years in cannabis use in the past 30 days (from 21.1% to 26.1% from 2013 to 2023 for college; from 25.8% to 28.8% for noncollege; Table/Figure 99).

Daily use has risen over the past 10 years among noncollege youth, but not for college students (Table/Figure 101).

There has been an increase in vaping cannabis in the past 30 days among both college (over the past 5 years from 10.0% in 2018 to 14.2% in 2023) and noncollege (from 7.7% in 2018 to 19.6% in 2023) young adults since it was first measured in 2017 (Table/Figure 103).

Alcohol

12 month & 30 day. There were no significant differences between college young adults and noncollege young adults for alcohol use in the past 12 months (74.9% vs. 72.5%) or past 30 days (55.0% vs. 51.9%; Tables/Figures 96 and 97).

Daily. The prevalence of daily drinking was similar for college (1.9%) and noncollege (2.8%) young adults (Table/Figure 98).

Binge drinking. In 2023, college (21.9%) and noncollege (20.3%) young adults had similar prevalence of binge drinking in the past 2 weeks (Table/Figure 98). Binge drinking had typically been more prevalent among college than noncollege young adults over the years, but there have been no significant differences in 2022 and 2023 (Table/Figure 107).

High-intensity drinking. The prevalence of high-intensity drinking (i.e., 10+ drinks in a row) in the past 2 weeks was similar for college (5.1%) and noncollege (8.4%) young adults in 2023 (Table/Figure 98).

Trends. Trends showed that the prevalence of alcohol use in the past 30 days has declined among noncollege young adults over the past 10 years (from 56.6% in 2013 to 51.9% in 2023). Among college young adults, there is also a significant decrease over the past 1 year (from 62.5% in 2022)

and 10 years (from 62.0% in 2013) to 55.0% in 2023 (Table/Figure 105). This is a new historic low level of alcohol use in the past 30 days among college students.

Similarly, for binge drinking among college and noncollege young adults there have been 10-year trends indicating a long term decrease (Table/Figure 107). Among college students there was also a significant 1-year decrease from 27.7% in 2022 to 21.9% in 2023, which is a new historic low level of binge drinking among college students (Table/Figure 107).

Cigarettes

12 month & 30 day. In 2023, noncollege young adults had significantly higher prevalence levels of smoking in the past 12 months than college students (20.3% vs. 13.7%) and past 30 days (8.3% vs. 4.0%; Tables/Figures 96 and 97).

Daily. In 2023, noncollege young adults had significantly higher prevalence of daily smoking than college students (2.2% vs. 0.6%; Table/Figure 98).

Trends. Trends in cigarette use showed major decreases for both college and noncollege young adults over the past 5 and 10 years (Table/Figure 109). In 2023, there was a nonsignificant increase (from 7.0% to 8.3%) for smoking in the past 30 days among noncollege young adults and a nonsignificant decrease (from 6.4% to 4.1%) among college students.

Vaping Nicotine

12 month & 30 day. The prevalence of nicotine vaping was significantly higher among noncollege young adults than college students in 2023 over the past 12 months (35.6% vs. 25.8%) and past 30 days (28.8% vs. 18.0%; Tables/Figures 96 and 97).

Trends. There have been dramatic increases in vaping nicotine since it was first reported in 2017, with significant increases over the past 5 years, among noncollege young adults. Specifically, since 2017, past 30 day prevalence has more than doubled among noncollege young adults (from 13.4% in 2018 to 28.8% in 2023; Table/Figure 111). In contrast, there have been no significant increases among college students over the past 5 years (Table/Figure 111).

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).

12 month & 30 day. Use of any drugs other than cannabis was similar among college and noncollege young adults in 2023, with no significant differences in prevalence of use over the past 12 months (12.0% vs. 15.2%) and the past 30 days (4.2% vs. 5.4%; Tables/Figures 96 and 97).

Trends. Among college young adults, use of any drug other than cannabis has decreased over the past 5 and 10 years (from 8.4% in 2013, and 7.3% in 2018 to 4.2% in 2023; Table/Figure 113). Among noncollege young adults, there has been a longer term decline over the past 10 years (from 10.8% in 2013 to 5.4% in 2023; Table/Figure 113). This is a slight but not significant rebound from 2022 when college and noncollege young adults had all time low prevalence levels of drug use other than cannabis (since the index was first available in 1980).

Other Substances: Prevalence for College & Noncollege

MTF includes specific questions about many individual substances. Below are 12 month prevalence levels for college and noncollege young adults for use of hallucinogens, narcotics (opioids), sedatives/tranquilizers, stimulants, and tobacco in forms other than cigarettes. Additional data are also available.[6]

Hallucinogens (Psychedelics)

Use of hallucinogens in the past 12 months was similar for college and noncollege young adults (7.5% vs. 10.8%) in 2023. There were also no significant differences for past 12 month use of LSD (1.8% vs. 2.3%), hallucinogens other than LSD (7.4% vs. 10.4%), MDMA (ecstasy, Molly; 0.3% vs. 1.2%), and ketamine (1.8% vs. 0.9%; Table/Figure 96).

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 2023 (both less than 0.05% for heroin; 0.5% for college and 1.2% for noncollege for other narcotics; Table/Figure 96). There were no significant differences for Vicodin use or OxyContin use for college and noncollege young adults (Table/Figure 96).

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

College students and noncollege young adults had similar levels for use of sedatives (barbiturates) (0.6% vs. 0.9%) and tranquilizers (1.2% vs. 1.6%) in the past 12 months in 2023 (Table/Figure 96).

Stimulants

Amphetamine use without a doctor's prescription in the past 12 months was similar for college and noncollege young adults (3.6% vs. 2.6%; Table/Figure 96). Amphetamine use prior to 2020 was typically higher among college than noncollege young adults, likely due to amphetamine use (and particularly use of Adderall) for study purposes.

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

Use of Adderall, a subclass of amphetamines prescribed for the treatment of attention-deficit/hyperactivity disorder (ADHD), without medical supervision was similar for college and noncollege young adults in 2023 (2.4% vs. 0.8% in the past 12 months; Table/Figure 96).

The nonmedical use of Ritalin, another stimulant drug prescribed for ADHD, is now low among college and noncollege young adults (0.7% and 0.4%, respectively, in the past 12 months in 2023; Table/Figure 96).

Cocaine use in the past 12 months was similar (2.2% vs. 2.9%) among college and noncollege young adults in 2023 (Table/Figure 96).

Methamphetamine use in the past 12 months was similar for college and noncollege young adults (less than 0.05% in both groups) in 2023 (Table/Figure 96).

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 (4.4%) and noncollege (5.4%) young adults in 2023 (Table/Figure 96). Similarly, use of nonmedical use of prescription drugs did not differ in the past 30 days in 2023 (Table/Figure 97).

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 between college and noncollege young adults (32.5% of college, 38.4% of noncollege in 2023; Table/Figure 96).

There were also no significant differences between college and noncollege young adults for specific measures of tobacco use, including large cigars, small cigars, tobacco using a hookah, smokeless tobacco, snus, and nicotine pouches (Table/Figure 96).

Sex Differences Among College Students: Most Common Substances

Cannabis

In 2023, there were no significant differences between men and women college students for cannabis use (past 12 months, past 30 days, daily; Tables/Figures 96–98). Before 2015, college men had consistently higher prevalence of cannabis use than college women. However, there has been a significant increase in cannabis use in the past 30 days among college women (from 16.2% in 2013 to 25.6% in 2023; Table/Figure 100).

Alcohol

Alcohol use (past 12 month, past 30 days) did not significantly differ between college men and college women in 2023 (Tables/Figures 96 and 97). Alcohol use in the past 30 days among college women decreased significantly from 2022 (65.8%) to 2023 (58.4%) but remains slightly and not significantly higher than the level for men in 2023 (51.0%; Table/Figure 106). Prior to 2000, college men consistently had a higher 30 day prevalence, but college men have significantly decreased over the past 10 years (63.3% in 2013 to 51.0% in 2023), although women have no significant changes over the past decade (Table/Figure 106).

For binge drinking, there have been significant decreases over the past 10 years for both college men (from 41.9% in 2013 to 24.4% in 2023) and college women (from 29.5% in 2013 to 19.9% in 2023; Table/Figure 108). This is an all time low among college men since the value was first available in 1980 (Table/Figure 108). Binge drinking among college women also showed a significant 1-year decline from 26.8% in 2022 to 19.9% in 2023) but remains above the low point of 18.2% reported during the pandemic in 2020 (Table/Figure 108).

Cigarettes

There were no significant differences in cigarette use for college men or college women (Tables/Figures 96–98). Noncollege men had higher prevalence than noncollege women for cigarette use in the past 12 months (at 26.2% vs. 12.0%; Table/Figure 96) and 30 days (at 11.3% vs. 3.8%; Table/Figure 97), although there were no significant differences for daily smoking (2.6% vs. 1.0%; Table/Figure 98). Trends in prevalence of cigarette use in the past 30 days were similar for college men and women, with a significant decrease over the past 5 and 10 years for men and over the past 10 years for women (Table/Figure 109).

Vaping Nicotine

There were no significant differences in vaping nicotine for men compared to women in college or for noncollege young adults (Tables/Figures 96 and 97). There were significant increases in the prevalence of vaping nicotine in the past 30 days for noncollege youth over the past 5 years, from 13.4% in 2018 to 28.8% in 2023 (Table/Figure 111), leading to significant differences between college and noncollege overall prevalence in 2023 (Tables/Figures 96 and 97). College women had a significant 5 year increase from 12.0% in 2018 to 16.9% in 2023 (Table/Figure 112).

Any Drug Other Than Cannabis

Use of any drug other than cannabis is markedly more prevalent among college men than college women (16.0% vs. 8.3% in the past 12 months, Table/Figure 96; 7.0% vs. 1.7% in the past 30 days, Table/Figure 97). Trends in 30 day use of any drugs other than cannabis have been decreasing. For men, these declines are over the past 10 years (from 10.4% in 2013 to 7.0% in

2023; Table/Figure 114). For women, there have been significant decreases over the past 5 and 10 years (from 6.8% in 2013 and 8.1% in 2018 to 1.7% in 2023; Table/Figure 114).

CHAPTER 5: Demographic Subgroup Differences

Executive Summary

Young adult women had significantly higher prevalence than young adult men in 2023 for cannabis use.

- Cannabis use in the past 12 months was reported by 44.1% of young adult women, compared to 40.3% of young adult men. The difference was not significant for use in the past 30 days. Although the sex differences had been narrowing since about 2010, this is the first time prevalence is higher among young adult women than men.
- There was a significant 1-year increase from 2022 to 2023 for cannabis use in the past 30 days among early midlife women, but not men.

Men had significantly higher prevalence levels of substance use than women in 2023 for many measures across young adults (ages 19 to 30), early midlife adults (ages 35 to 50), and midlife adults (ages 55 to 65). In particular:

- Cannabis use in the past 12 months was higher among men (early midlife adults and midlife adults) in 2023.
- Alcohol use in the past 30 days (early midlife adults and midlife adults) and binge drinking was higher among men (young adults, early midlife adults, midlife adults).
    - There was a significant decrease in both past 30 day alcohol use and binge drinking among early midlife women, but not early midlife men, from 2022 to 2023 that widened this gap.
- Cigarette use in the past 30 days was higher among men (young adults and midlife adults).
- Vaping nicotine in the past 30 days was higher among men (young adults).
- Use of any drug other than cannabis in the past 12 months was higher among men (young adults and early midlife adults).
- Trends over time showed that sex differences have been narrowing for alcohol use (since about 1994) and binge drinking (since about 1989) among young adults.

Significant differences by racial/ethnic subgroups in 2023 include:

- White young adults reported higher prevalence than Black young adults for alcohol use, binge drinking, nicotine vaping, and use of any drug other than cannabis. Hispanic young adults had higher prevalence than Black young adults for any drug other than cannabis.
- White early midlife adults reported higher prevalence than Black midlife adults for alcohol use, binge drinking, vaping nicotine, and use of any drug other than cannabis in the past 12 months. Hispanic early midlife adults had higher prevalence of alcohol and binge drinking than Black early midlife adults.

- Black and Hispanic young adults had lower rates of 12-month cannabis use for some years but in the past ten years have caught up to White young adults. A similar trend is seen among midlife adults.

Introduction

The demographic distributions for the 2023 MTF Panel sample in terms of sex/gender, race/ethnicity, and sexual orientation are shown in Table/Figure 115. Differences in 2023 prevalence levels by sex and race/ethnicity are shown for young adults (ages 19 to 30), early midlife adults (ages 35 to 50), and midlife adults (ages 55 to 65) in Tables/Figures 148–150. Trends in the prevalence of use by sex and by race/ethnicity are charted separately for young adults (ages 19 to 30) and early midlife adults (ages 35 to 50) in Tables/Figures 116–147. Subgroup data for young adults are available since 1988, for early midlife adults since 2008, and for 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. Tables and figures depicting differences by demographic groups are also available as part of the MTF Panel data dashboard at https://monitoringthefuture.org/data/panel/demographic-subgroups/.

Sex and Gender

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 due to small sample sizes of the other responses.

Starting in 2019, a gender identity question was added for those in the MTF Panel (i.e., ages 19+) asking "How do you describe yourself?" Since 2022, MTF Panel respondents have been able to check all that apply from six response options: female/woman, male/man, non-binary, transgender, other, and prefer not to answer. As data become available on larger numbers of individuals, we will be able to examine differences among gender minority groups.

Additional information on the 2023 sample, with more detailed sex and gender data collected from ages 19 onward, is shown in Table/Figure 115.

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. Prior to 2005, respondents could select only one option.

Trends by race/ethnicity are shown for the three largest subgroups: Black, Hispanic, and 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 2023 MTF Panel sample is shown in Table/Figure 115, including data collected from ages 19 onward.

Sexual Orientation

Sexual orientation was added to the MTF Panel surveys in 2017 and updated in 2019. Since 2019, the question has been, "Do you think of yourself as… (Mark all that apply.)" with response options of straight, gay or lesbian, bisexual, or other. Information regarding the 2023 MTF Panel sample responses to sexual orientation is provided in Table/Figure 115. As data become available for longer periods of time and on larger numbers of individuals, we will be able to report trends in substance use for sexual minority groups.

Most Common Substances

Results are reported for the most prevalent substances, including marijuana, alcohol, cigarettes, vaping nicotine, and any drug other than marijuana. Tests for significant differences by sex and race/ethnicity are shown in Table/Figure 148 for young adults ages 19 to 30, in Table/Figure 149 for early midlife adults ages 35 to 50, and in Table/Figure 150 for midlife adults ages 55 to 65. Differences for other subgroups and other substances can be examined in the data available for use by researchers.[1]

Subgroup Differences & Trends by Substance

Cannabis

Sex. For the first time in 2023, cannabis use in the past 12 months has a significantly higher prevalence among young adult women (44.1%) than men (40.3%; Table/Figure 148). Prior to 2018, young adult men had consistently higher prevalence of use than women. However, there have been strong increases in past 12-month cannabis use among young adult women over the past 5 and 10 years that outpace the past 10-year increases among young adult men (Table/Figure 116). This has led to a crossover. There were no significant differences between young adult men

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

and women in past 30 day cannabis use, although women reported higher prevalence than men for the first time in 2023, again showing a crossover following increases over the past 5 and 10 years for both groups (Table/Figure 120).

Cannabis use remained at a higher prevalence among men in the early midlife age band for the past 12 months only (Table/Figure 149) and in the midlife age band for the past 12 months and past 30 days (Table/Figure 150). For early midlife men and women, there have been significant increases in cannabis use (in the past 12 months and 30 days; Tables/Figures 118 and 122). For early midlife women, there was also a significant increase in cannabis use in the past 30 days from 14.8% in 2022 to 17.8% in 2023 (Table/Figure 122).

Race/Ethnicity. In 2023, 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 (Tables/Figures 117 and 121) or early midlife adults ages 35 to 50 (Tables/Figures 119 and 123). For ages 55 to 65, White midlife adults had significantly higher rates of cannabis use in the past 12 months and 30 days than Black midlife adults, although there were no differences for Hispanic midlife adults compared to Black or White midlife adults (Table/Figure 150).

Alcohol

Sex. For alcohol use in the past 30 days among young adults, differences by sex have narrowed, with significant decreases among young adult men but increases among young adult women over the past 10 years (Table/Figure 124). In 2023, there were no significant differences for alcohol use in the past 30 days by sex for young adults (Table/Figure 148), although young adult men continued to report higher prevalence of binge drinking than young adult women (31.8% vs. 23.4% in 2023; Table/Figure 148).

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 (74.2% vs. 64.2%) and binge drinking (36.1% vs. 18.9%) in 2023 (Tables/Figures 126 and 149). There was a significant decrease in both past 30 day alcohol use and binge drinking among early midlife women, but not early midlife men, from 2022 to 2023 that widened this gap (Table/Figure 126). Among 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 150).

Race/Ethnicity. Differences in alcohol use have persisted over time, with White young adults having the highest prevalence of alcohol use in the past 30 days in 2023 at 69.3%, followed by Hispanic (59.2%) and Black (57.3%) young adults (Tables/Figures 125 and 148). However, over the last 10 years there has been a significant increase in alcohol use in the past 30 days among Black young adults (from 53.7% in 2013; Table/Figure 125) and a slight decrease over the past 10 years among White young adults (from 72.1% in 2013; Table/Figure 125), narrowing the previous gaps. Hispanic young adults showed a decrease from 66.2 in 2022 to 59.2% in 2023, although no

other groups had significant 1-year changes (Table/Figure 125). For binge drinking, White (29.6%) young adults had higher prevalence of binge drinking than Black (20.0%) young adults (Tables/Figures 129 and 148).

Among early midlife adults ages 35 to 50, Black adults had lower levels of binge drinking (19.3%) than White (27.3%) and Hispanic (34.0%) adults, and Hispanic adults had significantly higher prevalence than White adults in 2023 (Tables/Figures 131 and 149). Similar patterns were observed for alcohol use in the past 30 days among early midlife (Tables/Figures 127 and 149) and midlife adults ages 55 to 65 (Table/Figure 150). There have been slight increases in alcohol use in the past 30 days among Hispanic early midlife adults over the past 5 and 10 years and a significant 1-year decline among White adults from 73.8% in 2022 to 68.6% in 2023 (Table/Figure 127). There have also been significant increases in binge drinking over the past 5 years and 10 years among White early midlife adults only somewhat offset by a 1-year decline from 2022 to 2023 (Table/Figure 131).

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 5 and 10 years (Table/Figure 132). In 2023, cigarette use in the past 30 days was significantly higher among young adult men (11.4%) than young adult women (6.4%; Table/Figure 148). For midlife adults ages 35 to 50 in 2023, there have been significant declines for both men and women over the past 10 years (Table/Figure 149). With the significant 1-year decrease in past 30 day cigarette use among men (from 14.3% in 2022 to 10.2% in 2023), there was no difference between men and women and both were at 10.2% in 2023 (Tables/Figures 134 and 149).

Race/Ethnicity. White young adults consistently had the highest prevalence of smoking cigarettes in the past 30 days, although the gaps have narrowed (Table/Figure 133). In 2023, there were no significant differences by race/ethnicity for young adults (Tables/Figures 133 and 148), early midlife adults (Tables/Figures 135 and 149), or midlife adults (Table/Figure 150).

Vaping Nicotine

Sex. The prevalence of nicotine vaping in the past 30 days was significantly higher for young adult men than women (22.1% vs. 15.4%) in 2023 (Tables/Figures 136 and 148), although there was no significant sex difference among early midlife adults (Tables/Figures 138 and 149) or midlife adults (Table/Figure 150).

Race/Ethnicity. With increases in vaping nicotine over the past 5 years among all groups (Table/Figure 137), White young adults have consistently had the highest prevalence of nicotine vaping (20.3% in 2023, which is significantly higher than Black but not Hispanic young adults in 2023; Tables/Figures 137 and 148). Nicotine vaping prevalence was also higher among White than

Black early midlife adults (Tables/Figures 139 and 149). There were no differences by race/ethnicity for midlife adults (Table/Figure 150).

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 differs slightly because hallucinogen use is not assessed after age 55, so hallucinogens are not included.

Sex. In 2023, young adult men continued to have higher prevalence levels of use of any illicit drug other than cannabis in the past 12 months (19.1% among men vs. 14.5% among women; Table/Figure 140), but differences were not significant for use in the past 30 days (7.4% vs. 5.9%; Tables/Figures 144 and 148). Similarly, in 2023 among early midlife adults, men had higher prevalence of use of any illicit drug other than marijuana in the past 12 months (12.7% vs. 10.1%) but not in the past 30 days (4.6% vs. 4.8%; Tables/Figures 142 and 149).

Race/Ethnicity. White and Hispanic young adults had the highest prevalence of using any drug other than cannabis in the past 12 months in 2023 (15.4% among Hispanic and 18.1% among White young adults; Table/Figure 141). Black young adults had the lowest prevalence (8.2%) in 2023 (Table/Figure 148), and this has been true since this full age group was first surveyed in 1988 (Table/Figure 141). For use in the past 30 days, there was only a single significant difference in 2023, with Black young adults having lower levels than White young adults (Table/Figure 148). This finding has been consistent over time: Black young adults have had the lowest prevalence of using any illicit drug other than marijuana for as long as data on this full age band were first available in 1988 (Table/Figure 145).

Among those ages 35 to 50 (Table/Figure 143), White early midlife adults had a higher prevalence in the past 12 months than Black early midlife adults, but there were no significant differences over the past 30 days (Table/Figure 149). Similarly, among midlife adults ages 55 to 65 there were significant differences between the highest prevalence (White midlife adults) and lowest prevalence (Black midlife adults) for the past 12 months and past 30 days (Table/Figure 150).

TABLES/FIGURES

TABLE/FIGURE 1
Monitoring the Future Panel Study Administration by Cohort, 1976-2023

12th Grade	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	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	
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		
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			
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				
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					
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						
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							
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								
2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023									
2014	2015	2016	2017	2018	2019	2020	2021	2022	2023										
2015	2016	2017	2018	2019	2020	2021	2022	2023											
2016	2017	2018	2019	2020	2021	2022	2023												
2017	2018	2019	2020	2021	2022	2023													
2018	2019	2020	2021	2022	2023														
2019	2020	2021	2022	2023															
2020	2021	2022	2023																
2021	2022	2023																	
2022	2023																		

MONITORING THE FUTURE

TABLE/FIGURE 2

Monitoring the Future Panel Study Weighted Response Rates (Proportion Responding) by Cohort, 1976-2023

Cohort	N per Cohort	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	2224	0.721	0.799	0.794	0.769	0.744	0.739	0.671	0.637	0.599	0.575	0.543	0.528	0.520
1977	2358	0.845	0.823	0.810	0.761	0.752	0.719	0.683	0.639	0.633	0.594	0.562	0.550	
1978	2411	0.848	0.824	0.799	0.763	0.742	0.702	0.654	0.617	0.608	0.586	0.544	0.532	
1979	2437	0.854	0.815	0.766	0.770	0.728	0.704	0.654	0.598	0.584	0.564	0.540	0.525	
1980	2458	0.861	0.810	0.786	0.770	0.724	0.698	0.657	0.600	0.576	0.564	0.542	0.514	
1981	2458	0.844	0.787	0.780	0.724	0.696	0.674	0.605	0.565	0.541	0.506	0.478	0.483	
1982	2437	0.840	0.782	0.752	0.702	0.668	0.621	0.572	0.571	0.531	0.507	0.464		
1983	2426	0.815	0.785	0.728	0.692	0.652	0.604	0.552	0.547	0.499	0.467	0.461		
1984	2438	0.802	0.762	0.717	0.688	0.630	0.588	0.509	0.506	0.473	0.453	0.439		
1985	2467	0.805	0.728	0.696	0.649	0.593	0.564	0.495	0.480	0.469	0.427	0.413		
1986	2461	0.762	0.724	0.679	0.618	0.576	0.537	0.515	0.480	0.439	0.395	0.400		
1987	2466	0.738	0.700	0.666	0.594	0.556	0.541	0.502	0.459	0.420	0.384			
1988	2456	0.765	0.731	0.666	0.618	0.599	0.551	0.519	0.474	0.443	0.442			
1989	2478	0.744	0.700	0.629	0.573	0.537	0.514	0.469	0.429	0.398	0.395			
1990	2470	0.727	0.652	0.592	0.549	0.524	0.487	0.428	0.408	0.371	0.361			
1991	2473	0.743	0.666	0.608	0.551	0.517	0.490	0.436	0.398	0.368	0.351			
1992	2479	0.752	0.678	0.634	0.569	0.535	0.525	0.462	0.427	0.375				
1993	2449	0.707	0.661	0.603	0.549	0.510	0.515	0.446	0.390	0.369				
1994	2467	0.694	0.654	0.582	0.537	0.520	0.480	0.425	0.379	0.374				
1995	2469	0.700	0.635	0.583	0.544	0.549	0.500	0.448	0.410	0.384				
1996	2440	0.691	0.614	0.562	0.545	0.515	0.491	0.434	0.386	0.377				
1997	2457	0.652	0.579	0.542	0.542	0.488	0.478	0.407	0.361					
1998	2454	0.642	0.561	0.551	0.508	0.464	0.454	0.383	0.352					
1999	2459	0.614	0.537	0.559	0.479	0.468	0.453	0.382	0.371					
2000	2456	0.593	0.580	0.535	0.474	0.458	0.436	0.374	0.343					
2001	2448	0.559	0.576	0.503	0.471	0.464	0.433	0.359	0.352					
2002	2453	0.613	0.574	0.521	0.491	0.473	0.438	0.375						
2003	2449	0.605	0.526	0.488	0.463	0.422	0.401	0.364						
2004	2450	0.580	0.520	0.491	0.454	0.415	0.381	0.347						
2005	2450	0.534	0.519	0.488	0.422	0.397	0.376	0.347						
2006	2452	0.506	0.501	0.474	0.439	0.386	0.393	0.372						
2007	2452	0.552	0.493	0.482	0.427	0.402	0.401							
2008	2454	0.551	0.490	0.449	0.398	0.404	0.397							
2009	2453	0.507	0.461	0.404	0.346	0.351	0.351							
2010	2450	0.485	0.433	0.400	0.363	0.371	0.349							
2011	2450	0.471	0.408	0.367	0.351	0.363	0.338							
2012	2452	0.443	0.384	0.378	0.391	0.352	—[a]							
2013	2450	0.423	0.361	0.360	0.392	0.343								
2014	2450	0.382	0.363	0.379	0.352	—[a]								
2015	2451	0.335	0.340	0.375	0.319									
2016	2450	0.347	0.378	0.339	—[a]									
2017	2452	0.362	0.345	0.337										
2018	2450	0.374	0.350	—[a]										
2019	2450	0.312	0.323											
2020	1745	0.428	—[a]											
2021	2450	0.354												
2022	1226	—[a]												

Notes: All response rates presented are weighted by drug user strata. Denominators include all respondents other than those coded as 'deceased or ineligible/foreign exchange.

[a] Response rates not reported as only the first half sample of the noted cohort has been able to complete participation at the specified follow up age as of 2023 data collection.

MONITORING THE FUTURE

TABLE/FIGURE 3

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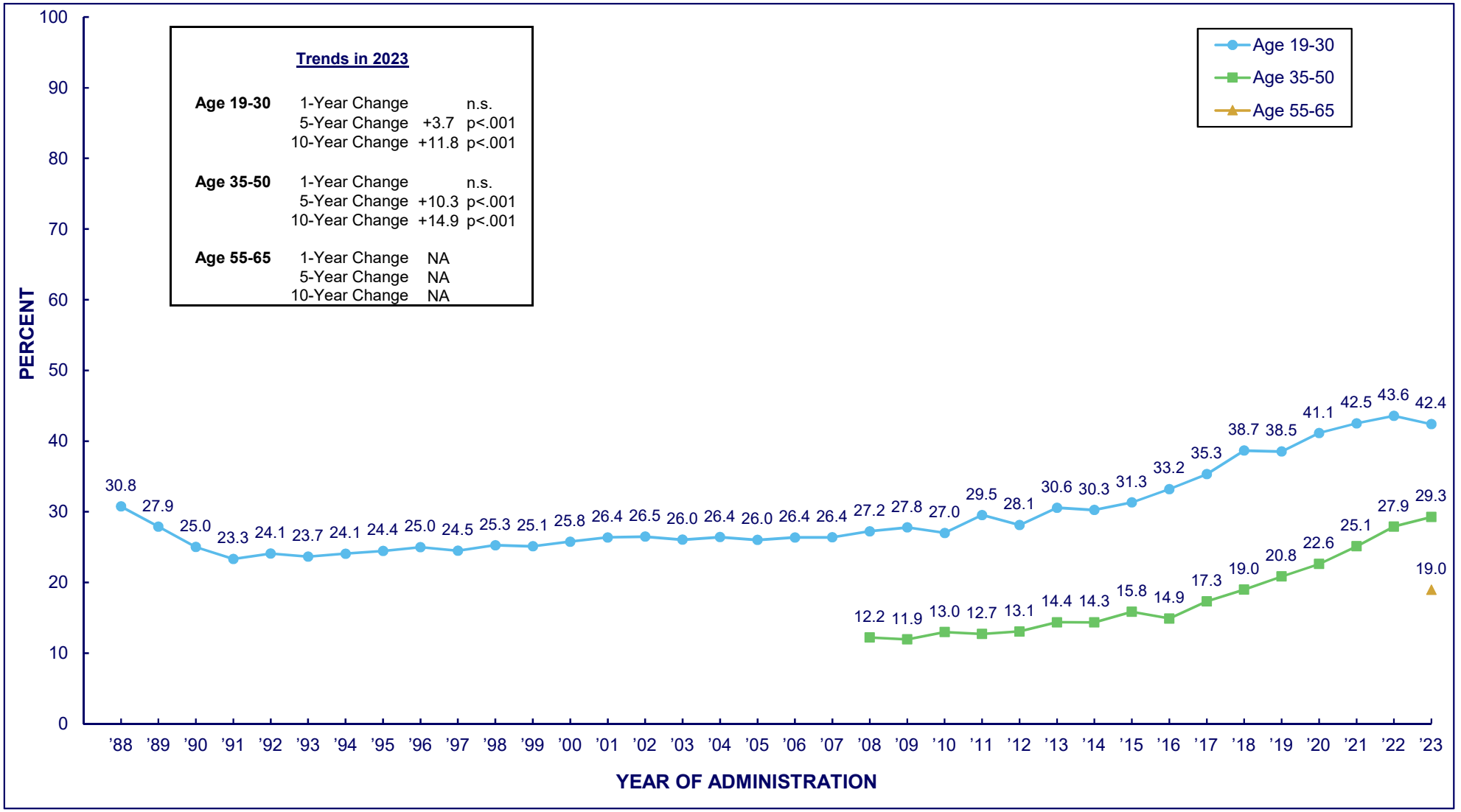
Trends in 12-Month Prevalence among Respondents of Modal Ages 19 through 65, by Age Group



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

TABLE/FIGURE 4

CANNABIS

Trends in 12-Month Prevalence

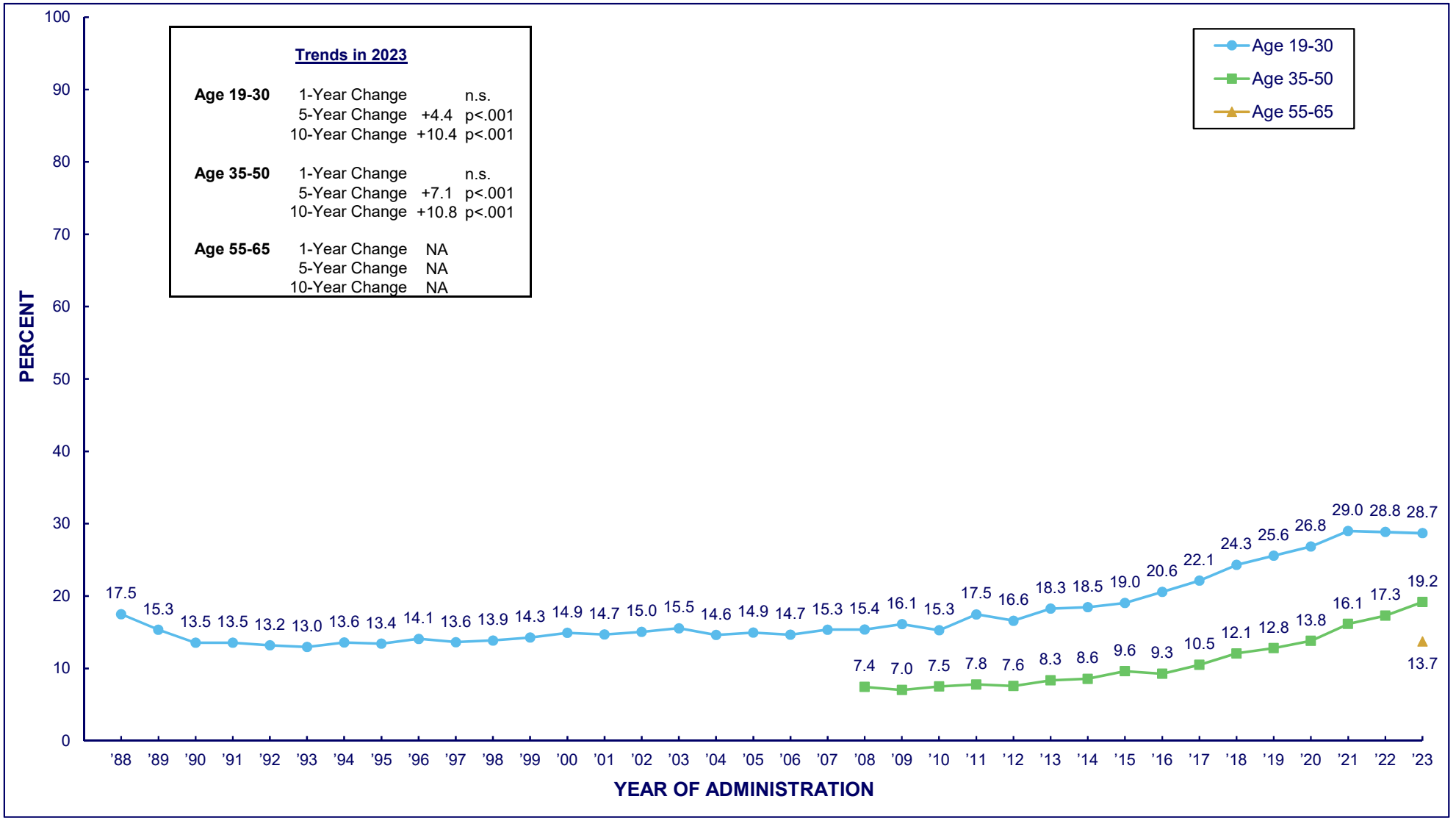
among Respondents of Modal Ages 18 through 65, by Age Group

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
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	41.9	40.7	41.5	39.7									
1986	38.8	39.6	40.0	38.1	34.2	33.1								
1987	36.3	36.6	37.8	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	23.3	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	20.2							
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	15.4						
1995	34.7	30.9	27.1	25.1	23.4	20.7	19.6	17.3						
1996	35.8	33.3	30.0	27.3	21.3	20.8	17.7	16.1						
1997	38.5	34.5	29.6	24.0	23.5	17.7	18.3	17.5						
1998	37.5	36.7	30.7	25.5	21.7	20.9	16.9	14.7	16.3					
1999	37.8	37.6	30.6	26.7	21.9	18.4	16.5	15.0	14.2					
2000	36.5	35.0	33.1	26.1	23.0	19.3	19.0	15.3	13.7					
2001	37.0	34.1	35.9	28.1	24.3	19.8	17.3	14.7	12.2					
2002	36.2	34.1	31.9	31.6	24.0	19.2	19.8	14.5	14.1					
2003	34.9	34.4	33.3	29.4	23.9	20.7	16.9	13.7	13.3	15.0				
2004	34.3	34.3	31.9	28.0	27.7	22.0	16.4	12.9	15.0	12.3				
2005	33.6	34.0	32.2	26.5	25.9	19.8	18.7	13.5	15.8	11.9				
2006	31.5	33.7	31.3	28.4	22.9	21.9	20.6	11.0	11.6	12.0				
2007	31.7	33.0	31.2	28.0	24.9	23.8	17.6	11.7	12.5	12.7				
2008	32.4	30.7	33.6	27.9	25.1	22.9	23.2	14.3	11.6	11.0	12.1			
2009	32.8	32.1	32.3	30.2	25.9	23.8	22.3	12.3	12.4	12.7	10.2			
2010	34.8	29.1	33.4	31.0	24.8	21.1	22.2	14.5	13.3	13.2	11.1			
2011	36.4	34.5	34.7	30.8	28.5	26.8	21.3	17.9	9.9	12.2	11.0			
2012	36.4	33.3	32.4	29.7	26.4	27.0	19.4	14.2	13.0	12.7	12.4			
2013	36.4	34.6	36.9	33.7	28.6	26.4	23.0	18.2	15.4	12.5	11.9	12.8		
2014	35.1	37.6	34.3	30.6	29.0	27.1	23.7	19.7	13.2	11.1	13.7	11.7		
2015	34.9	39.2	37.1	33.2	31.9	25.8	22.1	20.8	14.2	14.8	13.9	12.8		
2016	35.6	38.9	43.1	34.2	28.4	29.1	27.0	19.3	16.9	11.7	12.4	12.9		
2017	37.1	38.4	41.4	36.0	34.8	33.8	28.8	23.8	17.4	15.0	14.0	15.3		
2018	35.9	41.2	42.5	46.0	37.2	32.3	34.0	23.6	21.6	18.2	13.1	16.6	16.8	
2019	35.7	38.1	43.5	40.5	37.8	34.0	38.1	26.7	23.9	16.4	17.5	17.6	13.7	
2020	35.2	38.4	44.7	41.8	45.1	41.7	35.1	27.0	26.6	20.3	17.2	16.9	17.9	
2021	30.5	39.3	43.3	45.1	43.9	42.1	40.5	32.1	28.2	25.2	16.2	15.6	15.7	
2022	30.7	37.8	42.7	44.7	45.3	46.6	41.5	37.1	28.9	25.0	20.6	18.1	19.3	
2023	29.0	40.0	39.3	45.6	45.4	43.2	39.2	38.2	30.6	27.4	21.4	20.1	18.5	18.3

TABLE/FIGURE 5

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 6

CANNABIS

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

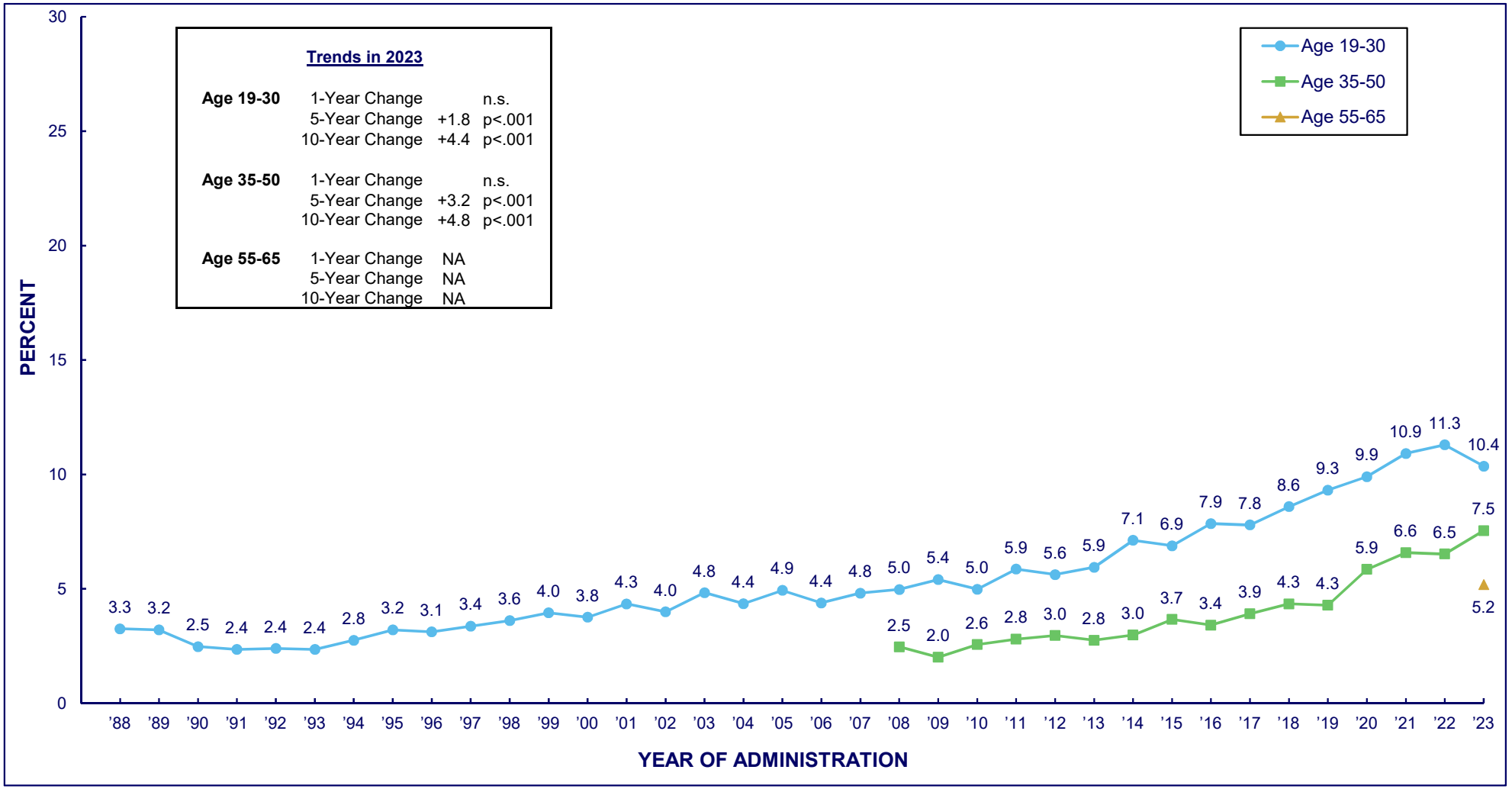
Year	Age 18	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
1976	32.2													
1977	35.4													
1978	37.1	37.9												
1979	36.5	37.1												
1980	33.7	34.6	36.3											
1981	31.6	33.8	35.0											
1982	28.5	29.5	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	13.9	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	9.1						
1995	21.2	18.6	14.9	12.4	11.9	10.9	11.8	11.2						
1996	21.9	19.5	16.1	15.3	12.8	11.0	10.1	8.6						
1997	23.7	20.0	18.5	13.2	10.5	10.3	9.7	10.6						
1998	22.8	19.0	17.1	14.3	13.1	11.0	9.2	8.9	9.7					
1999	23.1	22.2	17.3	15.2	12.0	9.2	10.2	9.0	8.6					
2000	21.6	21.0	20.1	14.2	12.8	11.2	10.8	8.9	8.6					
2001	22.4	20.4	21.8	14.4	14.3	9.8	8.4	8.9	8.3					
2002	21.5	20.5	18.4	17.3	15.2	9.6	10.3	9.6	7.8					
2003	21.2	22.2	18.6	18.7	14.3	12.1	8.9	7.9	8.2	9.1				
2004	19.9	19.5	18.0	15.8	15.4	11.8	8.4	8.0	9.1	6.6				
2005	19.8	18.4	17.6	14.0	16.0	11.8	12.1	7.5	9.2	7.2				
2006	18.3	17.9	17.1	16.5	13.2	13.4	10.3	6.0	7.2	6.6				
2007	18.8	17.4	19.3	16.6	15.0	13.6	10.3	6.0	7.6	7.2				
2008	19.4	16.8	17.8	16.4	13.3	14.2	13.4	8.2	7.5	6.5	7.8			
2009	20.6	18.7	19.0	17.6	16.0	13.5	11.9	6.3	7.2	8.3	6.1			
2010	21.4	17.7	17.4	17.5	13.0	13.7	12.2	8.5	7.6	7.4	6.6			
2011	22.6	20.5	21.3	17.6	17.2	16.3	11.4	10.9	6.2	8.2	6.0			
2012	22.9	21.1	19.0	17.8	14.7	14.8	11.7	9.1	6.9	6.7	7.5			
2013	22.7	22.4	23.7	20.1	15.4	15.0	12.9	10.8	9.6	5.8	7.4	8.2		
2014	21.2	25.1	19.8	18.6	18.1	16.5	13.3	11.1	7.1	6.9	9.2	8.4		
2015	21.3	23.8	23.6	19.9	19.8	14.3	13.6	13.1	8.8	8.4	8.3	8.8		
2016	22.5	22.0	29.0	20.8	18.3	18.2	15.9	11.1	11.0	7.3	8.0	6.5		
2017	22.9	22.1	26.5	23.8	22.8	20.6	17.5	14.1	10.3	8.7	9.3	10.3		
2018	22.2	24.8	25.5	28.1	23.4	22.0	22.5	15.0	13.6	11.0	9.0	10.0	11.3	
2019	22.3	24.7	29.6	25.5	24.6	25.1	24.3	16.4	14.9	10.2	10.3	12.5	9.1	
2020	21.1	22.1	28.7	27.6	31.2	27.0	23.7	16.7	16.0	11.9	11.0	10.7	11.6	
2021	19.5	28.8	29.4	28.4	31.9	28.5	27.0	19.0	18.9	17.0	10.5	9.7	11.1	
2022	20.2	23.9	26.0	32.9	31.5	28.6	27.9	23.4	18.4	15.5	12.0	12.2	12.7	
2023	18.4	27.0	27.9	32.2	30.1	28.2	26.0	26.1	18.5	18.7	13.6	14.6	12.9	13.8

MONITORING THE FUTURE

TABLE/FIGURE 7

CANNABIS

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 8

CANNABIS

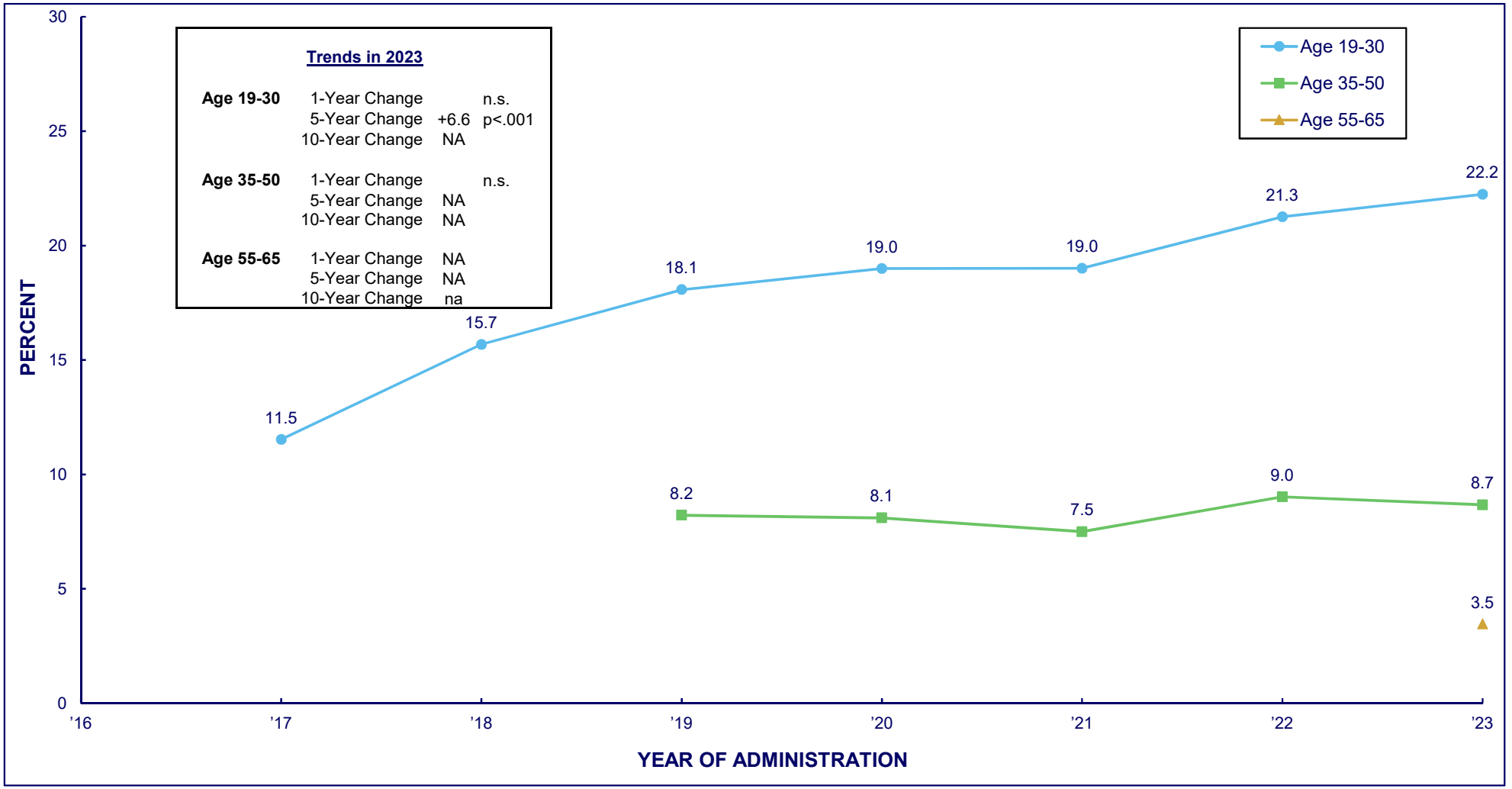
Trends in 30-Day Prevalence of Daily Use among Respondents of Modal Ages 18 through 65, by Age Group

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	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	2.3						
1995	4.6	5.0	3.3	3.4	2.4	2.8	2.4	2.4						
1996	4.9	4.7	3.1	2.6	3.5	2.3	2.5	2.1						
1997	5.8	5.1	5.3	2.7	2.3	2.6	2.3	3.5						
1998	5.6	5.1	5.2	3.4	2.9	2.7	2.5	2.4	3.2					
1999	6.0	6.1	4.5	5.1	3.0	3.0	2.2	1.9	2.1					
2000	6.0	5.7	5.0	3.7	3.5	2.5	2.4	2.7	2.7					
2001	5.8	6.2	6.6	4.5	4.5	2.0	2.6	2.5	1.7					
2002	6.0	5.7	5.3	5.6	2.5	2.3	2.9	3.1	2.9					
2003	6.0	6.4	6.7	6.7	3.4	4.2	2.1	2.4	2.4	3.1				
2004	5.6	5.7	4.8	5.6	5.6	2.9	1.9	2.1	1.9	2.1				
2005	5.0	6.3	4.9	4.8	6.2	3.2	4.2	2.2	1.9	2.1				
2006	5.0	5.2	4.5	5.2	4.6	4.6	2.3	2.6	3.0	1.3				
2007	5.1	4.4	5.5	5.0	4.7	5.7	3.5	2.5	2.6	2.9				
2008	5.4	4.2	5.8	4.6	5.6	4.2	5.4	2.3	2.6	2.7	2.2			
2009	5.2	5.4	6.0	6.1	5.9	3.8	5.2	1.9	1.9	2.3	2.0			
2010	6.1	5.6	5.4	6.1	3.5	5.2	4.1	3.4	2.7	2.1	2.0			
2011	6.6	5.9	6.3	6.8	7.4	4.2	4.2	3.0	2.7	3.1	2.4			
2012	6.5	6.2	5.8	6.5	5.5	4.9	4.8	3.9	3.0	2.3	2.7			
2013	6.5	6.4	7.9	6.9	5.7	5.5	3.0	3.7	2.8	2.7	2.0	2.9		
2014	5.8	8.9	7.2	6.9	6.9	7.2	5.8	4.8	2.0	2.5	2.8	2.3		
2015	6.0	9.2	6.4	7.8	7.3	5.8	5.2	4.9	4.0	2.8	3.1	2.8		
2016	6.0	6.4	10.0	9.3	6.8	6.7	7.7	3.9	4.3	3.0	2.5	3.0		
2017	5.9	5.9	9.8	9.2	8.2	6.3	7.4	5.2	4.7	3.3	2.7	3.2		
2018	5.8	6.7	8.2	9.5	10.2	8.5	8.3	4.6	5.4	3.6	3.9	3.6	4.7	
2019	6.4	6.9	10.4	10.1	9.7	10.6	8.3	5.2	6.0	2.7	3.5	3.7	2.7	
2020	6.9	5.6	12.3	10.2	11.0	11.2	8.3	8.0	6.4	4.8	4.4	3.6	4.7	
2021	5.8	11.1	9.5	10.5	12.7	9.8	11.9	9.5	7.4	6.3	3.5	4.5	4.3	
2022	6.3	7.0	11.3	13.8	10.9	11.3	11.3	8.4	7.6	4.7	5.4	3.9	4.9	
2023	6.5	7.9	9.8	11.8	10.0	10.2	11.3	11.2	6.6	7.8	4.6	5.9	3.8	6.1

TABLE/FIGURE 9

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 10

VAPING CANNABIS

Trends in 12-Month Prevalence

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

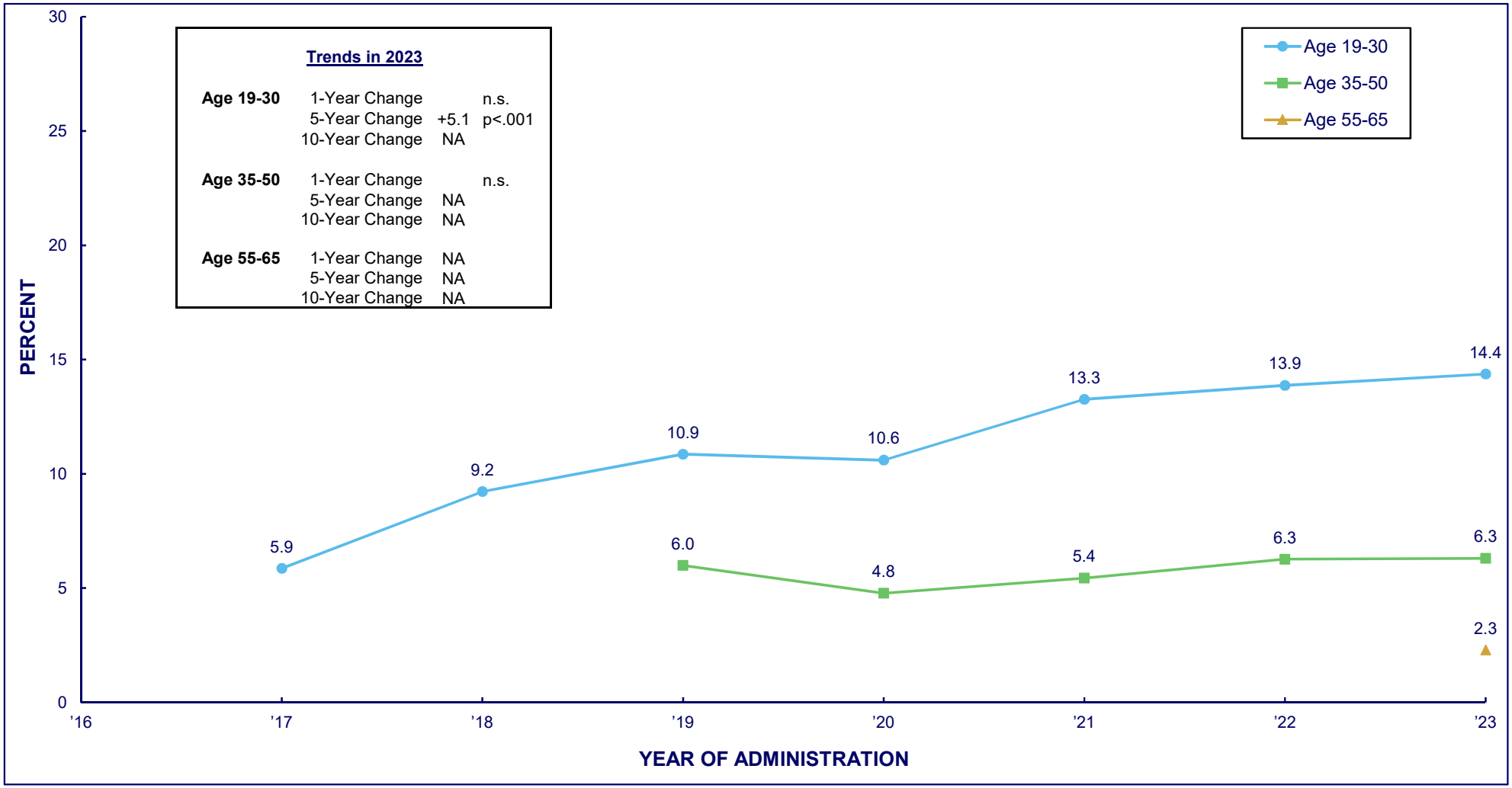
Year	Age 18	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
2017	9.5	11.0	11.3	17.2	11.2	11.7	6.6							
2018	13.1	13.8	15.7	18.4	20.5	11.8	14.3							
2019	20.8	18.1	20.6	20.0	17.6	15.8	17.1	16.0	8.6	4.2	5.8	5.4	3.7	
2020	22.1	22.4	23.3	18.2	17.4	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	25.0	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	9.8	7.3	4.3	4.6	2.7	3.2

MONITORING THE FUTURE

TABLE/FIGURE 11

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 12

VAPING CANNABIS

Trends in 30-Day Prevalence

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

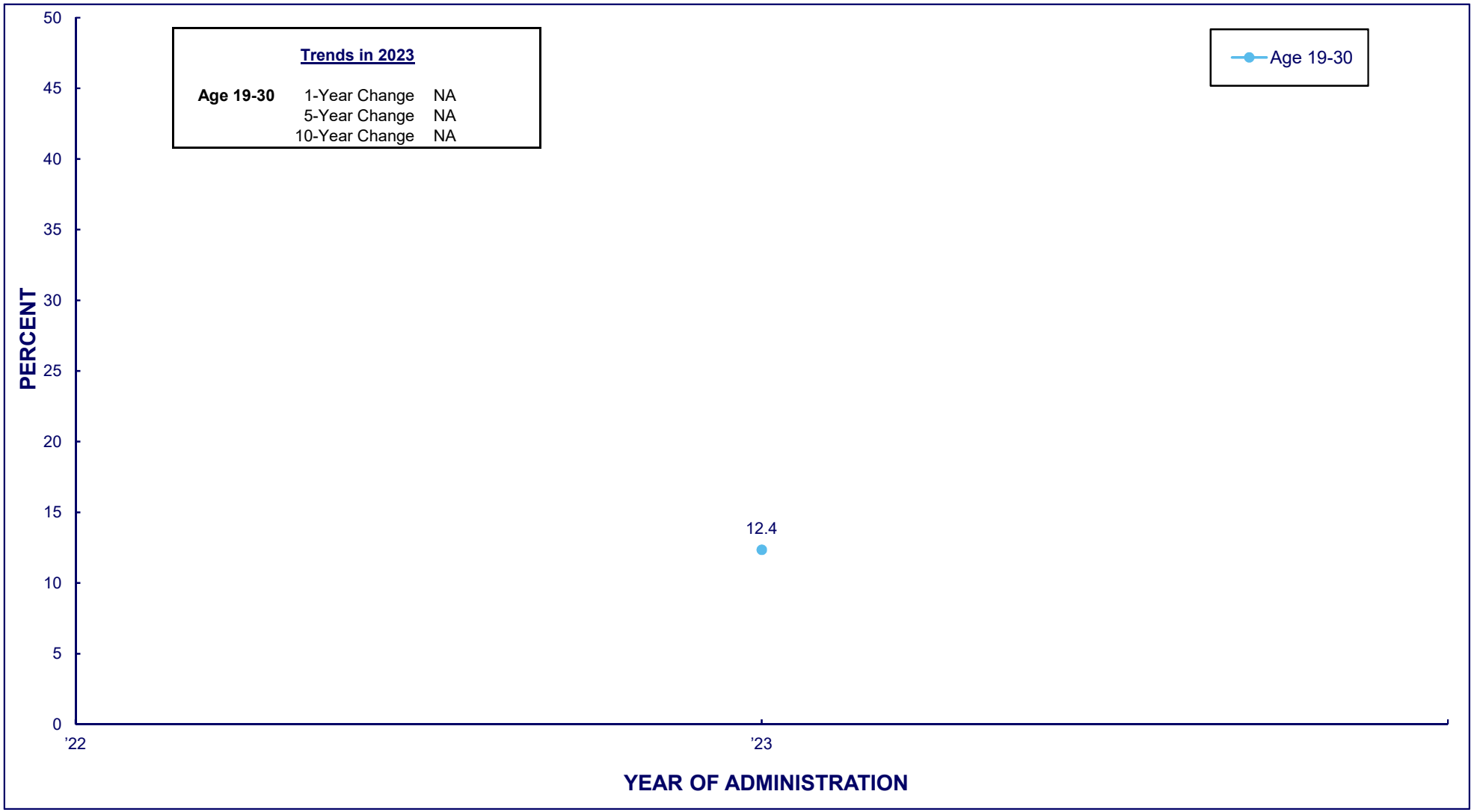
Year	Age 18	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
2017	4.9	5.1	6.2	7.0	5.2	7.6	4.0	.	.	.	.	.	.	.
2018	7.5	7.2	10.6	12.1	12.5	7.2	6.2	.	.	.	.	.	.	.
2019	14.0	10.5	11.4	10.4	10.1	10.9	11.9	12.1	6.5	2.8	3.9	3.9	2.6	.
2020	12.2	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	16.5	10.9	13.5	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	5.2	3.2	2.7	2.1	2.1

MONITORING THE FUTURE

TABLE/FIGURE 13

DELTA-8

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



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

TABLE/FIGURE 14

DELTA-8

Trends in 12-Month Prevalence

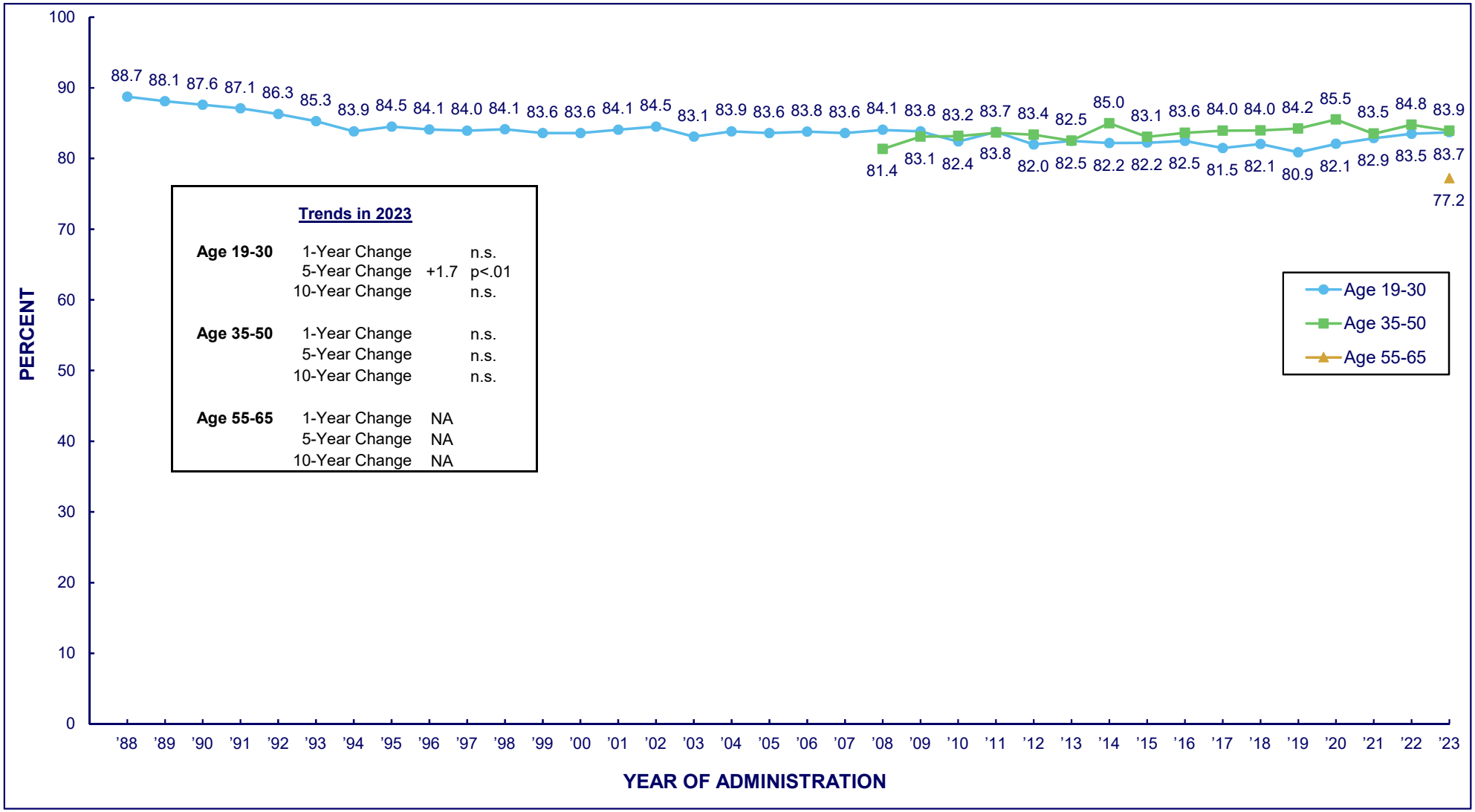
among Respondents of Modal Ages 18 through 30, by Age Group

Year	Age 18	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30
2023	11.4	11.2	15.1	13.8	13.2	11.7	10.2

TABLE/FIGURE 15

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 16

ALCOHOL

Trends in 12-Month Prevalence

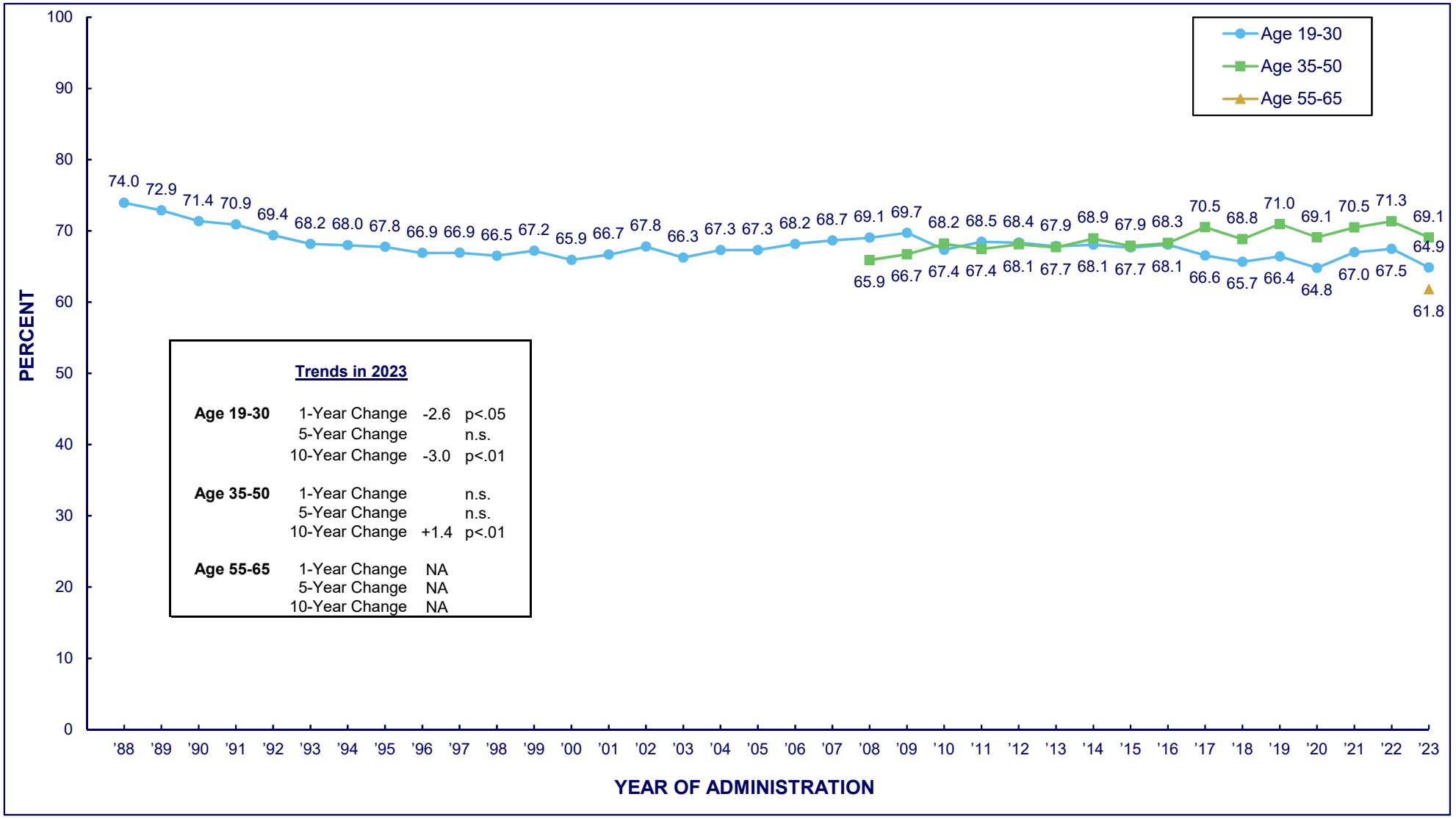
among Respondents of Modal Ages 18 through 65, by Age Group

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	85.4							
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	82.2	80.5					
2000	73.2	78.2	85.5	86.4	83.9	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	83.9	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	82.9	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	71.9	84.7	87.6	88.6	86.9	83.5	83.5	85.7	82.7	80.4			
2010	65.2	67.6	82.3	88.6	85.3	84.5	85.7	84.8	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	81.2	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	78.1		
2015	58.2	69.3	83.2	84.6	83.6	84.8	86.2	85.7	81.0	84.3	81.5	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	84.6	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	79.5	80.1	77.2	
2019	52.1	63.5	81.9	85.3	85.5	85.1	83.6	88.0	85.8	80.1	83.9	81.6	78.2	
2020	55.3	63.1	81.9	84.3	88.0	85.9	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	84.5	86.5	85.9	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	85.6	85.4	83.0	82.0	79.5	77.8	74.1

TABLE/FIGURE 17

ALCOHOL

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



Trends in 2023

Age 19-30	1-Year Change	-2.6	p<.05
	5-Year Change		n.s.
	10-Year Change	-3.0	p<.01
Age 35-50	1-Year Change		n.s.
	5-Year Change		n.s.
	10-Year Change	+1.4	p<.01
Age 55-65	1-Year Change	NA	
	5-Year Change	NA	
	10-Year Change	NA	

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

TABLE/FIGURE 18

ALCOHOL

Trends in 30-Day Prevalence

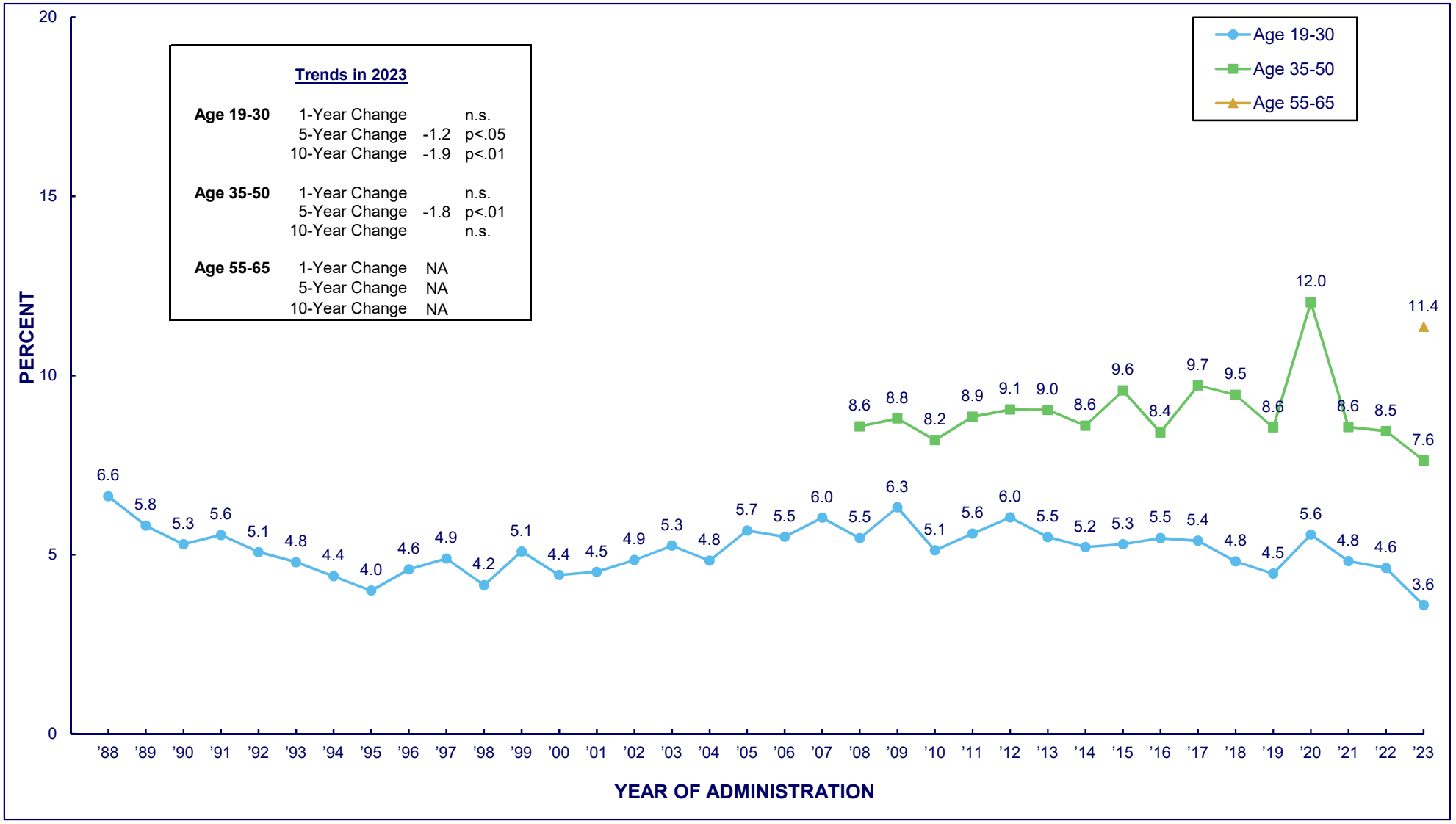
among Respondents of Modal Ages 18 through 65, by Age Group

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	76.0	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	74.5	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	75.3	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	71.4	70.6							
1991	54.0	64.8	73.9	73.0	72.7	70.8	69.9							
1992	51.3	62.0	72.0	72.6	69.4	69.6	70.2							
1993	51.0	59.7	70.1	72.1	70.2	69.3	67.3							
1994	50.1	60.6	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	69.4	64.6	66.0				
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	64.1				
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	64.7			
2010	41.2	49.7	69.8	72.8	72.8	70.2	68.2	66.4	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	73.6	72.1	70.9	68.9	69.4	67.3	65.7	62.7		
2014	37.4	48.2	68.1	68.7	71.5	76.9	73.2	72.1	65.8	70.6	67.3	64.3		
2015	35.3	48.3	67.9	71.7	69.5	72.8	73.4	71.0	64.7	67.5	68.6	65.5		
2016	33.2	49.0	71.0	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	68.3	70.6	72.1	69.8	70.1	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	61.5	
2019	29.3	43.1	68.3	71.9	72.4	70.8	71.5	73.3	71.1	67.6	72.3	65.3	64.7	
2020	33.6	41.7	63.4	66.1	72.3	70.7	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	66.7	65.1	
2022	28.4	41.2	65.2	70.2	70.3	68.1	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	59.0

TABLE/FIGURE 19

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 20

ALCOHOL

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

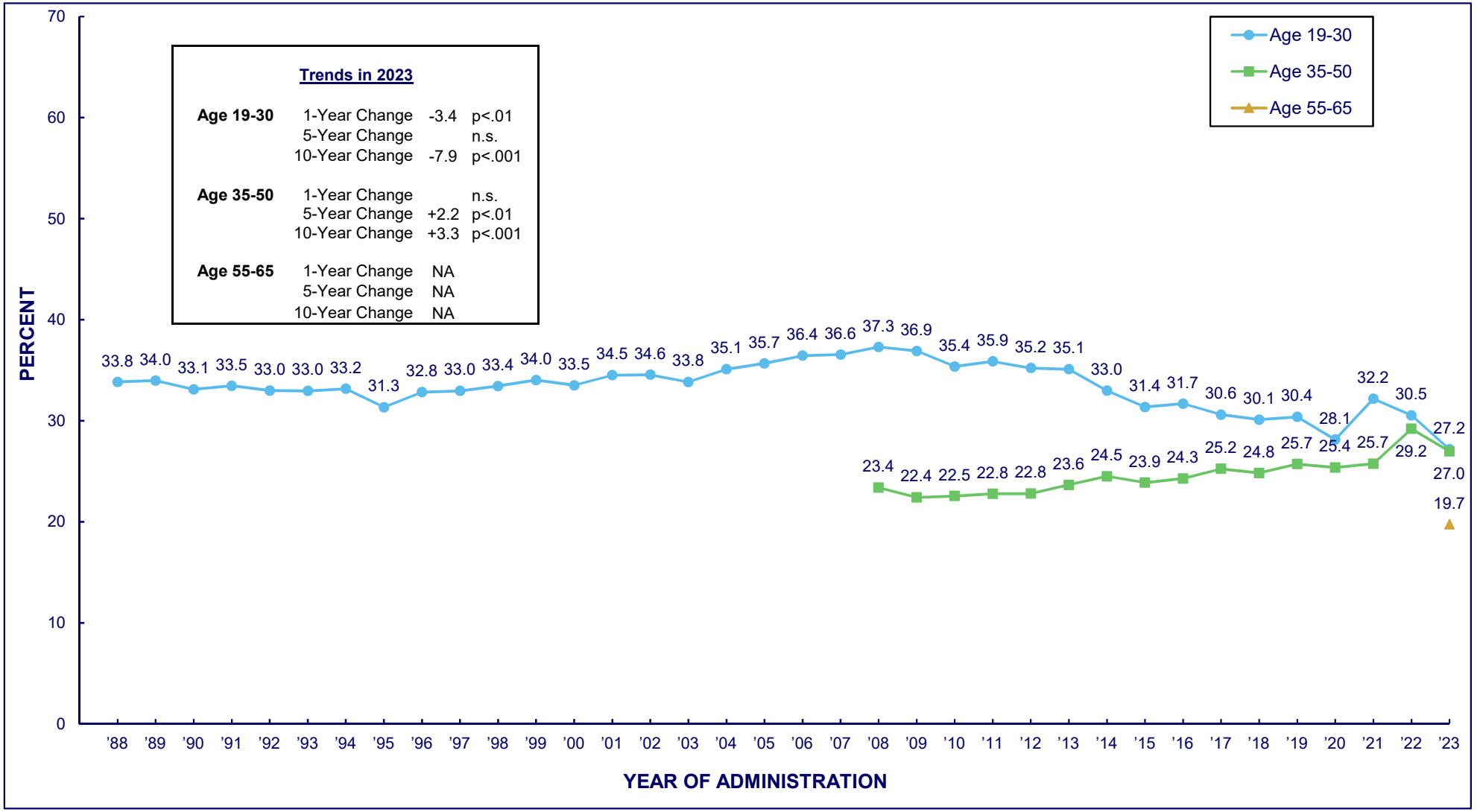
Year	Age 18	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
1976	5.6													
1977	6.1													
1978	5.7	7.8												
1979	6.9	7.5												
1980	6.0	7.3	8.6											
1981	6.0	7.4	7.9											
1982	5.7	7.9	8.1	8.5										
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	4.8	5.2	6.6	7.0	6.5	8.1	7.5	10.4			
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	11.1			
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	9.6	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	7.0	5.4	9.9	9.5	9.6	9.9	11.2		
2018	1.2	1.2	4.1	5.4	5.5	5.5	6.7	9.2	8.8	9.7	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	5.9	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	10.9

MONITORING THE FUTURE

TABLE/FIGURE 21

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 22

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

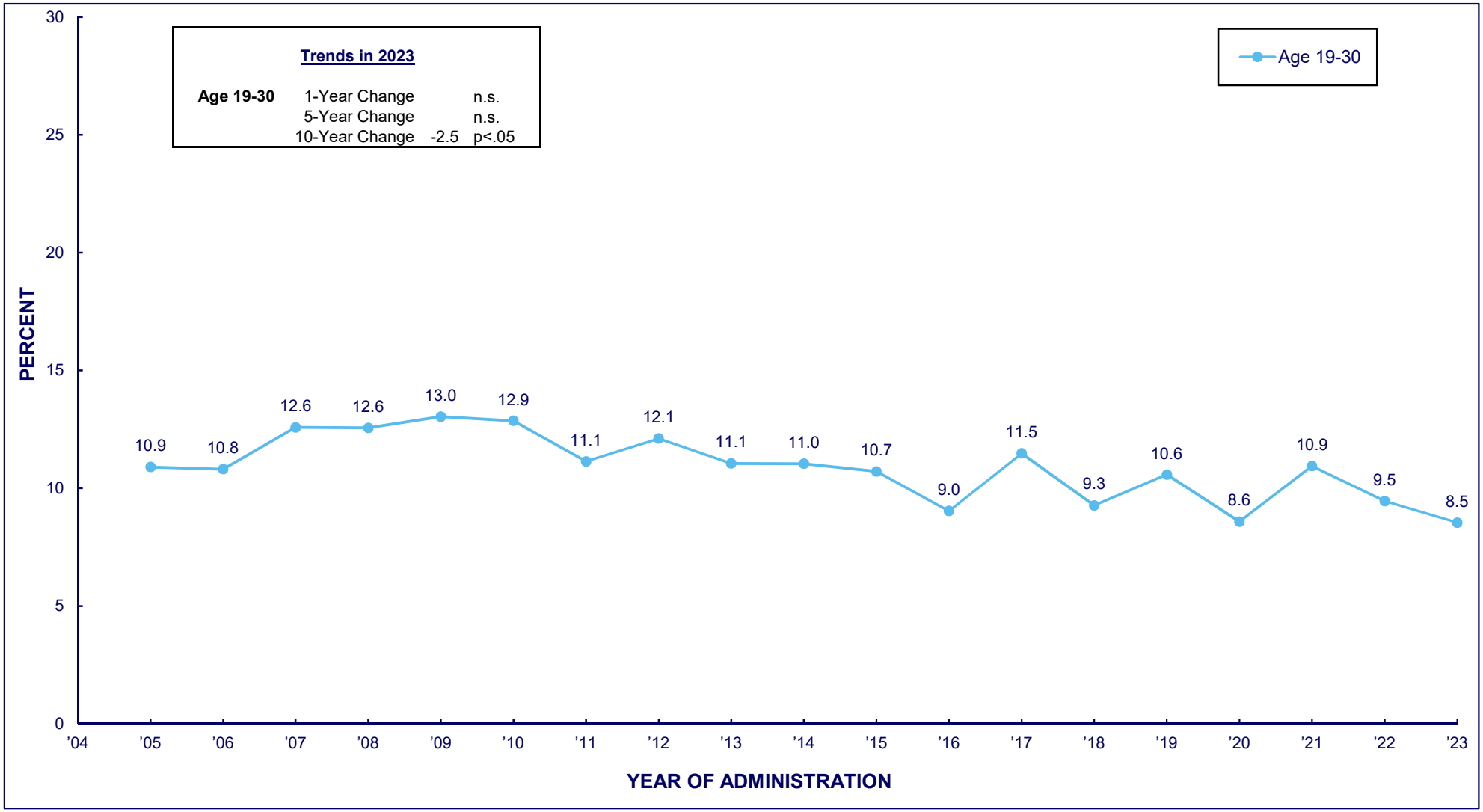
Year	Age 18	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
1976	37.1													
1977	39.4													
1978	40.3	41.6												
1979	41.2	42.1												
1980	41.2	43.1	41.6											
1981	41.4	43.6	43.9											
1982	40.5	42.3	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	42.9	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	36.6	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	26.6							
1993	27.5	33.6	39.9	34.7	33.7	30.2	26.4							
1994	28.2	35.1	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	38.0	37.8	31.4	31.3	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	35.7	33.3	30.1	27.6	21.7	20.7					
1999	30.8	35.9	40.2	37.5	32.0	32.1	27.0	22.5	21.3					
2000	30.0	34.7	40.9	37.0	33.3	31.1	24.9	24.1	19.1					
2001	29.7	36.4	41.3	39.5	34.0	29.6	27.1	22.5	22.1					
2002	28.6	35.9	39.3	39.0	35.1	29.9	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	27.9	22.3	21.9	20.5				
2005	27.1	35.5	39.2	39.0	38.9	32.3	30.2	23.5	23.6	20.7				
2006	25.4	34.5	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	24.8	22.1	19.6				
2008	24.6	30.8	42.0	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	22.9	18.6			
2010	23.2	26.7	38.0	39.8	37.8	35.9	33.6	24.9	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	20.2			
2012	23.7	27.5	37.5	38.6	36.0	36.8	35.0	26.2	23.5	21.4	20.1			
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	25.4	23.6	18.4		
2015	17.2	23.5	34.0	36.0	33.7	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	32.1	28.6	28.8	26.7	24.9	21.2	18.1		
2018	13.8	18.9	32.7	35.0	32.5	29.0	31.6	30.3	23.2	24.9	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	26.1	23.9	18.1	
2020	16.8	17.7	30.3	30.6	31.4	29.5	27.3	29.1	26.3	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	23.0	18.5	
2022	12.6	19.0	28.6	29.5	32.6	34.0	32.9	31.7	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	27.6	27.4	25.9	27.1	22.1	19.8	17.2

MONITORING THE FUTURE

TABLE/FIGURE 23

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 24

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	12.6
2020	—	8.2	9.8	8.3	10.9	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

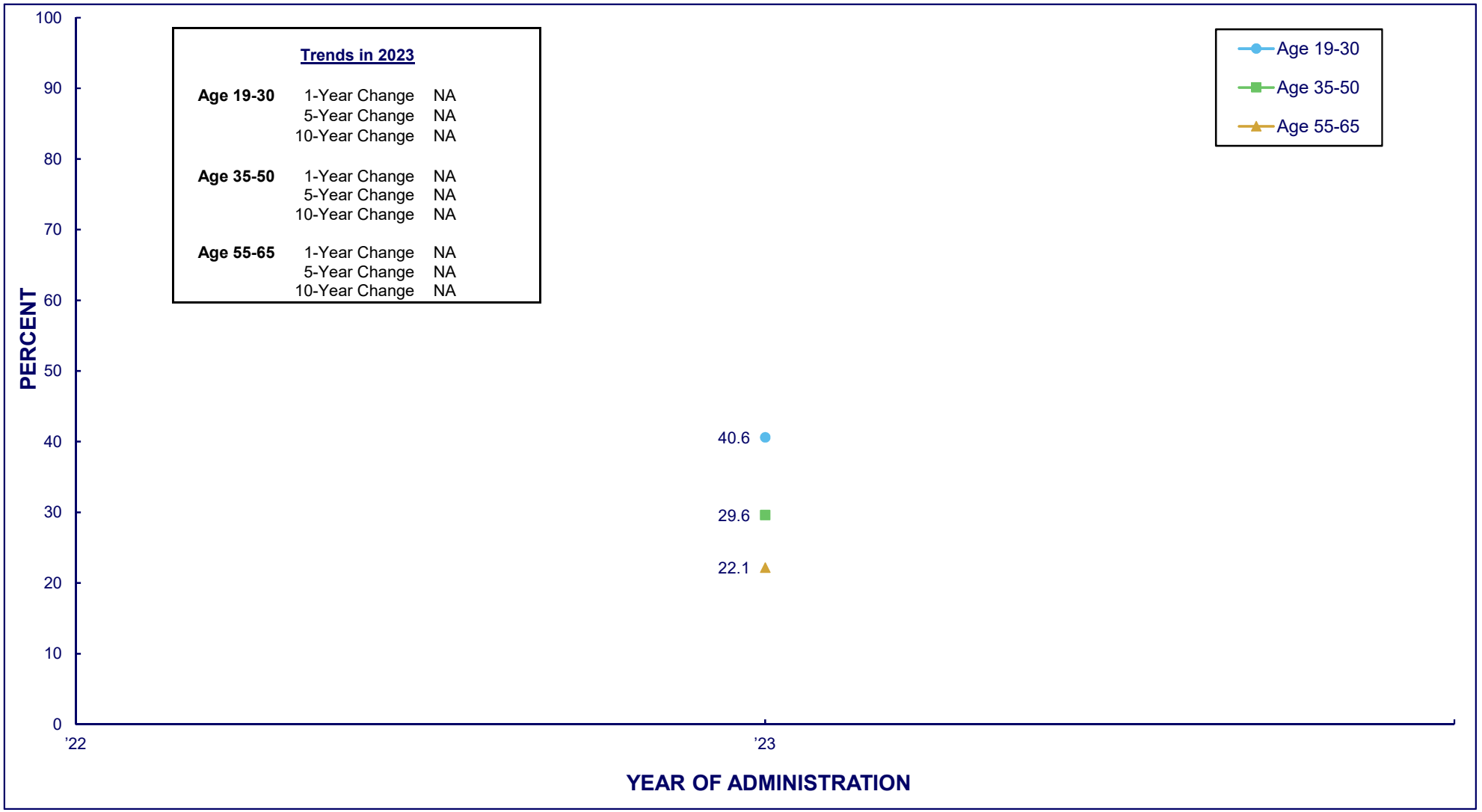
Notes. ' — ' indicates data not available.

MONITORING THE FUTURE

TABLE/FIGURE 25

ANY NICOTINE USE[1]

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



[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 26

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	29.9	34.0	26.9	28.0	24.2	20.9	21.4

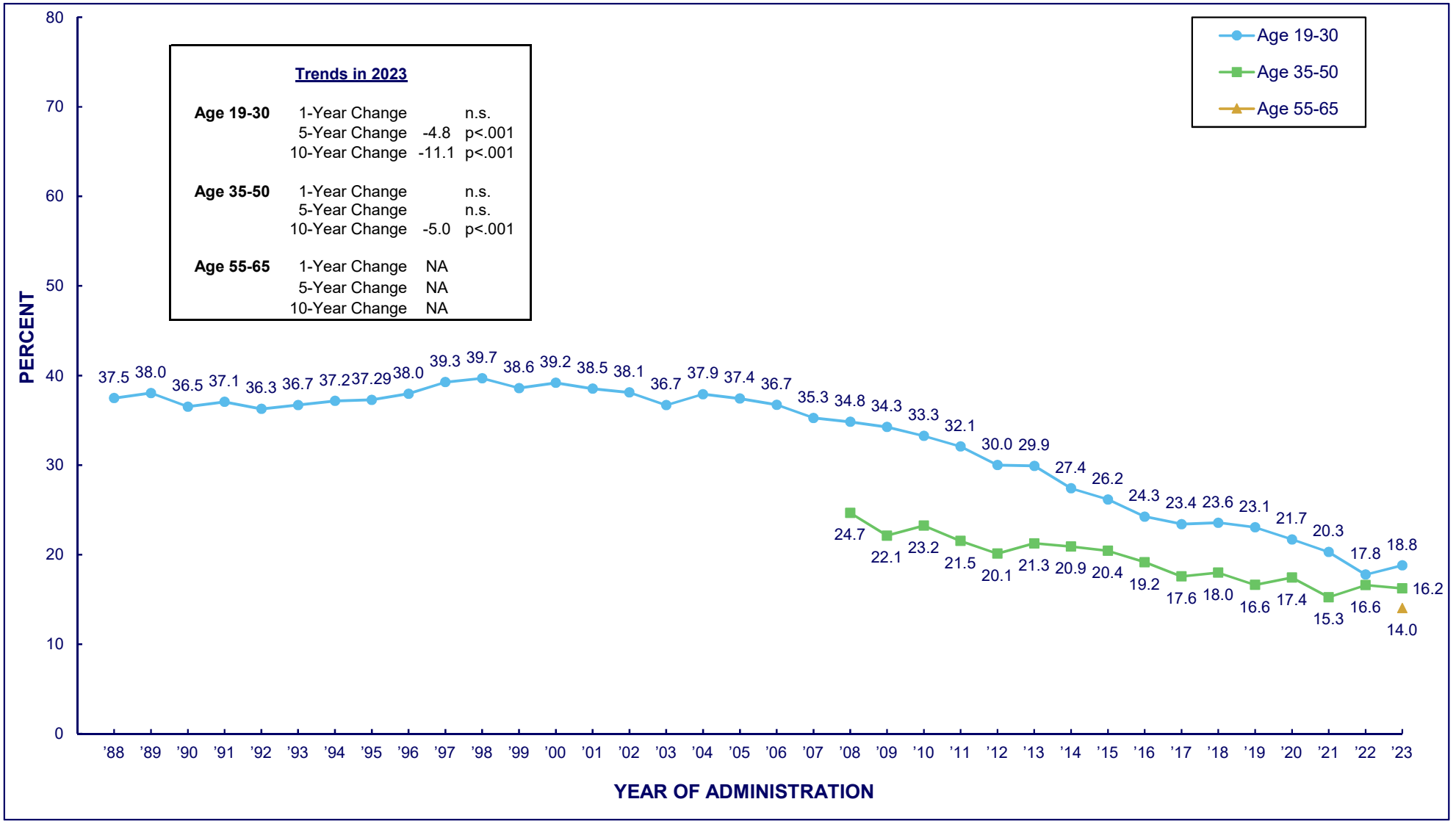
[1]Includes use of cigarettes, large cigars, small cigars, tobacco using a hookah, smokeless tobacco, or vaping nicotine

MONITORING THE FUTURE

TABLE/FIGURE 27

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 28

CIGARETTES

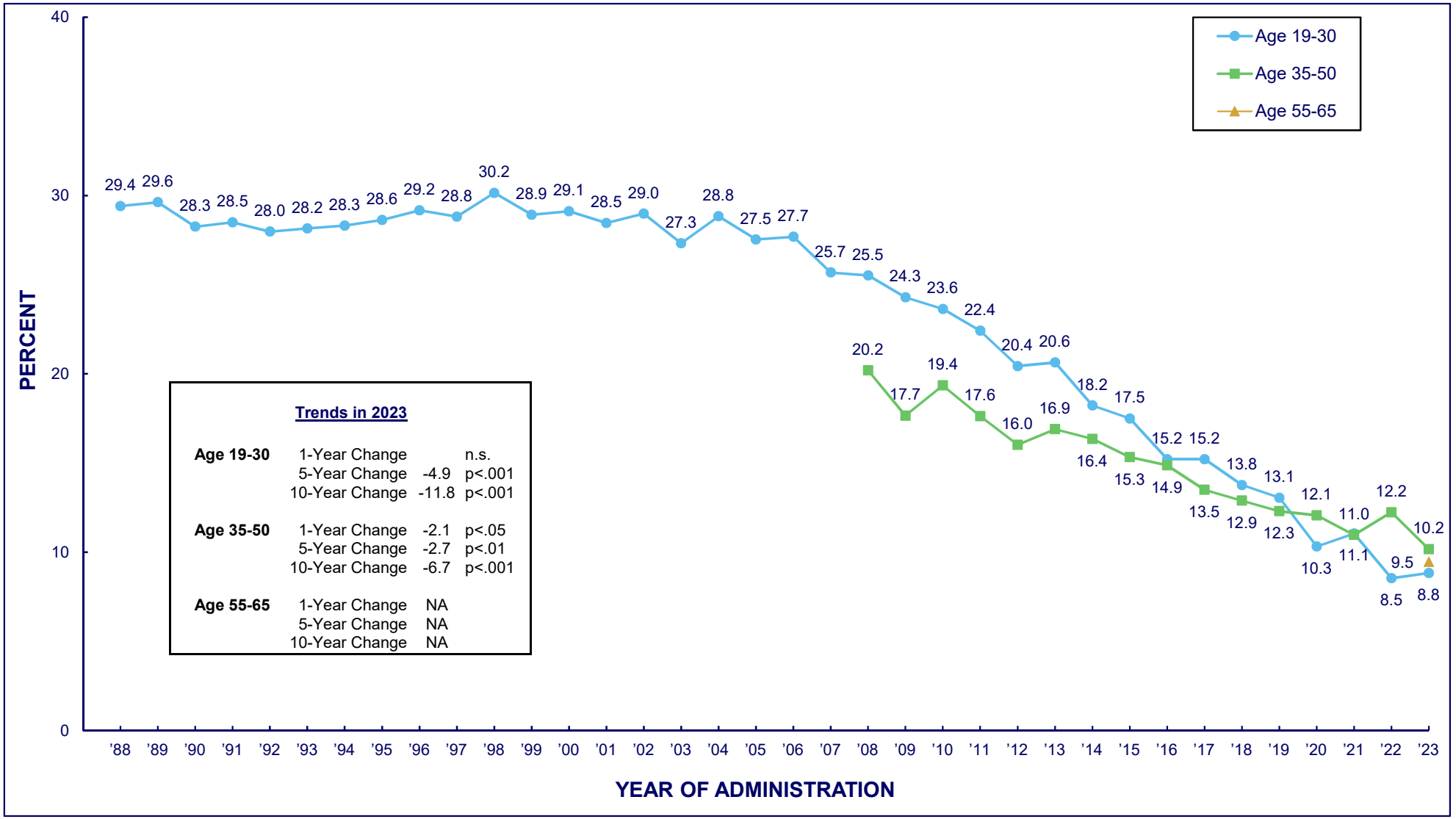
Trends in 12-Month Prevalence among Respondents of Modal Ages 18 through 65, by Age Group

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
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	35.5	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	30.3							
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	44.6	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	32.0	31.4	29.6	27.8					
2000	45.0	45.1	41.6	38.1	35.6	30.6	29.1	27.5					
2001	43.2	45.8	41.5	39.7	32.7	29.2	27.3	27.3					
2002	42.0	42.7	41.3	37.3	34.2	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	29.9	27.0	25.8	24.2				
2005	39.4	39.8	39.2	40.9	35.3	30.9	27.0	25.3	25.8				
2006	36.2	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	21.6				
2008	32.3	36.9	38.6	33.6	35.6	31.9	29.4	24.2	22.5	22.9			
2009	32.1	36.7	36.3	34.5	32.4	33.2	23.9	20.3	23.3	20.8			
2010	30.5	35.2	34.8	34.9	32.1	31.8	26.1	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	30.0	32.3	32.9	30.8	26.9	24.6	16.7	20.0	19.1			
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	18.8	18.9	19.2	18.5		
2015	26.9	27.9	27.7	28.6	25.9	20.3	26.9	19.7	15.5	20.2	18.4		
2016	17.4	27.5	25.9	25.7	23.1	25.4	24.1	20.1	15.5	17.6	16.9		
2017	17.9	27.1	25.6	26.6	24.0	19.0	20.3	20.4	12.9	16.8	16.6		
2018	19.0	23.4	29.0	23.1	24.2	22.6	21.6	18.9	17.5	14.3	18.4	16.0	
2019	17.1	25.9	22.8	26.1	23.8	22.6	19.6	18.0	13.9	15.6	16.4	14.6	
2020	18.9	21.7	23.4	24.9	21.8	19.1	20.7	17.9	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	15.1	13.8	
2022	12.3	18.4	20.9	17.2	17.5	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

TABLE/FIGURE 29

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 30

CIGARETTES

Trends in 30-Day Prevalence

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

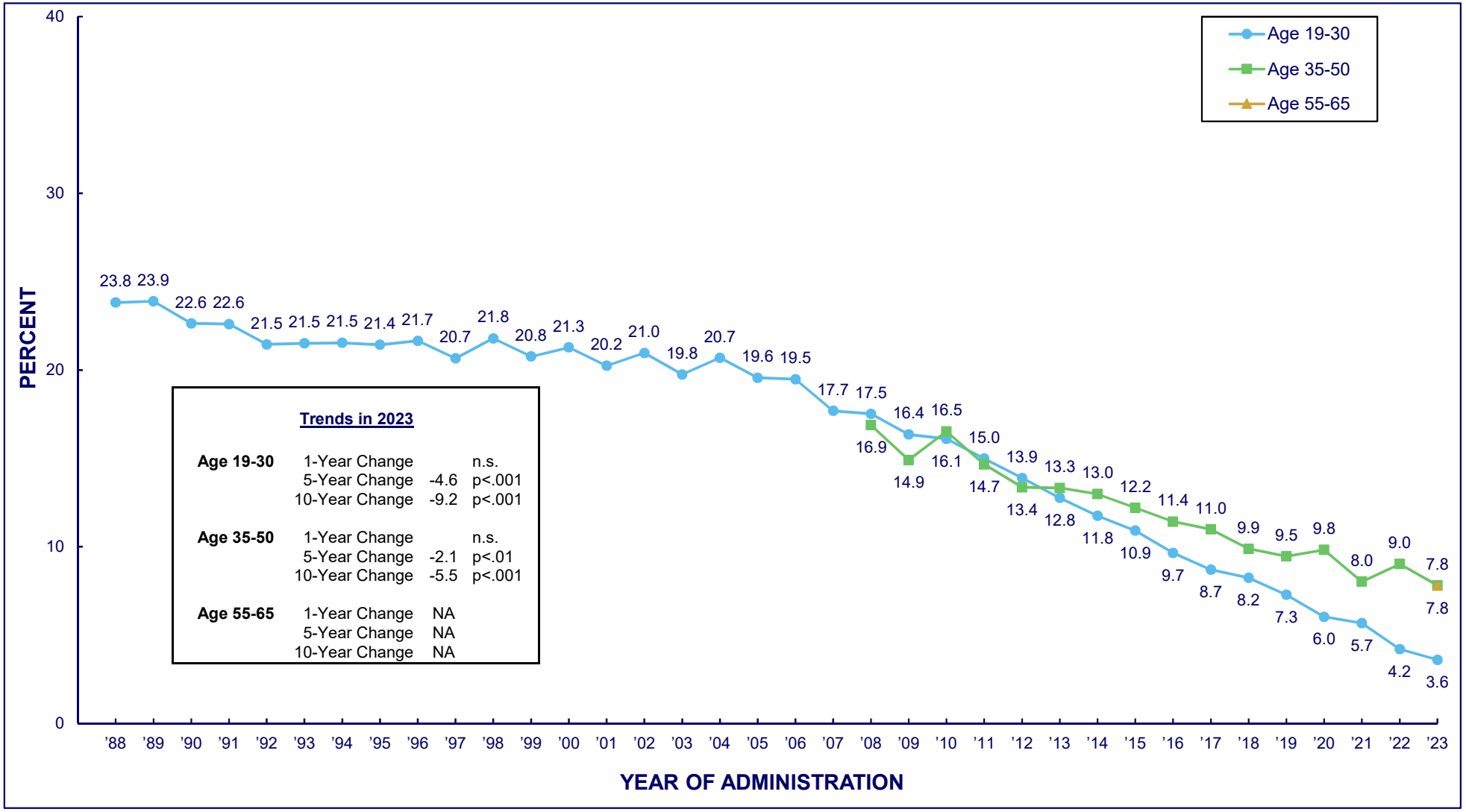
Year	Age 18	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
1976	38.8													
1977	38.4													
1978	36.7	39.3												
1979	34.4	39.1												
1980	30.5	37.0	38.0											
1981	29.4	34.6	37.0											
1982	30.0	33.7	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	32.5	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	26.3	24.1	27.0						
1997	36.5	33.9	31.4	28.3	28.5	25.4	25.7	22.8						
1998	35.1	34.0	33.3	32.3	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	23.8	24.5					
2000	31.4	32.0	34.5	30.6	29.2	26.6	22.4	24.9	23.5					
2001	29.5	31.9	33.6	31.4	28.8	24.8	21.0	21.3	24.1					
2002	26.7	30.4	32.4	32.9	27.8	25.6	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	22.7	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	17.5			
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	17.3			
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	21.5	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	14.5	16.2	15.5	15.1		
2015	11.4	17.0	18.8	19.3	19.4	15.6	14.9	19.0	14.7	11.5	16.4	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	15.8	12.0	15.5	14.5	9.9	14.1	13.2		
2018	7.6	11.2	12.4	16.8	14.2	13.9	13.9	12.3	13.2	14.4	11.5	15.3	13.9	
2019	5.7	8.4	13.3	10.8	15.2	15.4	14.9	13.0	13.8	11.6	11.0	13.2	12.2	
2020	7.5	8.1	7.8	11.4	11.6	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	11.2	8.8	8.1	8.4	13.7	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	8.8	10.1	9.7	12.0	8.5	9.9	9.9

MONITORING THE FUTURE

TABLE/FIGURE 31

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 32

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	20.8							
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	23.6	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	22.1	22.6	20.2	19.1	21.9	21.6					
1999	23.1	25.3	23.3	21.6	20.0	16.4	18.5	21.0	21.8					
2000	20.6	22.5	26.0	21.7	20.9	20.1	16.9	20.9	20.9					
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	18.2	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	17.3	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	15.2	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	15.9			
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	15.3			
2012	9.3	9.6	12.5	12.9	15.7	16.9	15.8	14.3	10.6	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	10.8	12.3	13.9	13.4		
2015	5.5	8.2	11.6	12.2	11.9	10.0	11.1	13.1	12.2	9.7	13.9	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	10.9	7.0	11.7	11.6	7.9	12.6	11.7		
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	12.8	
2019	2.4	3.2	5.9	6.1	10.4	8.5	9.0	9.5	9.4	9.7	9.3	11.9	9.9	
2020	3.1	4.1	3.9	6.4	6.7	6.9	7.6	10.0	10.6	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	4.6	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	6.0	7.7	6.8	10.6	6.9	7.9	8.5

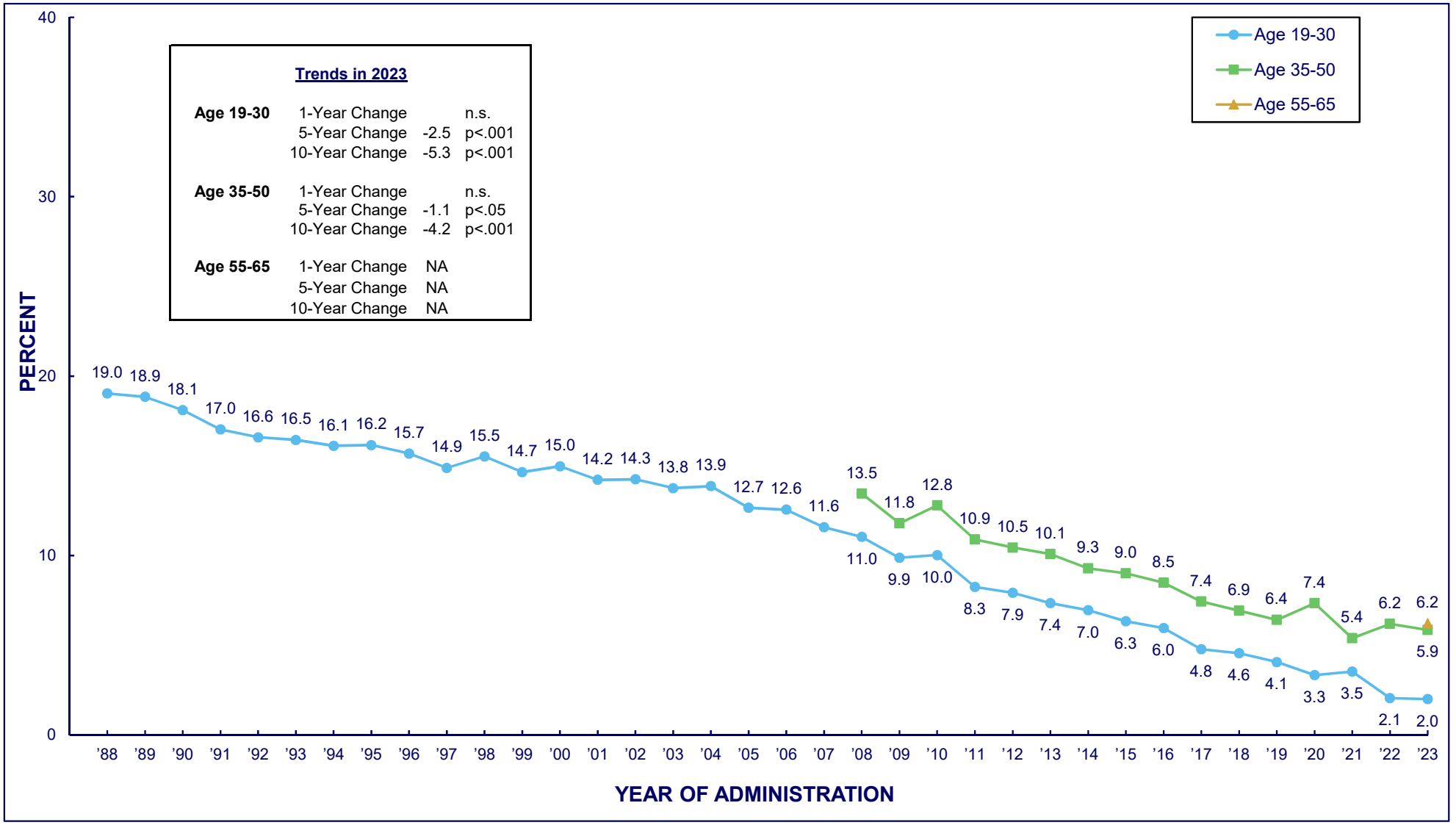
MONITORING THE FUTURE

TABLE/FIGURE 33

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 34

CIGARETTES

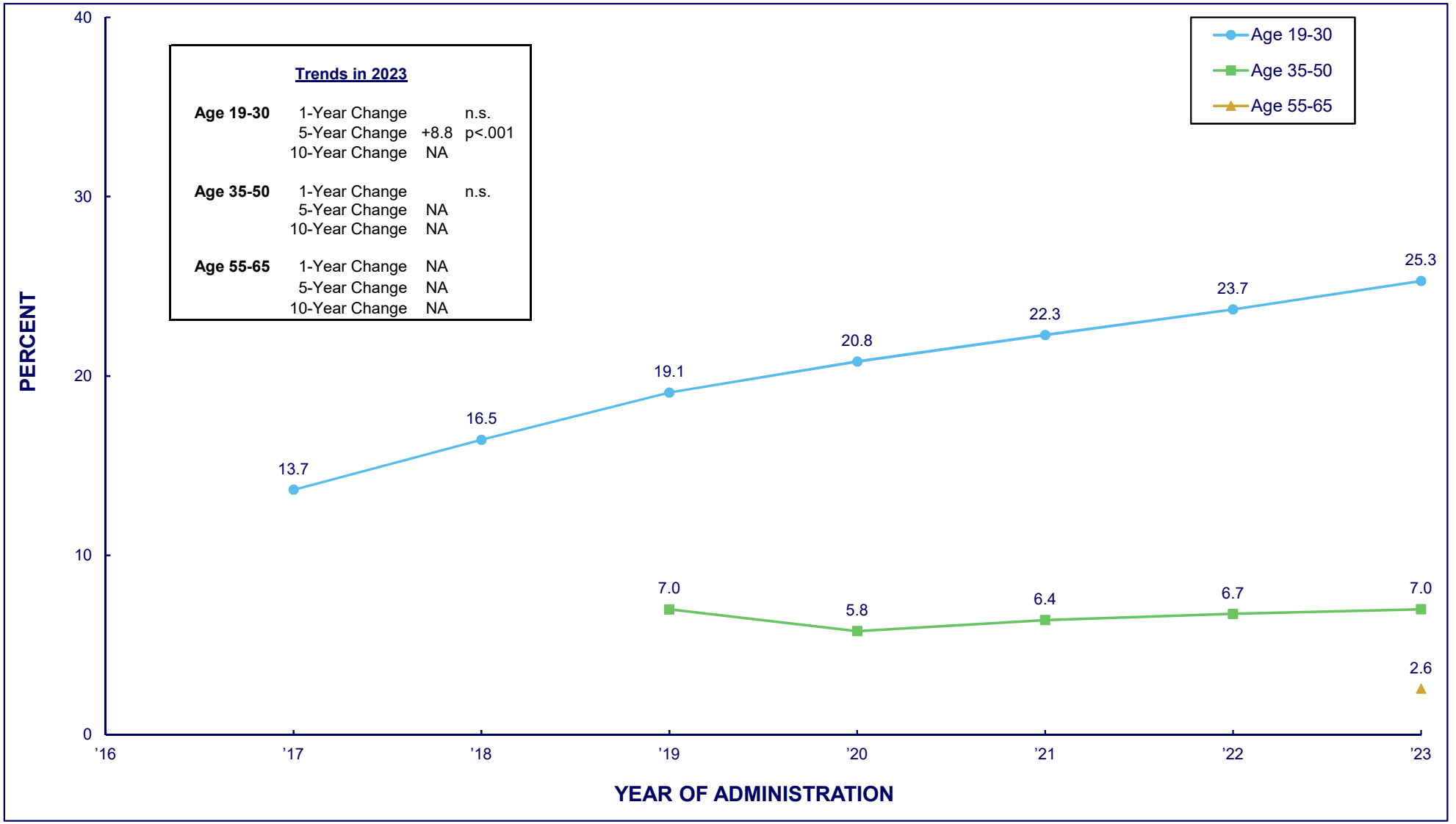
Trends in 30-Day Prevalence of Smoking a Half Pack or More per Day among Respondents of Modal Ages 18 through 65, by Age Group

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	16.7	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	15.3	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	18.2	17.6					
2000	11.3	14.3	17.9	14.4	15.2	15.1	13.1	15.6	17.3					
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	14.3	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	13.2	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	13.1				
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	7.3	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	7.4	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	11.2	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	9.3		
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	7.6	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	8.1	7.1	
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	4.7	5.3	4.7	8.5	5.7	6.3	6.6

TABLE/FIGURE 35

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 36

VAPING NICOTINE

Trends in 12-Month Prevalence

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

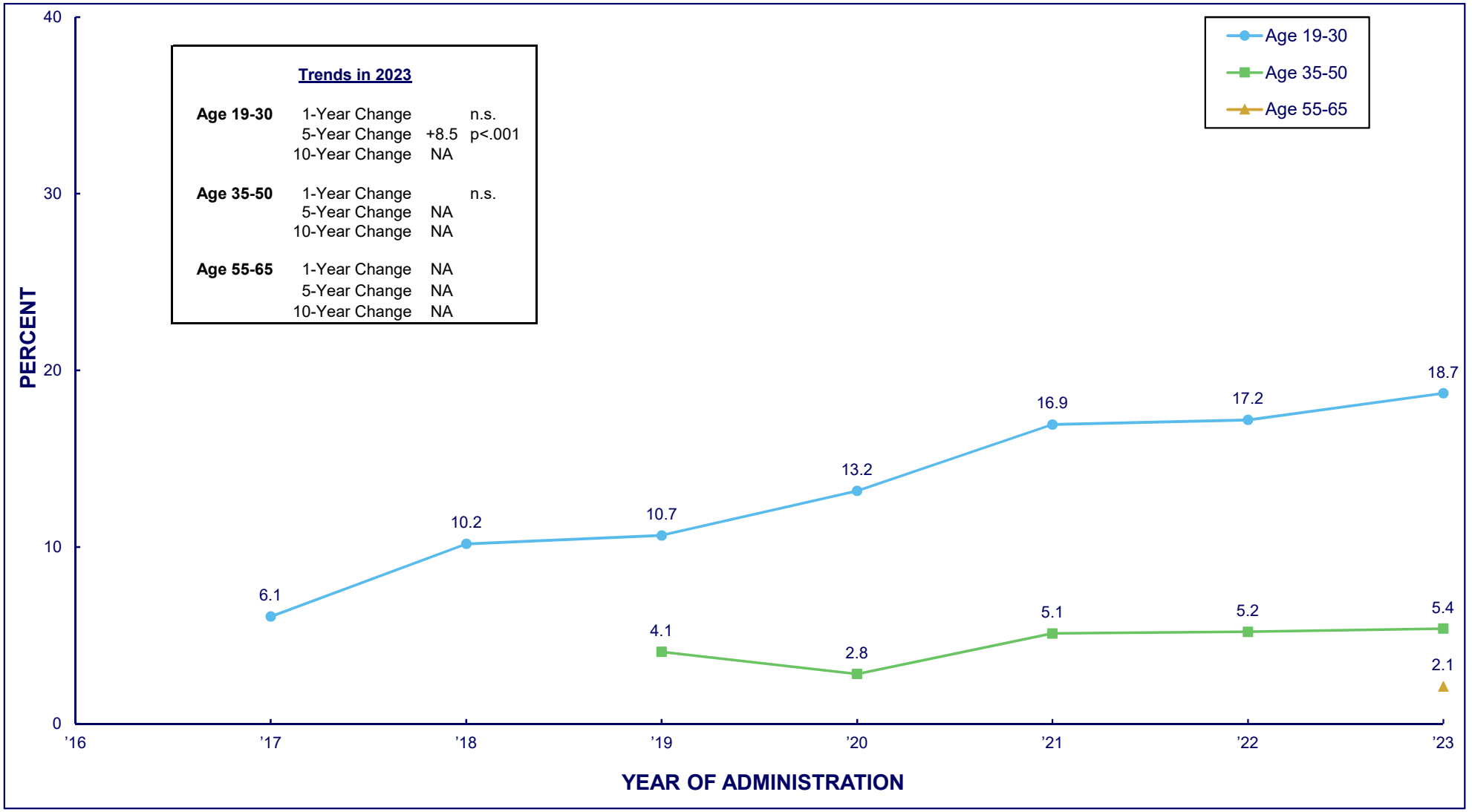
Year	Age 18	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
2017	18.8	13.3	18.4	16.7	12.7	14.5	7.1							
2018	29.7	24.0	20.0	17.8	17.8	10.8	9.8							
2019	35.3	24.6	26.5	21.1	16.5	12.6	14.7	11.9	6.6	5.2	5.3	4.4	2.8	
2020	34.5	29.4	30.4	19.6	20.5	17.2	10.8	7.7	7.3	4.2	4.3	2.7	2.6	
2021	26.6	26.6	30.8	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	31.4	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

MONITORING THE FUTURE

TABLE/FIGURE 37

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 38

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	11.3	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	22.8	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	5.0	3.7	2.8	1.6	2.0

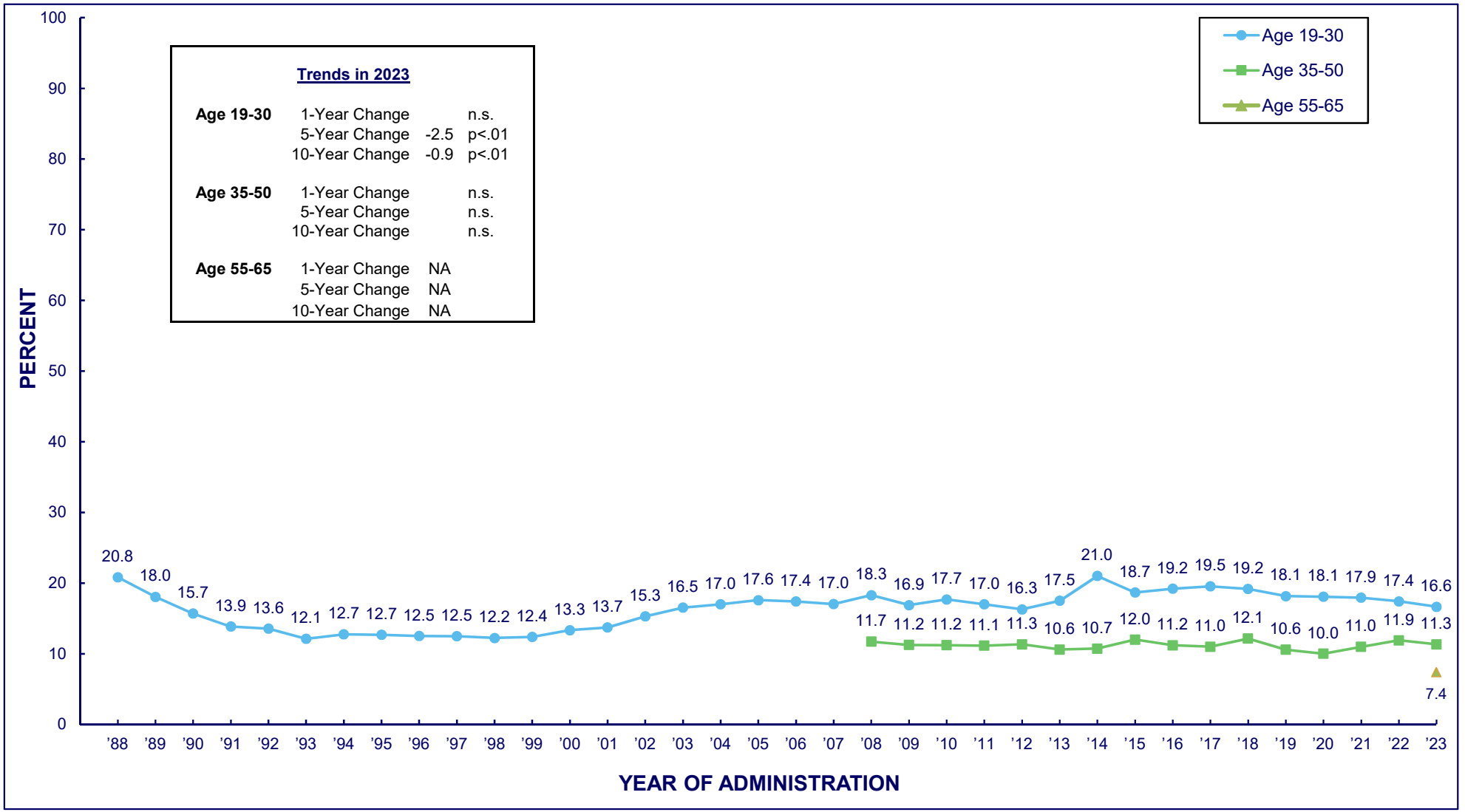
MONITORING THE FUTURE

TABLE/FIGURE 39

ANY DRUG OTHER THAN CANNABIS[1]

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). Question the use of hallucinogens are not included in the questionnaires for all years for age 55-, 60-, and 65-year-olds. Therefore, hallucinogens are not included in the estimates presented here for those ages/years.

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

TABLE/FIGURE 40

ANY DRUG OTHER THAN CANNABIS[1]

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

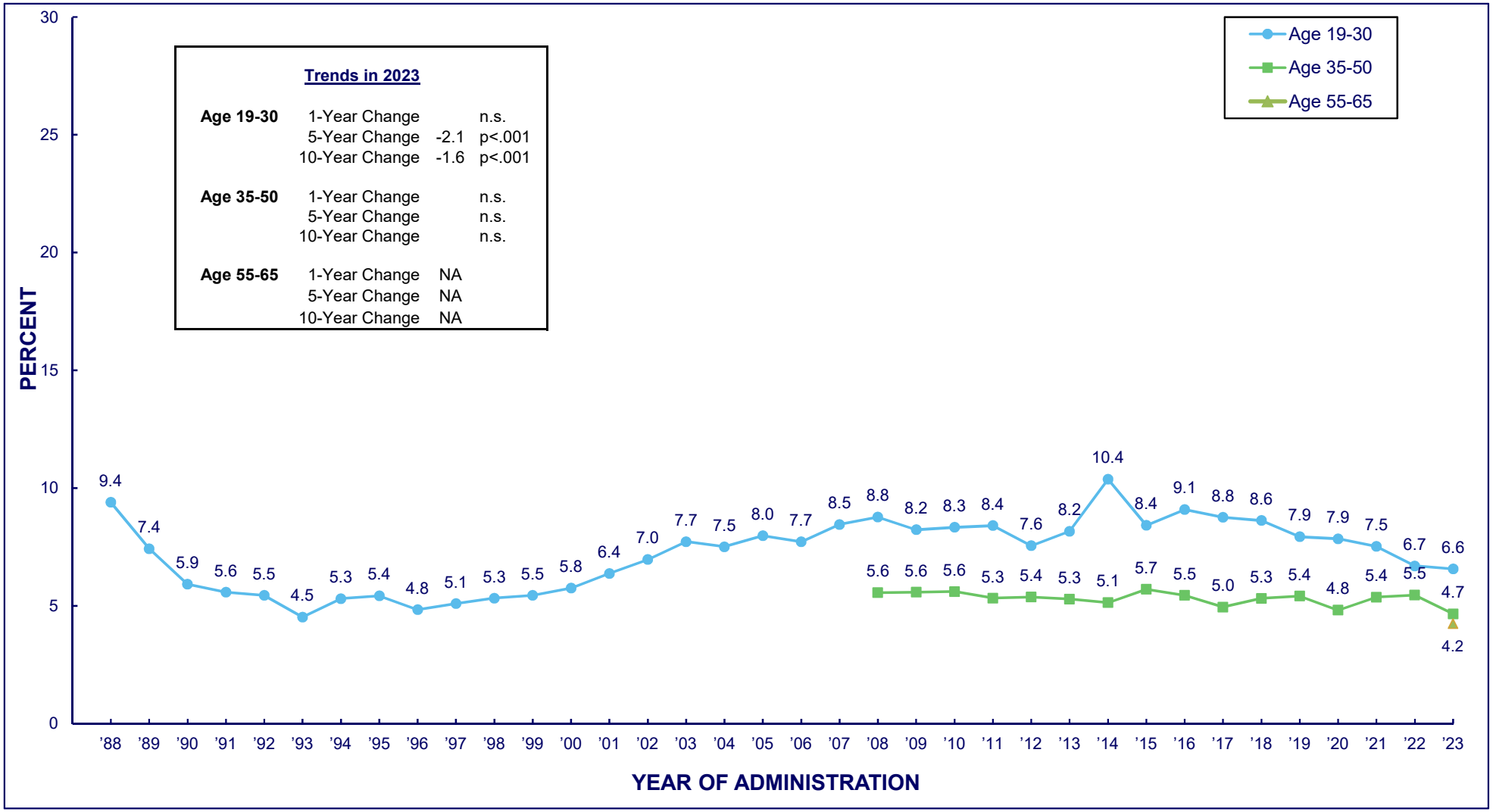
Year	Age 18	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
1976	25.4													
1977	26.0													
1978	27.1	27.7												
1979	28.2	29.3												
1980	30.4	33.2	35.4											
1981	34.0	34.1	36.0											
1982	30.1	32.2	33.8	34.9										
1983	28.4	29.4	33.3	32.8										
1984	28.0	27.5	31.6	29.3	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	25.9	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	11.6						
1995	19.4	18.0	14.5	11.6	11.2	11.6	9.2	10.3						
1996	19.8	17.4	14.2	13.7	10.1	11.0	9.0	11.3						
1997	20.7	17.4	17.0	11.7	10.5	8.6	9.9	10.1						
1998	20.2	16.1	15.2	14.3	11.2	9.7	7.2	7.8	9.3					
1999	20.7	18.5	14.3	14.7	11.7	8.5	7.0	9.5	8.4					
2000	20.4	19.4	16.4	14.1	13.5	10.3	6.9	9.3	7.8					
2001	21.6	17.3	19.4	14.2	13.3	11.6	7.1	8.9	7.2					
2002	20.9	18.9	18.5	17.4	14.6	13.2	9.6	10.3	9.3					
2003	19.8	19.8	20.8	20.1	14.2	15.1	10.1	10.6	6.8	9.6				
2004	20.5	19.5	20.4	21.0	16.0	14.9	11.2	10.6	9.2	10.1				
2005	19.7	19.5	20.5	17.5	19.6	14.2	14.6	11.0	10.1	8.5				
2006	19.2	18.0	21.8	18.6	17.3	15.5	13.6	10.7	10.1	10.0				
2007	18.5	16.9	19.9	19.3	17.2	16.9	12.2	11.2	12.0	10.9				
2008	18.3	17.2	19.4	20.8	18.9	19.0	14.6	13.8	11.8	10.6	10.7			
2009	17.0	14.0	22.0	17.3	18.1	14.4	15.4	13.2	10.4	10.4	11.0			
2010	17.3	16.7	20.1	20.2	19.3	16.6	13.0	12.6	9.6	11.9	10.8			
2011	17.6	17.7	17.5	18.6	17.8	16.3	13.5	14.7	9.2	10.3	10.4			
2012	17.0	15.9	17.6	18.9	15.4	16.9	12.6	12.8	10.6	11.4	10.5			
2013	17.8	17.7	21.3	17.6	17.9	16.6	13.5	13.2	11.3	10.4	8.1	6.9		
2014	15.9	22.0	23.0	21.7	22.3	19.3	17.8	16.1	9.1	8.6	9.4	7.9		
2015	15.2	17.9	21.8	22.1	18.7	17.8	13.6	16.0	10.6	10.4	11.3	8.6		
2016	14.3	17.2	24.4	19.6	18.8	19.3	16.0	14.8	12.3	8.7	9.6	9.0		
2017	13.3	16.7	20.9	23.2	21.5	18.1	16.6	13.6	11.2	9.7	9.9	8.1		
2018	12.4	13.3	22.0	22.2	20.5	19.2	17.4	15.0	10.7	11.2	11.9	9.7	7.6	
2019	11.5	11.5	20.5	19.5	19.3	19.4	18.6	14.3	11.2	9.4	8.1	9.2	7.0	
2020	11.4	14.5	19.4	19.2	21.3	18.2	15.2	13.7	10.8	8.8	7.1	9.3	7.2	
2021	7.2	15.2	15.0	20.1	21.7	18.3	16.6	13.2	10.2	12.0	8.6	7.1	8.3	
2022	8.0	9.4	13.8	20.6	21.3	18.9	16.3	14.6	13.4	10.7	9.0	8.4	7.5	
2023	7.4	13.8	14.8	13.6	18.2	19.5	18.2	16.7	11.3	10.0	7.5	9.9	7.1	6.1

[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). Questions about the use of hallucinogens are not included in the questionnaires for all years for age 55-, 60-, and 65-year-olds. Therefore, hallucinogen are not included in the estimates presented here for those ages/years.

TABLE/FIGURE 41

ANY DRUG OTHER THAN CANNABIS[1]

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



[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). Question the use of hallucinogens are not included in the questionnaires for all years for age 55-, 60-, and 65-year-olds. Therefore, hallucinogens are not included in the estimates presented here for those ages/years.

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

TABLE/FIGURE 42

ANY DRUG OTHER THAN 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	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
1976	13.9													
1977	15.2													
1978	15.1	14.2												
1979	16.8	16.5												
1980	18.4	19.2	21.5											
1981	21.7	21.1	22.0											
1982	17.0	17.4	17.5	20.1										
1983	15.4	14.3	16.7	16.2										
1984	15.1	14.5	16.1	14.6	16.7									
1985	14.9	14.4	14.2	16.7	15.5									
1986	13.2	12.9	13.8	15.0	11.9	11.9								
1987	11.6	10.2	11.3	9.9	11.6	11.3								
1988	10.0	9.8	10.2	9.3	9.2	8.5	9.6							
1989	9.1	6.7	8.7	7.7	7.2	7.4	7.0							
1990	8.0	5.6	5.9	7.0	6.6	5.2	5.2							
1991	7.1	4.8	5.1	5.6	6.4	5.8	5.7							
1992	6.3	6.0	5.5	5.0	5.9	5.7	4.7							
1993	7.9	5.5	5.5	4.1	5.3	3.8	3.2							
1994	8.8	6.5	6.4	5.2	4.6	4.8	4.4	4.5						
1995	10.0	8.0	5.9	4.8	4.2	5.2	4.6	4.9						
1996	9.5	6.9	5.1	5.8	3.6	3.5	4.3	4.6						
1997	10.7	7.4	7.3	5.6	3.3	3.3	3.9	5.8						
1998	10.7	7.5	5.9	5.5	5.5	4.0	3.7	3.2	5.6					
1999	10.4	8.5	6.2	6.3	4.7	3.8	3.5	3.8	3.3					
2000	10.4	8.9	6.8	6.5	5.8	3.9	3.0	3.5	3.9					
2001	11.0	8.7	8.9	6.4	5.4	5.6	3.6	4.1	3.5					
2002	11.3	9.0	8.9	8.1	6.1	5.5	4.5	5.4	3.6					
2003	10.4	9.6	9.3	9.4	6.3	6.4	5.8	4.9	3.3	4.9				
2004	10.8	9.8	9.0	8.6	6.9	5.8	5.6	4.7	5.0	4.2				
2005	10.3	8.0	10.2	8.1	8.8	6.2	6.9	5.0	4.7	3.8				
2006	9.8	8.5	9.4	7.9	8.0	7.1	5.6	4.8	4.2	5.5				
2007	9.5	9.1	9.5	8.7	9.0	7.7	6.8	5.3	6.0	5.0				
2008	9.3	8.5	9.6	10.1	8.4	8.4	7.6	5.8	4.6	5.7	6.2			
2009	8.6	6.3	10.2	8.3	9.4	7.7	7.6	5.6	5.2	5.1	6.4			
2010	8.6	7.9	9.8	10.5	7.9	6.8	7.0	6.4	5.1	5.3	5.8			
2011	8.9	8.2	8.4	9.8	8.8	8.0	7.2	7.3	3.9	5.3	5.0			
2012	8.4	8.1	7.3	9.0	6.9	7.9	5.9	4.8	5.0	5.3	6.4			
2013	8.2	8.0	11.1	8.2	8.2	7.1	6.4	6.3	5.2	5.5	4.4	3.6		
2014	7.7	12.0	10.5	10.6	11.4	9.1	8.7	6.9	4.4	4.5	4.9	4.0		
2015	7.6	8.8	11.4	11.0	6.3	7.5	5.7	8.0	5.0	3.8	6.2	4.5		
2016	6.9	7.2	13.1	8.9	7.5	10.4	7.6	6.5	5.8	4.8	4.9	4.0		
2017	6.3	5.5	9.9	10.8	9.4	8.3	8.3	5.4	5.8	3.7	4.9	4.2		
2018	6.0	5.9	9.3	10.3	8.9	8.3	9.0	5.0	3.9	4.9	7.4	4.7	4.4	
2019	5.2	4.4	9.6	9.8	7.7	8.1	8.1	7.1	6.2	4.4	4.2	4.7	3.5	
2020	4.8	6.2	8.5	9.5	8.8	7.3	6.6	6.7	5.6	4.0	3.1	4.3	3.8	
2021	2.9	5.3	6.5	6.4	9.9	8.7	7.5	6.4	4.2	5.6	5.3	3.7	4.7	
2022	3.6	2.1	4.4	9.7	7.9	8.2	5.8	5.4	6.7	4.9	4.9	4.1	4.0	
2023	3.4	4.9	5.2	3.8	7.8	9.5	7.3	6.4	5.0	4.7	2.8	5.8	3.6	3.4

[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). Questions about the use of hallucinogens are not included in the questionnaires for all years for age 55-, 60-, and 65-year-olds. Therefore, hallucinogen are not included in the estimates presented here for those ages/years.

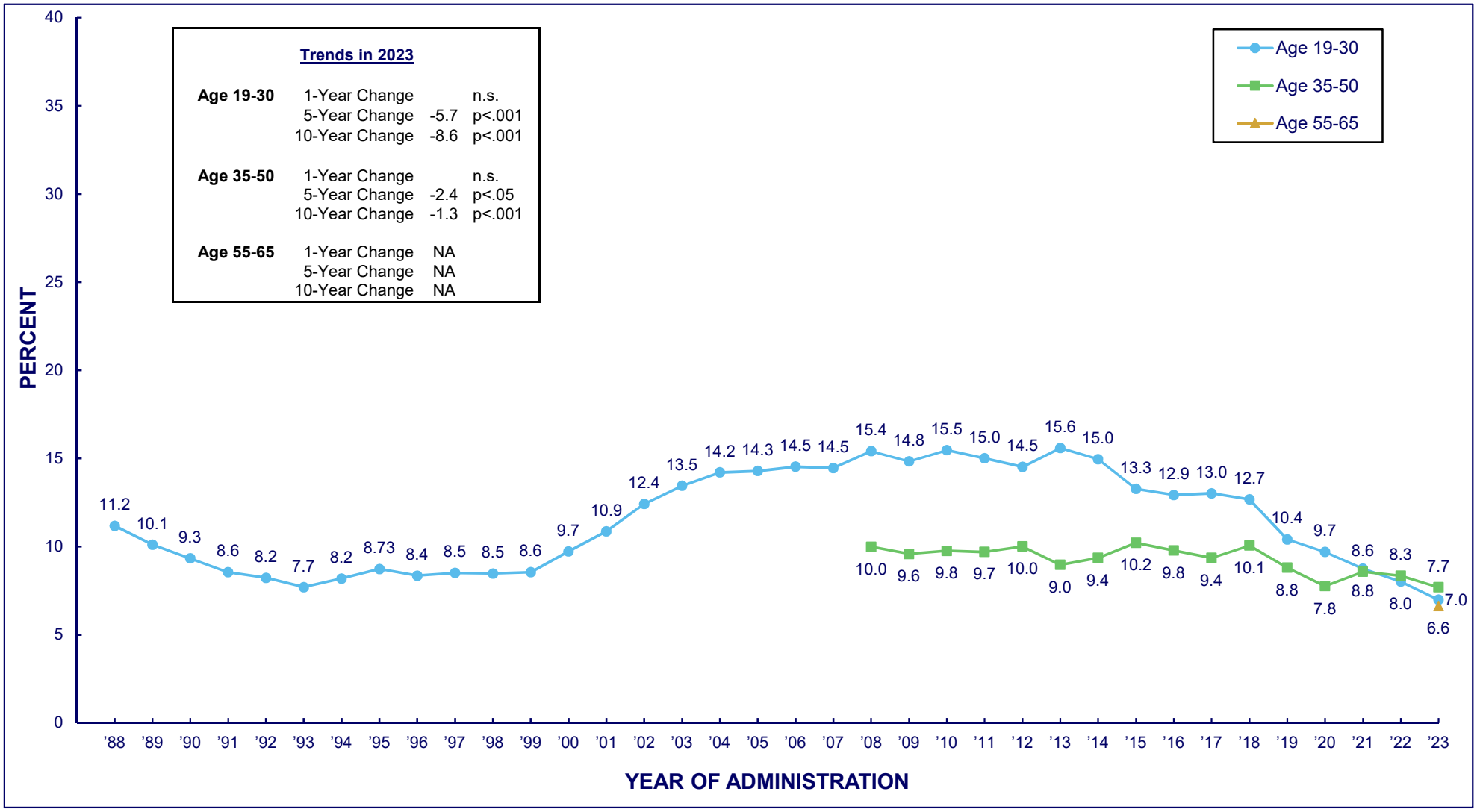
MONITORING THE FUTURE

TABLE/FIGURE 43

ANY PRESCRIPTION DRUG[1]

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.

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

TABLE/FIGURE 44

ANY PRESCRIPTION DRUG[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	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
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	21.2	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	15.1	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	7.5						
1995		12.4	10.3	7.4	7.2	7.8	7.4	6.9						
1996		12.1	9.5	8.8	6.1	6.9	6.9	6.9						
1997		11.6	12.8	7.3	6.4	5.6	7.6	6.5						
1998		11.7	9.8	9.9	7.6	6.7	5.3	4.4	5.6					
1999		13.5	9.3	9.7	8.0	5.9	5.3	6.3	4.7					
2000		15.7	11.3	10.1	9.5	6.8	5.6	5.6	5.3					
2001		13.7	14.9	11.6	9.8	8.7	7.1	7.2	5.4					
2002		15.5	14.9	13.8	12.0	10.6	8.3	8.3	6.8					
2003		17.1	16.5	16.4	11.8	11.4	8.5	8.9	4.1	6.1				
2004		17.4	16.1	17.0	12.9	12.3	10.5	8.5	6.4	7.1				
2005	17.1	15.6	17.1	13.9	15.0	10.8	13.7	9.4	7.2	6.4				
2006	16.8	14.3	18.6	15.6	14.0	12.7	12.3	9.3	8.4	7.8				
2007	15.8	14.6	17.3	16.9	13.6	13.5	11.1	9.5	10.2	8.7				
2008	15.4	14.8	15.3	17.9	15.7	15.5	13.5	12.5	10.4	8.5	8.8			
2009	14.4	12.2	19.0	14.1	16.4	12.0	15.2	11.4	9.5	8.5	9.1			
2010	15.0	14.7	17.6	17.3	17.2	13.5	12.3	11.0	8.4	10.3	9.4			
2011	15.2	15.7	15.3	15.8	15.6	14.4	13.1	12.4	8.3	8.7	9.5			
2012	14.8	13.7	16.0	16.0	14.0	15.2	12.1	11.0	9.3	10.4	9.3			
2013	15.9	16.5	19.0	15.0	15.0	14.6	13.2	10.7	9.7	8.7	7.1	6.0		
2014	13.9	16.0	16.6	14.0	15.4	13.3	14.6	14.1	7.8	7.8	8.2	6.4		
2015	12.9	13.1	14.9	15.2	12.4	12.3	11.7	12.3	10.0	9.3	9.5	7.9		
2016	12.0	12.1	18.1	11.7	12.1	11.6	12.3	13.0	10.8	8.0	8.0	7.9		
2017	10.9	10.8	13.8	14.7	13.7	12.1	12.7	11.4	9.5	8.6	8.3	6.9		
2018	9.9	8.3	14.3	14.8	12.6	12.4	13.5	12.9	8.2	8.5	10.9	8.0	6.2	
2019	8.6	6.6	12.0	11.0	9.9	11.4	11.6	10.9	8.9	7.9	7.8	8.2	6.0	
2020	7.6	7.9	9.3	9.6	11.5	10.0	9.4	10.4	7.7	7.4	5.8	7.3	6.7	
2021	4.4	5.8	8.2	8.7	10.7	8.5	9.4	8.6	8.2	9.6	7.8	6.4	7.7	
2022	5.0	5.5	5.2	8.5	9.9	8.9	8.8	9.8	9.1	7.2	7.3	7.6	7.0	
2023	4.2	5.3	5.6	5.8	6.2	10.9	7.3	10.1	7.6	7.5	5.7	8.5	6.1	5.3

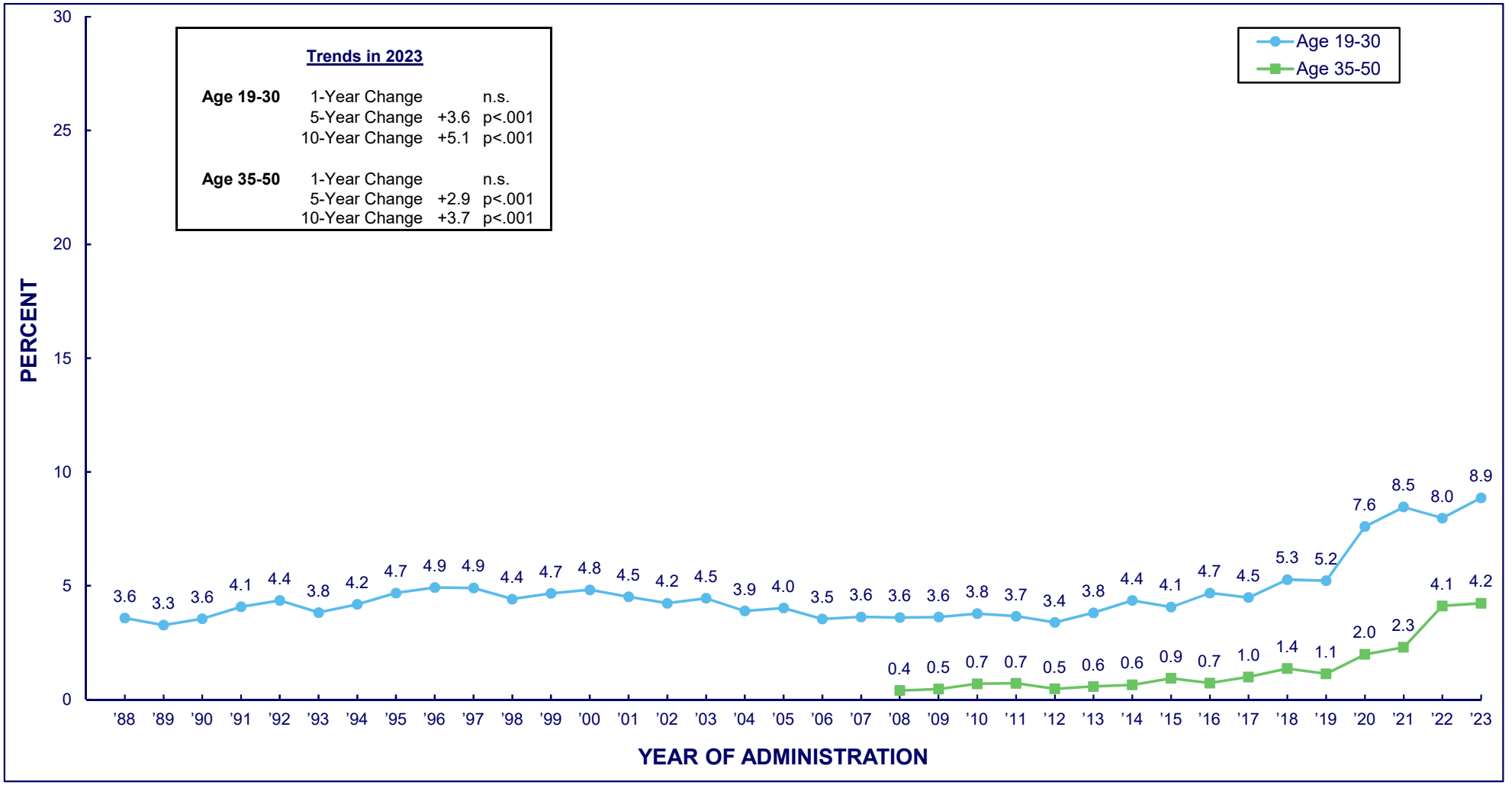
[1]An index of non-medical use of any prescription drug includes amphetamines, sedatives (barbiturates), tranquilizers, and narcotics other than heroin.

MONITORING THE FUTURE

TABLE/FIGURE 45

HALLUCINOGENS

Trends in 12-Month Prevalence among Respondents of Modal Ages 19 through 50, by Age Group



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

TABLE/FIGURE 46

HALLUCINOGENS[1]

Trends in 12-Month Prevalence

among Respondents of Modal Ages 18 through 55 [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	Age 40	Age 45	Age 50	Age 55
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	10.1	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	2.6	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	8.6	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	9.7	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

[1]Unadjusted for the possible underreporting of PCP.

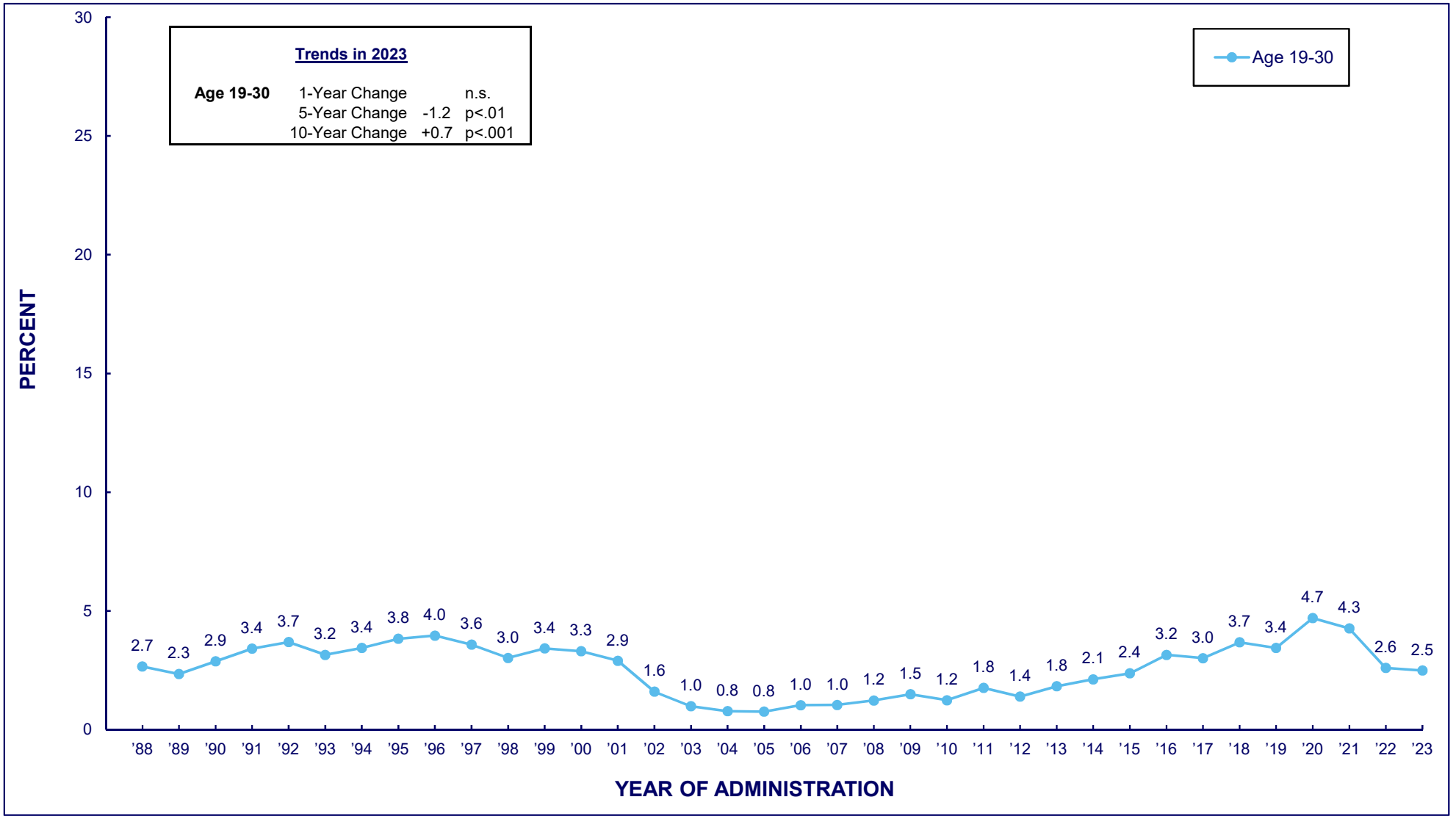
[2]Questions about the use of hallucinogens were not included in the questionnaires for 60- and 65-year-olds. Therefore, we only present estimates through age 55 here.

MONITORING THE FUTURE

TABLE/FIGURE 47

LSD

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



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

TABLE/FIGURE 48

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	4.0	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	—

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

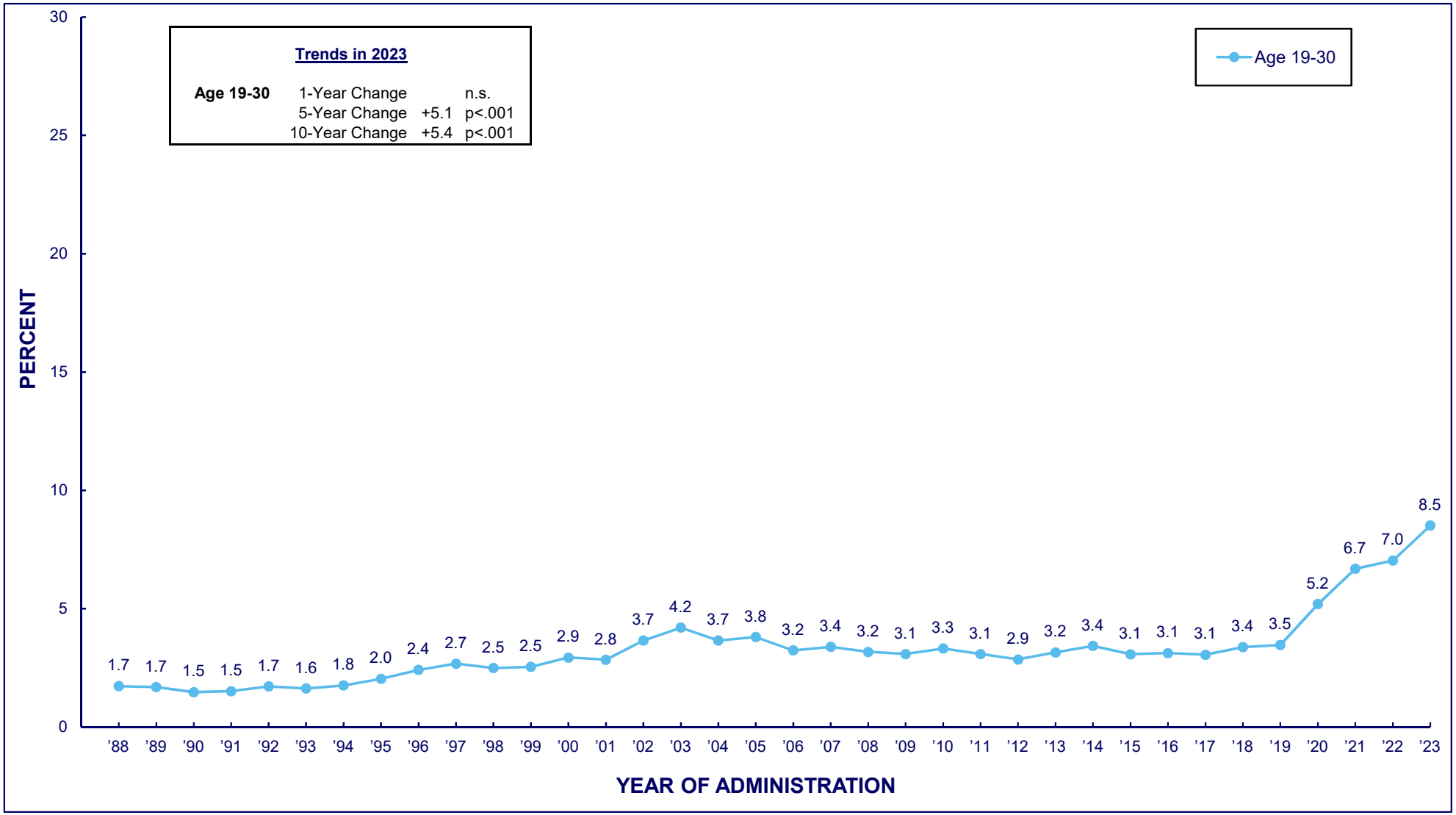
[1]Questions about LSD use were not included in the questionnaires for ages 40 and older, or age 35 after 20(

MONITORING THE FUTURE

TABLE/FIGURE 49

HALLUCINOGENS OTHER THAN LSD

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



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

TABLE/FIGURE 50

HALLUCINOGENS OTHER THAN LSD [1]

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	3.5	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	3.1	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	5.1	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	3.4	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	2.8	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	8.1	8.4	8.1	5.2
2023	4.0	9.0	8.6	5.6	10.1	8.4	9.5

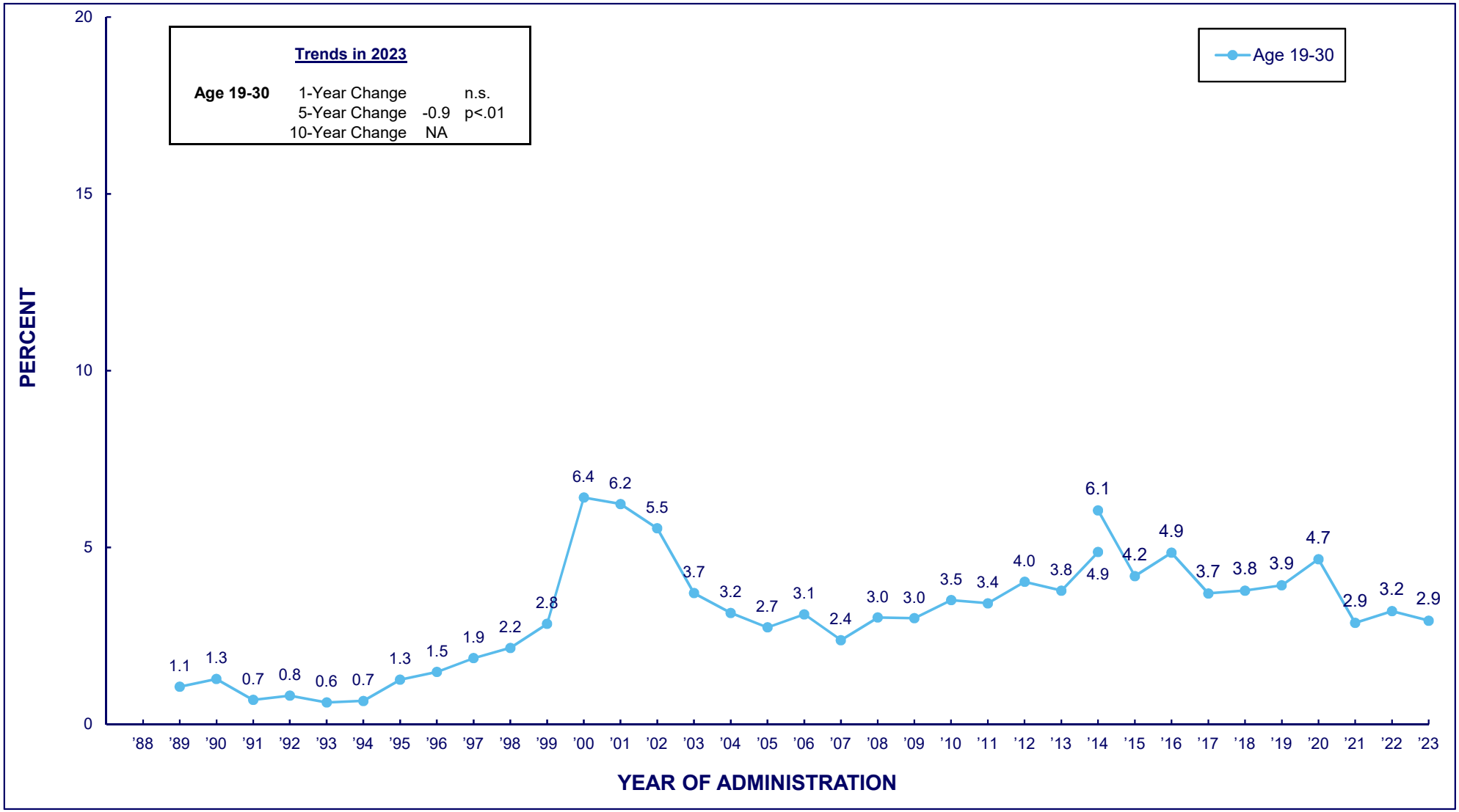
[1] Unadjusted for the possible underreporting of PCP.

MONITORING THE FUTURE

TABLE/FIGURE 51

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 52

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	—	3.8	—	2.7	—	5.5	—	2.9
2023	—	0.7	—	1.1	—	0.4	—	2.9	—	3.5	—	4.6	—	3.5

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

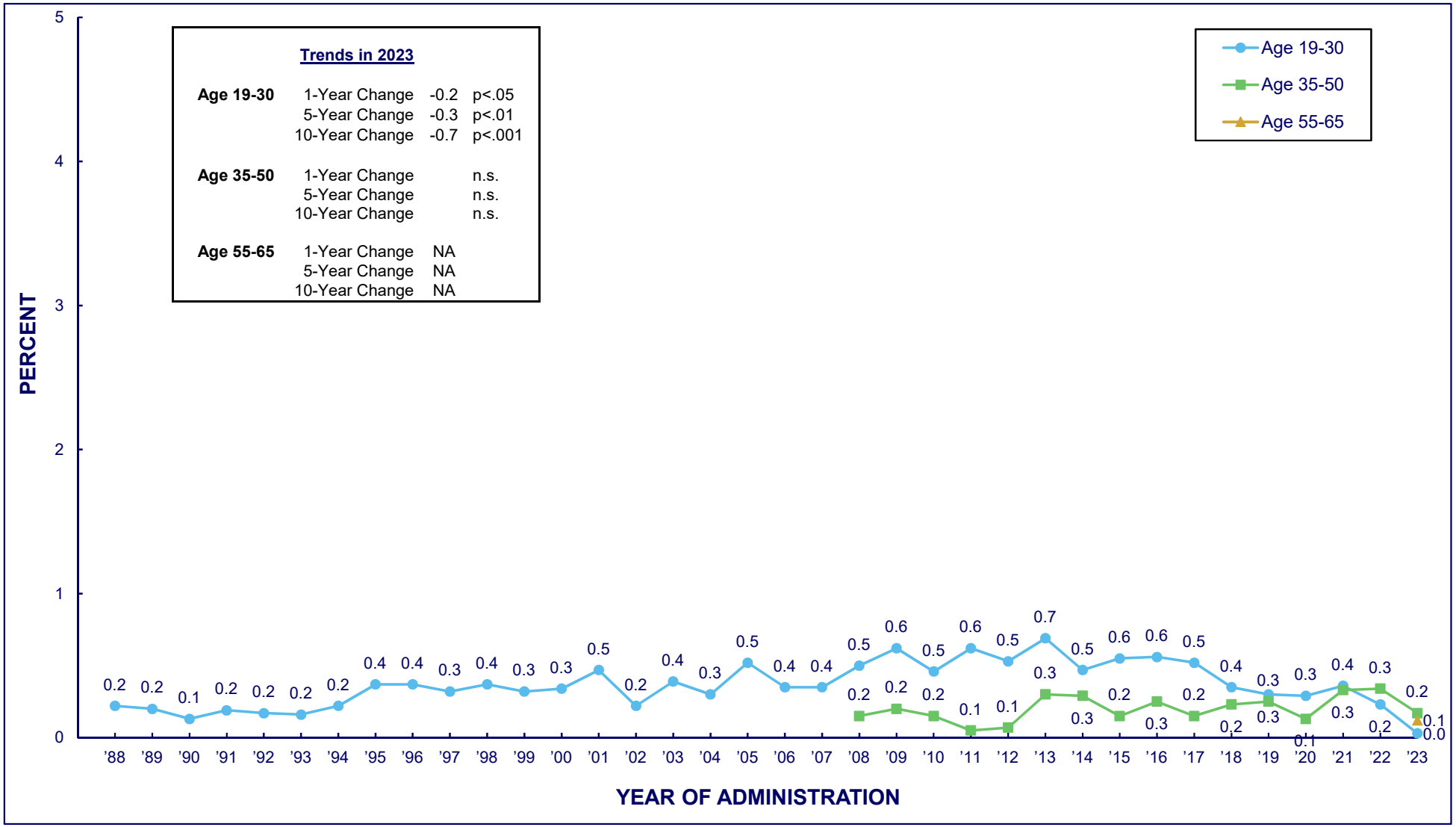
[1]Questions about use of ecstasy (MDMA, Molly) were not included in the questionnaires administered to those ages 35+.

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

TABLE/FIGURE 53

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 54

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

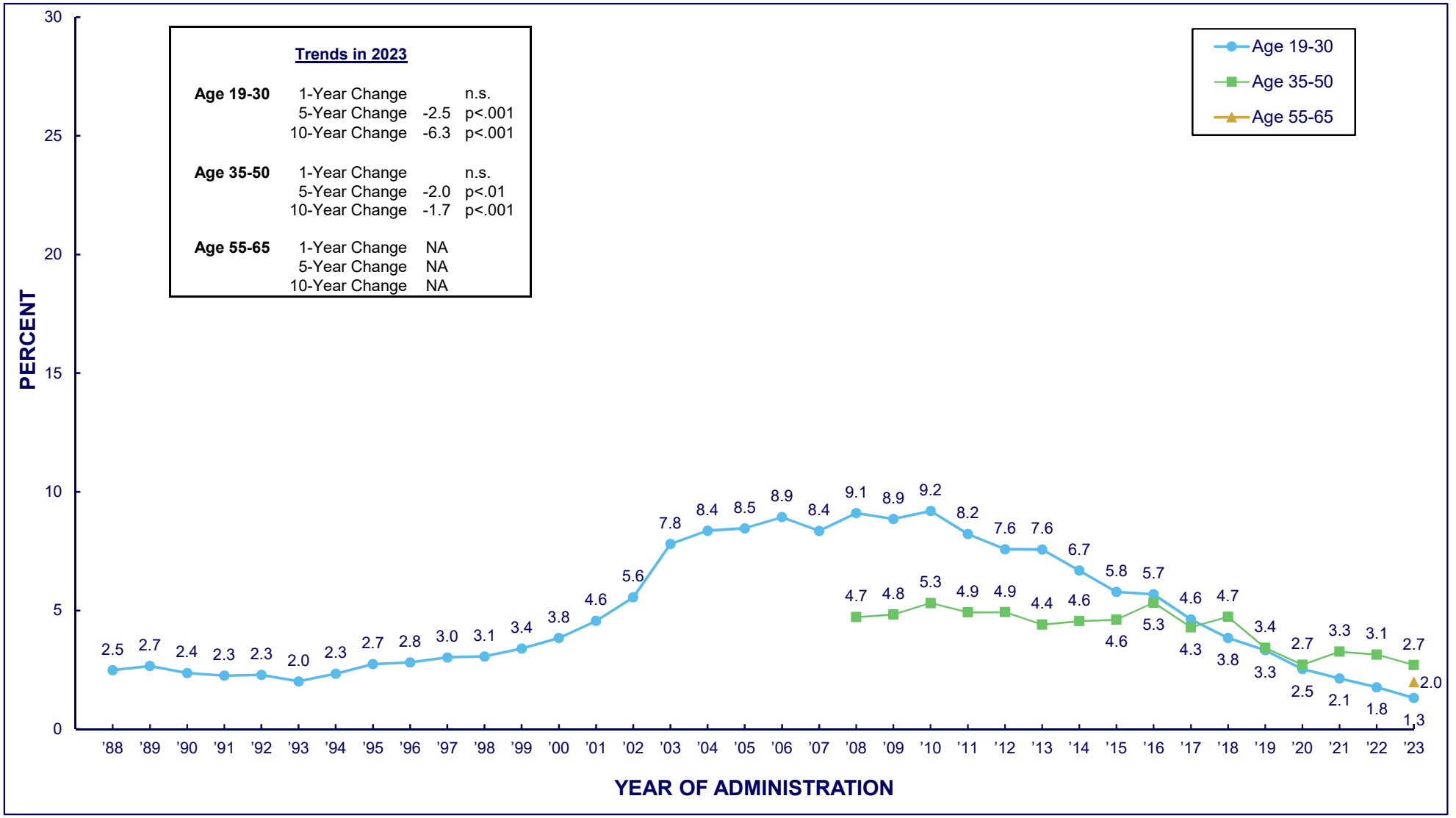
Notes. '*' indicates a percentage of less than 0.05%.

MONITORING THE FUTURE

TABLE/FIGURE 55

NARCOTICS OTHER THAN 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 56

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	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
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	1.6						
1995	4.7	4.5	2.8	2.7	1.9	2.7	1.9	1.4						
1996	5.4	4.8	2.8	3.3	2.1	1.9	2.1	1.8						
1997	6.2	4.5	4.6	2.7	2.1	1.9	2.5	1.9						
1998	6.3	4.1	4.0	3.9	3.1	1.9	1.6	1.1	1.6					
1999	6.7	5.8	4.3	4.0	2.8	1.9	1.7	2.4	1.6					
2000	7.0	6.8	4.9	4.0	2.9	2.1	2.5	1.9	1.8					
2001	6.7	7.1	7.1	4.4	3.4	3.1	2.6	2.3	1.4					
2002	9.4	7.4	7.2	6.7	4.5	4.3	3.5	4.5	3.3					
2003	9.3	10.4	9.5	10.3	6.1	6.4	4.9	3.5	2.2	2.7				
2004	9.5	10.4	9.0	9.5	7.7	7.9	6.0	4.3	3.1	3.4				
2005	9.0	9.1	10.0	7.7	9.1	6.9	8.0	4.4	3.8	3.1				
2006	9.0	8.5	12.4	9.9	9.2	6.9	7.0	4.9	4.3	3.2				
2007	9.2	8.0	9.3	9.5	8.6	8.0	6.8	3.9	6.2	4.5				
2008	9.1	9.0	8.1	10.9	10.1	9.5	7.3	7.2	5.1	3.2	3.5			
2009	9.2	7.0	11.0	8.1	10.5	6.9	9.6	6.1	4.6	4.5	4.1			
2010	8.7	8.2	9.6	10.4	10.6	8.9	7.3	6.9	4.2	5.5	4.7			
2011	8.7	8.2	7.8	7.3	10.2	8.0	7.7	6.1	4.9	4.2	4.6			
2012	7.9	6.7	7.1	8.4	8.4	8.2	6.8	6.3	4.5	4.7	4.3			
2013	7.1	8.6	7.5	7.3	7.7	7.7	6.6	6.7	4.9	3.5	2.9	2.3		
2014	6.1	5.9	6.6	6.4	7.8	6.7	6.6	7.0	3.6	3.9	3.9	2.8		
2015	5.4	4.6	5.0	6.4	5.7	6.5	6.2	5.7	4.5	3.7	4.7	3.5		
2016	4.8	4.3	6.1	5.4	6.9	5.7	5.7	7.4	5.6	4.8	3.9	3.6		
2017	4.2	3.5	3.9	4.1	4.9	4.7	6.5	4.6	4.9	4.1	3.6	3.2		
2018	3.4	2.0	3.8	3.8	3.6	5.0	4.6	5.6	4.6	4.2	4.7	3.3	2.8	
2019	2.7	1.4	3.3	3.6	2.8	3.8	5.0	3.3	3.8	2.7	4.0	2.0	1.9	
2020	2.1	1.3	2.4	2.1	2.8	3.0	3.2	3.8	2.5	2.9	1.7	2.6	3.1	
2021	1.0	1.4	1.6	1.2	2.5	2.3	3.3	2.9	3.4	4.1	2.7	2.6	2.7	
2022	1.7	1.2	0.8	2.7	1.8	1.5	2.3	3.8	2.9	3.1	2.7	2.9	2.7	
2023	1.0	1.5	0.2	1.1	0.8	2.8	1.2	3.6	2.9	2.2	2.1	2.3	1.9	1.8

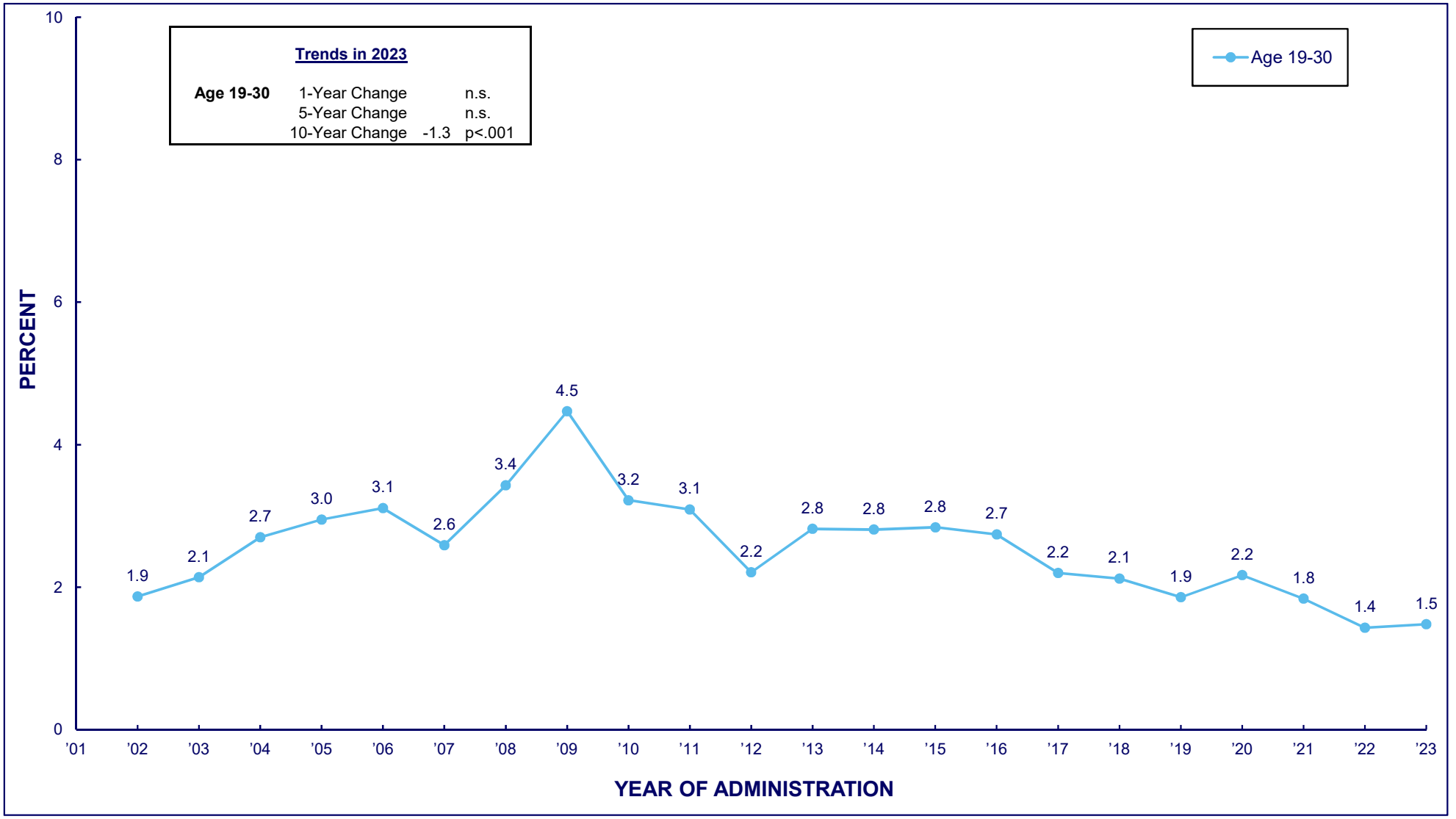
[1]In 2002 the question text was changed on half of the questionnaire forms for 18- to 30-year-olds, and the age 35+ forms. The list of examples of narcotics other than heroin was updated. Talwin, laudanum, and paregoric—all of which had negligible rates of use by 2001— were replaced by Vicodin, OxyContin, and Percocet. In 2003 the remaining forms were changed to the new version of the queston.

MONITORING THE FUTURE

TABLE/FIGURE 57

OXYCONTIN

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



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

TABLE/FIGURE 58

OXYCONTIN

Trends in 12-Month Prevalence

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

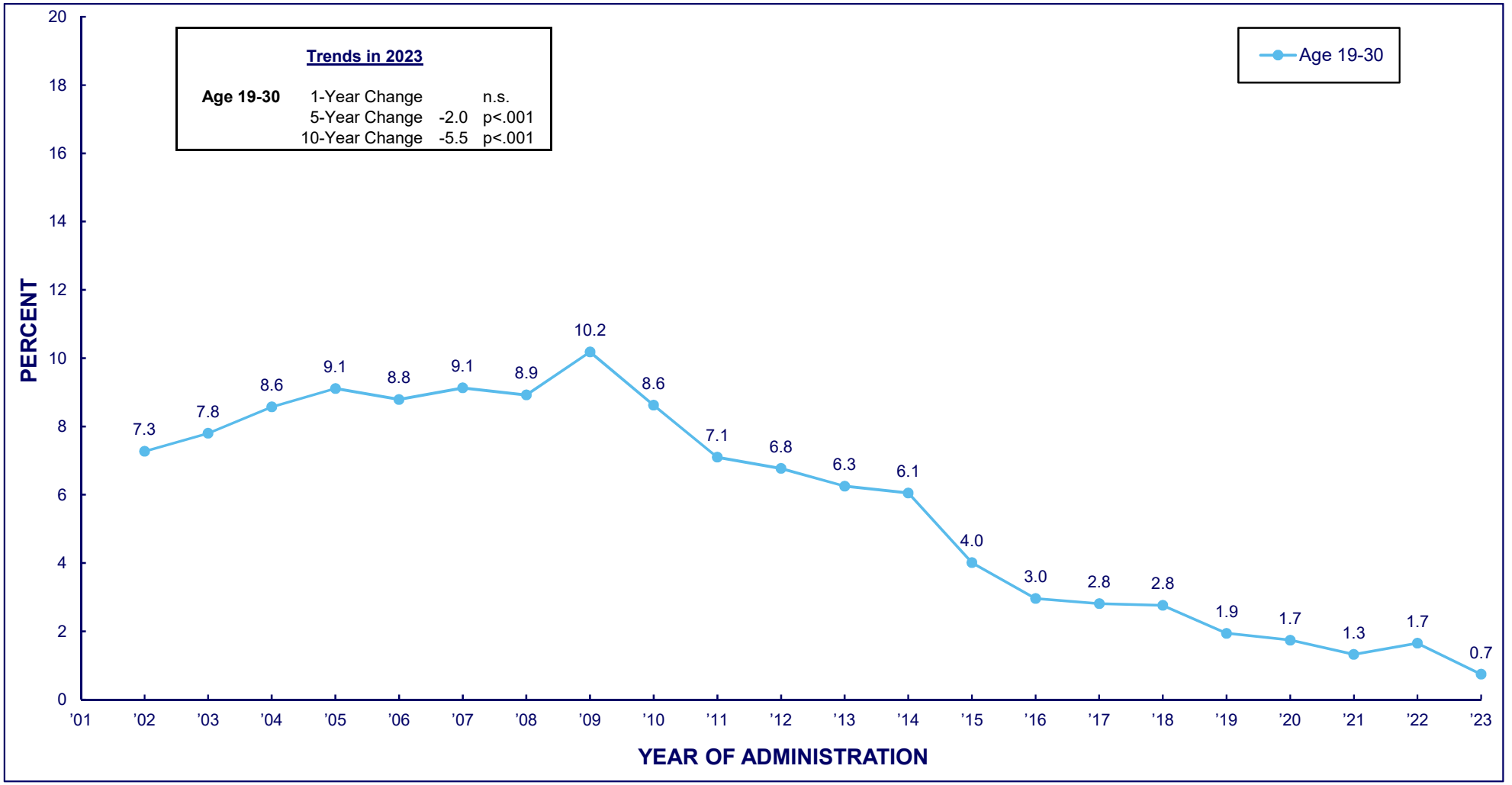
Year	Age 18	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30
2002	4.0	2.5	1.7	1.5	2.7	1.2	1.8
2003	4.5	3.5	3.0	3.8	1.8	1.2	*
2004	5.0	3.9	3.2	3.6	2.2	2.3	1.3
2005	5.5	4.1	2.7	2.6	3.9	1.9	2.3
2006	4.3	2.8	4.5	3.4	2.6	3.0	2.3
2007	5.2	2.9	3.4	3.4	2.0	2.3	1.4
2008	4.7	4.4	4.4	3.4	3.3	2.7	2.4
2009	4.9	3.3	6.6	4.6	6.4	4.0	2.2
2010	5.1	3.0	3.8	4.7	3.8	1.7	2.2
2011	4.9	3.8	2.7	4.4	2.9	2.3	2.4
2012	4.3	3.2	2.0	1.7	1.8	3.6	1.0
2013	3.6	3.6	3.1	2.5	3.3	2.9	1.4
2014	3.3	3.3	1.5	3.5	3.0	2.6	2.9
2015	3.7	5.1	1.8	2.5	2.8	2.4	2.7
2016	3.4	1.5	2.4	2.5	3.2	2.5	4.4
2017	2.7	2.0	2.7	2.2	2.1	1.5	2.7
2018	2.3	2.1	1.2	1.3	2.9	3.4	1.8
2019	1.7	2.2	2.1	1.6	1.2	2.2	1.7
2020	2.4	2.7	1.2	2.2	3.2	2.1	1.9
2021	0.9	0.8	3.1	1.4	1.2	2.1	2.0
2022	1.9	1.2	0.7	0.4	1.5	3.3	1.3
2023	0.6	2.6	0.3	2.2	0.5	1.8	1.4

MONITORING THE FUTURE

TABLE/FIGURE 59

VICODIN

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



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

TABLE/FIGURE 60

VICODIN

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
2002	9.6	9.1	8.0	7.4	8.3	5.7	5.5
2003	10.5	8.6	10.2	10.9	8.3	6.2	3.3
2004	9.3	10.3	9.2	10.5	8.0	6.4	7.4
2005	9.5	10.1	12.2	6.6	8.5	8.7	8.7
2006	9.7	7.4	10.9	10.2	9.1	9.0	6.3
2007	9.6	6.9	8.2	14.3	7.1	10.1	8.7
2008	9.7	8.8	8.2	10.2	8.3	9.6	8.5
2009	9.7	8.2	11.1	7.5	12.1	9.1	13.2
2010	8.0	6.0	8.6	10.0	10.8	6.3	9.8
2011	8.1	6.8	7.0	7.7	6.8	7.6	6.8
2012	7.5	4.9	5.8	8.4	6.6	8.2	6.8
2013	5.3	6.7	7.7	6.2	7.6	4.4	4.9
2014	4.8	4.9	3.6	4.5	7.8	7.0	8.3
2015	4.4	2.3	3.0	5.5	3.5	5.3	4.3
2016	2.9	1.8	2.6	2.0	3.2	3.6	4.4
2017	2.0	1.1	1.2	3.6	3.7	3.2	3.7
2018	1.7	2.2	2.6	2.6	3.1	3.2	2.7
2019	1.1	1.5	1.3	1.9	1.6	2.0	3.2
2020	1.2	2.2	1.1	1.1	4.0	0.8	1.5
2021	0.9	0.5	0.7	1.1	1.6	1.7	2.0
2022	1.3	0.3	*	1.2	0.9	4.8	1.9
2023	0.6	*	0.3	1.9	0.1	0.8	0.9

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

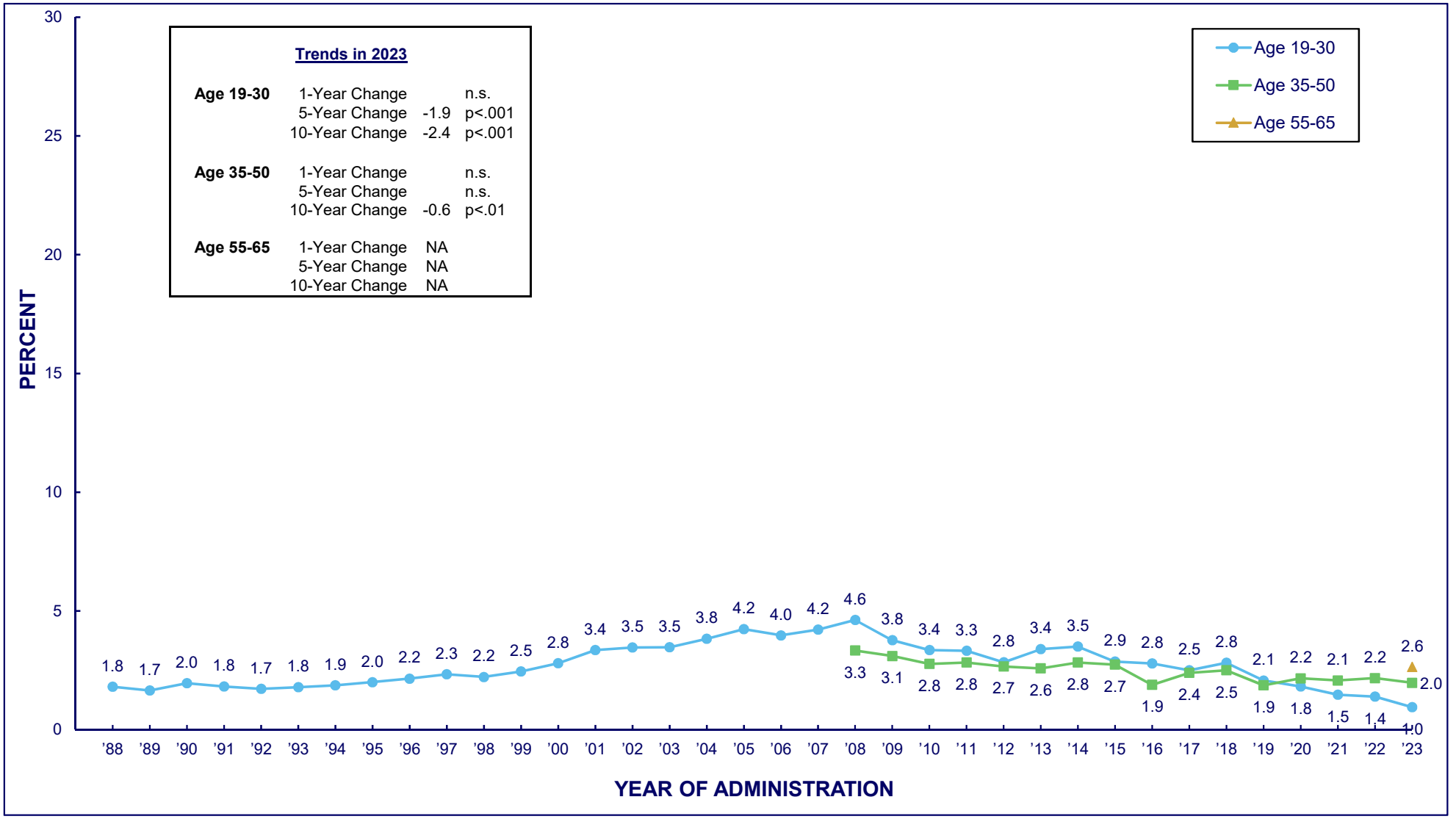
MONITORING THE FUTURE

TABLE/FIGURE 61

SEDATIVES (BARBITURATES)

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

MONITORING THE FUTURE



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

TABLE/FIGURE 62

SEDATIVES (BARBITURATES)

Trends in 12-Month Prevalence

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

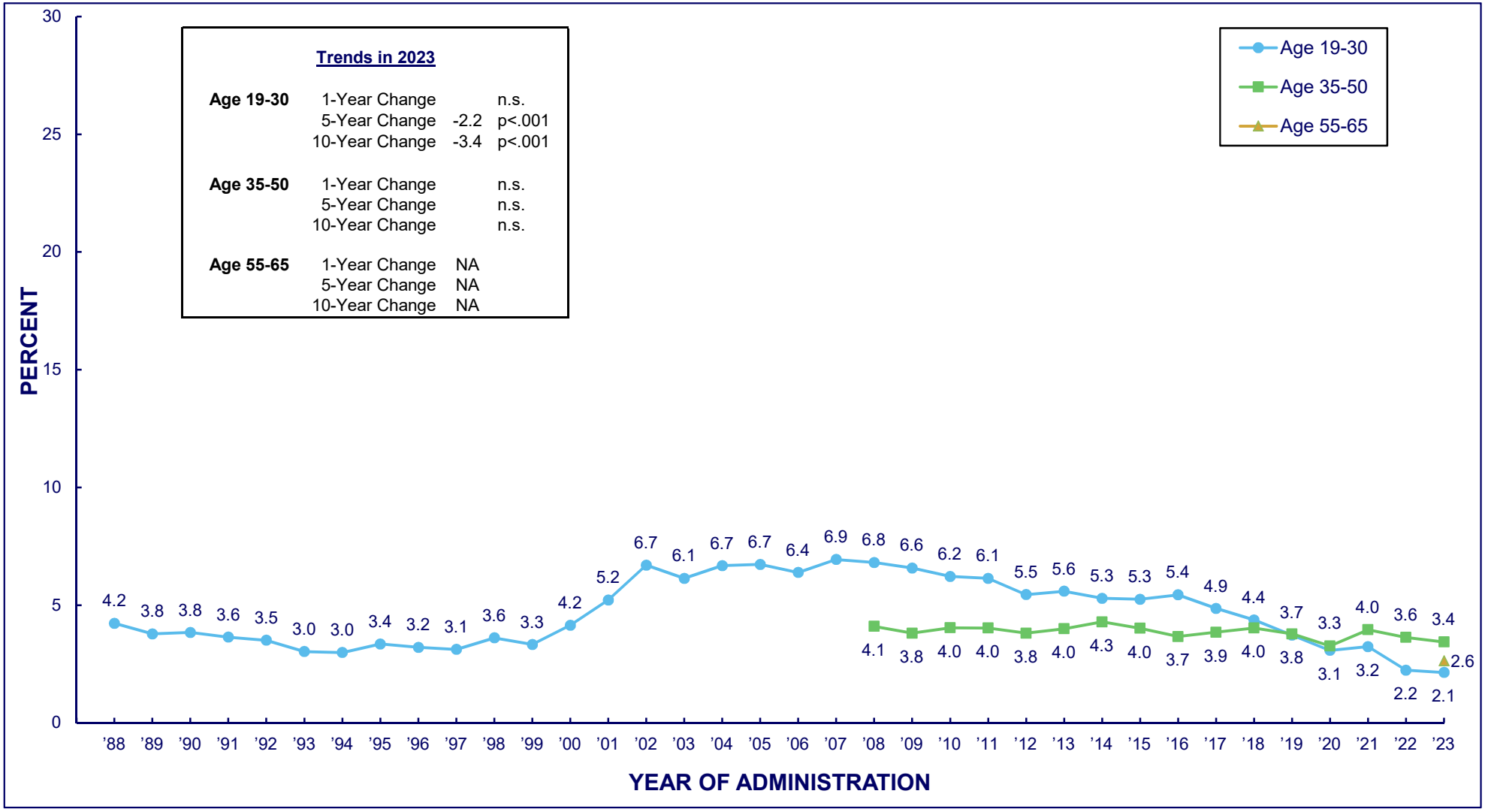
Year	Age 18	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
1976	9.6													
1977	9.3													
1978	8.1	6.3												
1979	7.5	6.9												
1980	6.8	4.7	5.6											
1981	6.6	5.1	5.8											
1982	5.5	4.5	4.2	4.1										
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	1.7						
1995	4.7	3.3	2.8	1.5	1.3	1.5	1.7	1.6						
1996	4.9	3.7	2.5	2.4	1.0	2.0	1.5	1.6						
1997	5.1	4.1	3.6	1.7	1.5	1.3	1.9	1.4						
1998	5.5	3.4	3.0	2.5	1.6	1.8	1.1	1.0	0.9					
1999	5.8	5.0	2.6	3.0	2.0	1.0	1.2	1.5	1.5					
2000	6.2	4.6	3.5	3.8	2.6	1.6	1.1	0.7	1.7					
2001	5.7	5.4	4.8	4.0	2.6	2.2	1.3	1.8	1.4					
2002	6.7	5.6	3.8	4.1	2.7	2.8	2.0	1.9	1.1					
2003	6.0	5.3	4.6	3.9	2.6	3.4	1.5	1.2	0.8	0.9				
2004	6.5	5.8	4.3	4.9	3.3	2.6	2.4	1.2	1.1	1.0				
2005	7.2	5.0	5.2	3.8	4.1	2.7	4.6	1.6	1.2	1.5				
2006	6.6	4.3	5.2	4.8	3.2	2.7	3.8	0.9	1.4	1.4				
2007	6.2	4.5	4.2	4.4	4.2	4.3	3.6	3.6	2.7	2.7				
2008	5.8	5.7	5.2	5.1	4.8	3.9	3.1	3.9	3.3	3.2	3.0			
2009	5.2	3.8	5.9	2.7	4.6	3.0	2.8	3.1	3.4	2.8	3.2			
2010	4.8	3.0	3.7	3.7	2.7	4.5	2.6	3.2	1.9	3.0	3.0			
2011	4.3	3.2	3.0	3.7	4.4	2.7	2.8	4.6	1.9	2.0	2.9			
2012	4.5	2.5	3.1	2.8	2.2	3.6	2.9	2.7	3.0	2.5	2.4			
2013	4.8	3.0	4.0	3.4	4.5	2.7	2.8	2.6	3.2	3.0	1.7	2.1		
2014	4.3	3.9	4.6	3.1	2.8	3.7	3.0	3.8	2.8	2.5	2.3	1.7		
2015	3.6	2.7	3.9	3.0	2.6	2.9	2.2	2.3	2.2	3.0	3.4	2.5		
2016	3.0	2.4	3.3	2.6	2.5	2.9	3.1	2.0	2.0	2.0	1.6	2.4		
2017	2.9	2.1	2.3	2.5	2.9	2.7	2.4	2.9	2.0	2.7	2.0	1.7		
2018	2.7	2.0	3.3	3.2	3.0	3.0	2.4	3.0	2.0	1.9	3.3	1.7	1.8	
2019	2.5	1.5	2.2	2.4	1.8	2.8	1.7	1.8	1.9	1.3	2.4	3.0	1.9	
2020	2.4	1.8	0.9	2.1	2.4	1.7	2.0	3.4	1.7	1.9	1.7	2.0	2.0	
2021	1.8	1.4	1.6	1.5	1.4	1.4	1.6	1.4	1.3	3.1	2.3	2.2	2.7	
2022	2.0	2.9	1.2	1.3	1.4	1.1	1.3	2.4	3.0	1.8	1.7	3.0	2.8	
2023	1.5	0.7	0.6	0.7	1.4	1.1	0.9	2.6	1.7	1.5	2.1	3.4	2.4	2.1

MONITORING THE FUTURE

TABLE/FIGURE 63

TRANQUILIZERS

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 64

TRANQUILIZERS

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	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	5.4	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	3.0						
1995	4.4	3.6	3.4	3.2	2.9	3.5	3.6	3.5						
1996	4.6	3.7	4.1	3.0	2.2	3.2	3.0	3.5						
1997	4.7	4.7	3.5	2.7	1.8	2.2	3.9	3.1						
1998	5.5	3.8	4.4	4.1	3.4	3.1	2.9	1.8	2.8					
1999	5.8	4.3	4.1	4.1	3.3	2.3	1.9	3.2	2.2					
2000	5.7	5.2	5.1	4.9	4.1	2.9	2.9	3.0	2.9					
2001	6.9	5.7	7.0	5.8	5.1	3.9	4.0	4.1	3.4					
2002	7.7	8.4	7.6	6.3	7.1	5.9	5.1	4.4	3.9					
2003	6.7	7.6	6.8	7.1	6.2	5.3	4.2	4.1	2.1	2.7				
2004	7.3	7.6	7.1	8.1	6.3	6.0	5.3	3.6	3.9	3.5				
2005	6.8	6.3	8.2	6.5	7.5	4.3	7.6	4.7	4.0	2.8				
2006	6.6	5.9	7.7	6.8	5.6	6.1	6.3	3.9	3.5	3.9				
2007	6.2	5.7	7.5	7.5	7.7	7.9	5.5	3.6	4.9	4.1				
2008	6.2	7.8	6.1	8.3	6.7	5.8	6.4	5.7	2.9	3.8	4.0			
2009	6.3	4.7	7.2	6.9	7.3	6.0	7.3	4.8	4.5	3.0	2.9			
2010	5.6	5.0	6.9	7.3	7.1	5.3	5.6	4.4	3.6	4.5	3.8			
2011	5.6	6.1	5.3	6.7	7.2	5.4	6.1	6.2	3.0	4.0	3.0			
2012	5.3	5.1	4.7	5.8	5.8	7.0	4.2	2.9	3.2	4.5	4.5			
2013	4.6	5.4	5.3	6.7	4.1	6.3	5.8	4.7	4.3	3.4	3.7	2.5		
2014	4.7	6.4	3.7	4.0	5.7	6.0	5.9	6.8	3.9	2.7	3.8	2.7		
2015	4.7	5.4	5.0	5.4	5.1	4.7	5.8	5.0	4.2	3.6	3.3	3.5		
2016	4.9	4.1	7.7	5.3	4.9	4.5	6.2	3.5	3.5	3.7	4.0	2.9		
2017	4.7	3.8	4.8	4.8	5.9	5.0	4.7	4.5	4.2	2.2	4.4	3.0		
2018	3.9	3.6	3.9	4.5	5.2	3.8	5.1	5.3	3.0	3.7	4.1	3.3	2.9	
2019	3.4	2.3	4.2	3.4	3.9	4.1	4.5	4.7	4.1	3.6	2.9	3.4	2.8	
2020	3.2	2.3	2.5	2.9	4.4	3.2	3.1	3.7	3.6	3.3	2.5	3.3	3.2	
2021	1.2	2.2	3.2	2.6	3.3	3.3	4.3	4.0	3.4	5.0	3.4	3.0	2.9	
2022	1.5	1.0	1.6	1.1	3.2	2.6	3.1	4.5	4.7	2.7	2.8	3.1	3.0	
2023	1.0	1.8	0.9	1.4	1.9	3.4	2.9	3.9	3.9	4.0	2.1	3.3	2.4	2.3

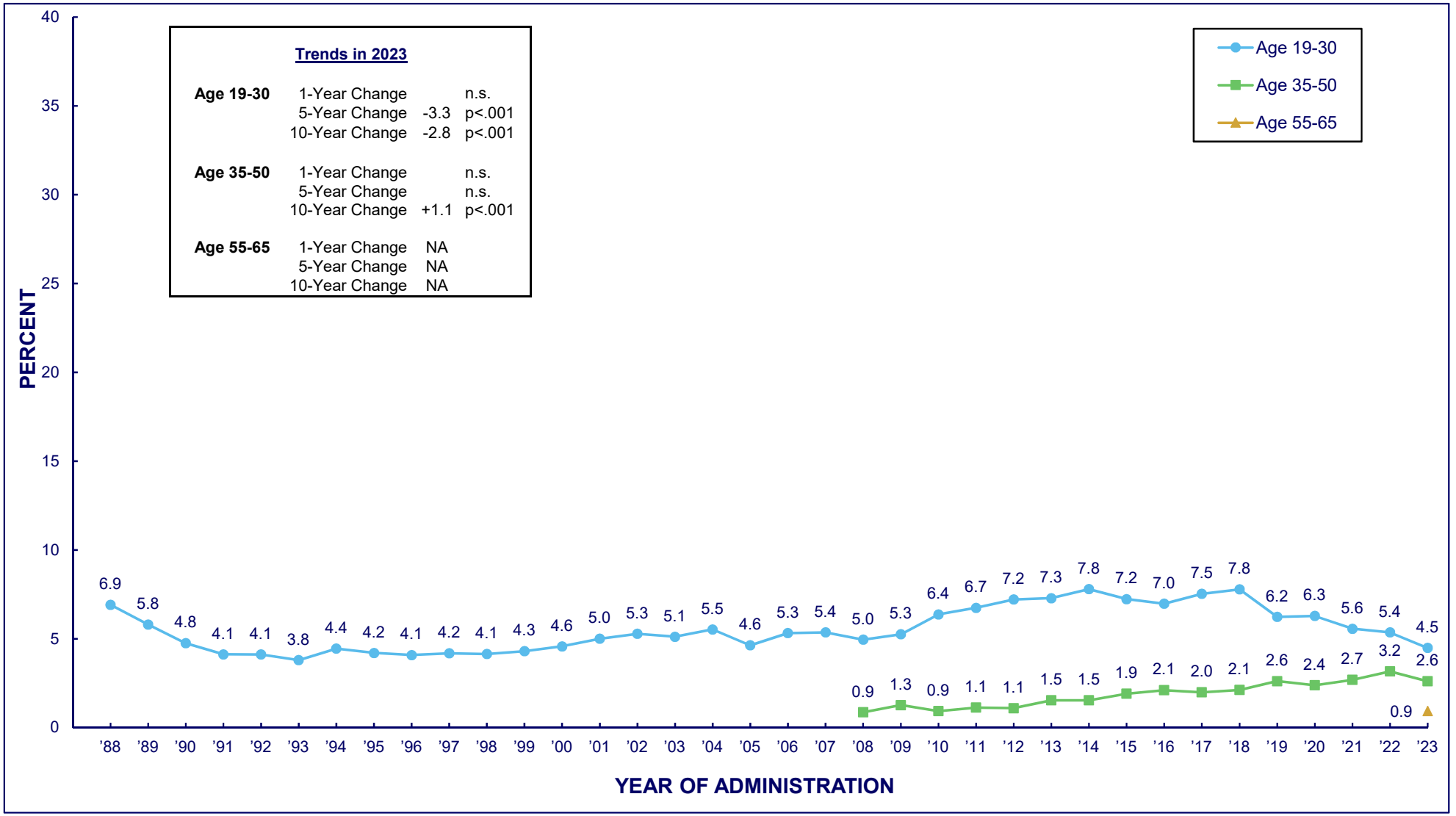
MONITORING THE FUTURE

TABLE/FIGURE 65

AMPHETAMINES

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

MONITORING THE FUTURE



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

TABLE/FIGURE 66

AMPHETAMINES

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

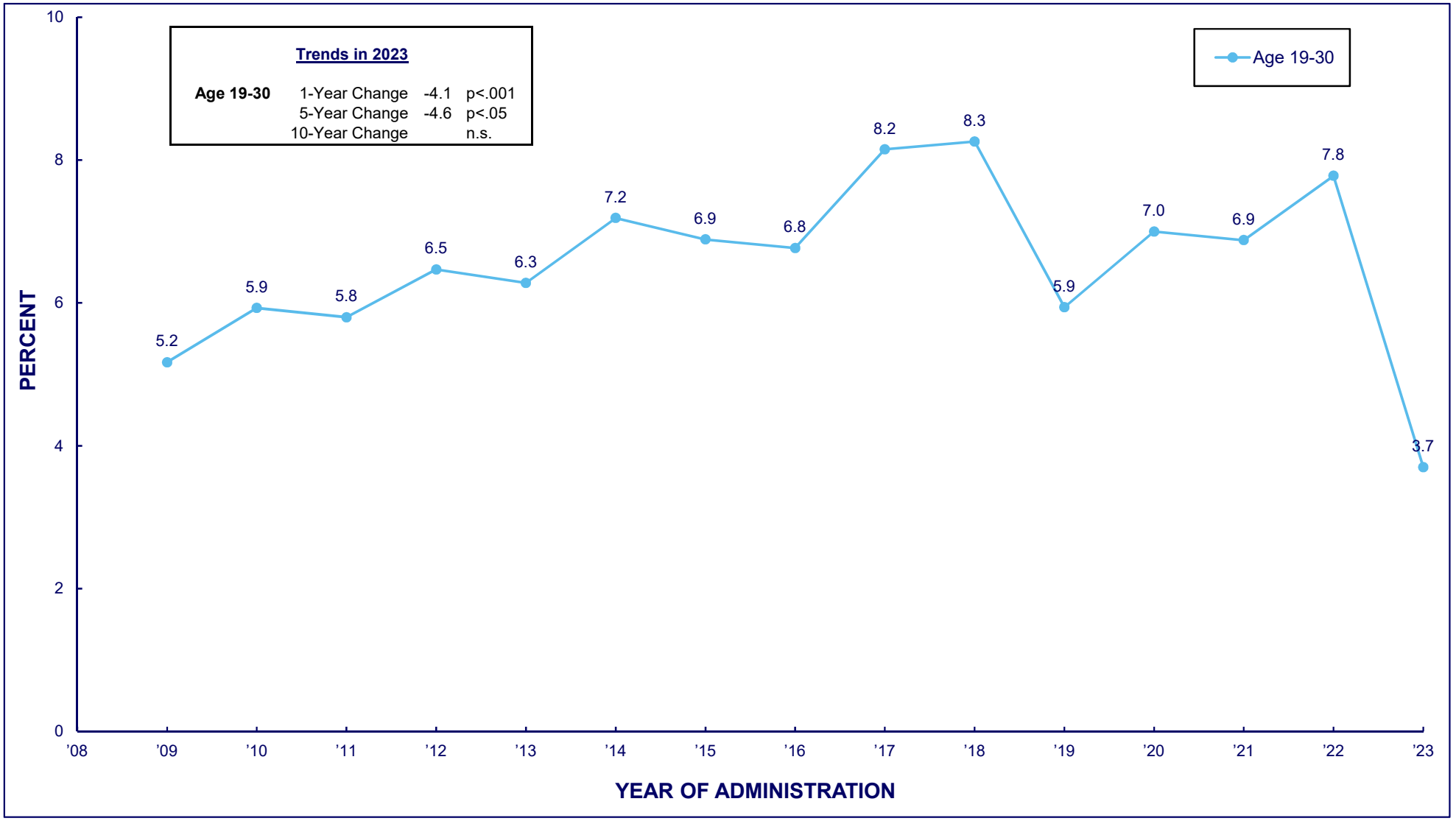
Year	Age 18	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
1976	15.8													
1977	16.3													
1978	17.1	17.7												
1979	18.3	21.5												
1980	20.8	24.1	25.1											
1981	26.0	26.3	26.7											
1982	20.3	23.9	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	15.1	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	6.5	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	1.3	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	4.9	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

MONITORING THE FUTURE

TABLE/FIGURE 67

ADDERALL

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



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

TABLE/FIGURE 68

ADDERALL

Trends in 12-Month Prevalence

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

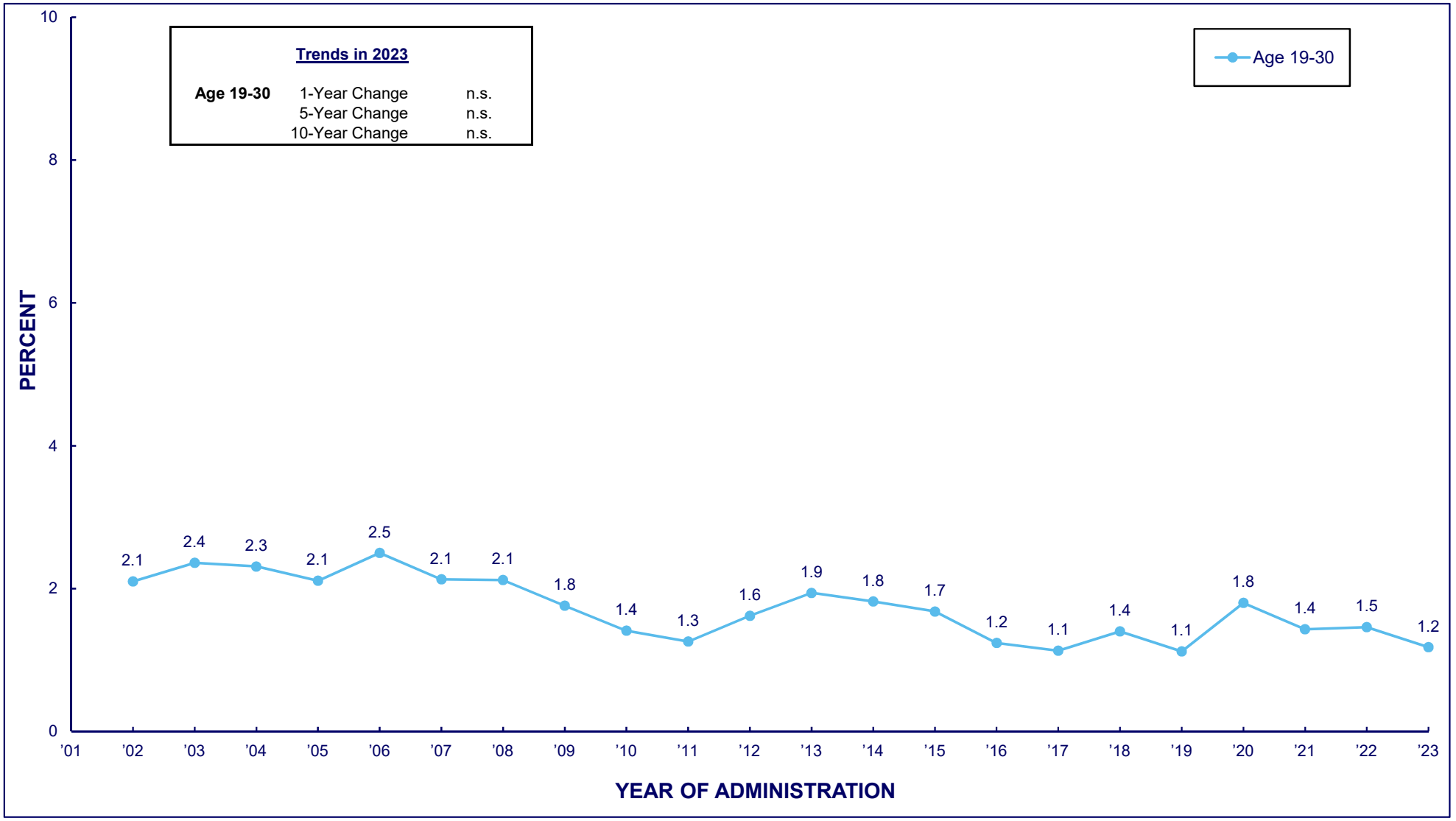
Year	Age 18	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30
2009	5.4	8.2	7.3	4.2	4.5	4.2	2.9
2010	6.5	6.9	8.5	6.3	6.3	4.1	3.3
2011	6.5	8.3	9.5	5.6	4.6	4.4	2.1
2012	7.6	7.5	7.9	7.8	5.9	5.8	3.8
2013	7.4	9.8	8.9	5.8	5.2	4.8	3.1
2014	6.8	11.1	7.1	6.9	7.4	6.3	4.5
2015	7.5	9.4	10.7	8.0	6.7	3.5	3.5
2016	6.2	7.7	9.4	5.6	6.8	5.5	6.0
2017	5.5	4.9	12.8	11.2	7.4	7.6	5.5
2018	4.6	7.0	10.3	12.9	7.8	5.4	6.4
2019	3.9	2.9	9.1	6.9	7.4	5.1	4.6
2020	4.4	5.1	7.6	7.3	10.0	5.6	6.2
2021	1.8	4.2	8.4	5.3	8.4	7.7	6.2
2022	3.4	3.3	4.0	8.4	9.8	12.3	6.5
2023	1.7	1.7	1.8	4.7	2.7	5.7	4.1

MONITORING THE FUTURE

TABLE/FIGURE 69

RITALIN

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



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

TABLE/FIGURE 70

RITALIN

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
2001	5.1						
2002	4.0	3.5	4.2	3.0	1.6	0.7	*
2003	4.0	3.2	4.3	4.7	1.5	0.2	0.8
2004	5.1	3.8	3.1	3.4	1.3	1.5	1.1
2005	4.4	4.8	2.9	3.2	0.1	0.4	1.4
2006	4.4	2.6	4.4	2.9	2.2	1.4	1.7
2007	3.8	3.2	3.0	3.1	1.8	1.5	0.3
2008	3.4	2.8	3.0	3.2	2.2	1.0	0.5
2009	2.1	3.0	1.0	1.9	1.4	1.5	1.6
2010	2.7	2.4	1.6	1.0	1.6	1.1	0.8
2011	2.6	2.0	2.1	2.0	0.7	0.2	0.3
2012	2.6	2.8	2.3	1.7	1.3	1.0	0.5
2013	2.3	4.0	3.0	1.6	1.2	1.5	0.3
2014	1.8	2.7	2.1	1.2	1.1	2.0	1.8
2015	2.0	3.1	1.6	2.4	1.4	1.2	0.5
2016	1.2	1.4	2.8	0.4	0.8	0.6	1.6
2017	1.3	0.9	1.3	3.5	0.7	0.3	0.1
2018	0.9	1.0	1.8	1.6	1.5	1.8	0.7
2019	1.1	1.6	2.1	0.7	1.5	1.0	0.0
2020	1.7	2.1	1.9	1.2	2.6	2.5	0.7
2021	0.5	1.8	1.2	1.4	0.9	2.2	1.1
2022	1.1	0.4	0.5	0.5	0.2	3.5	2.8
2023	0.6	0.9	0.2	1.7	1.3	1.3	1.1

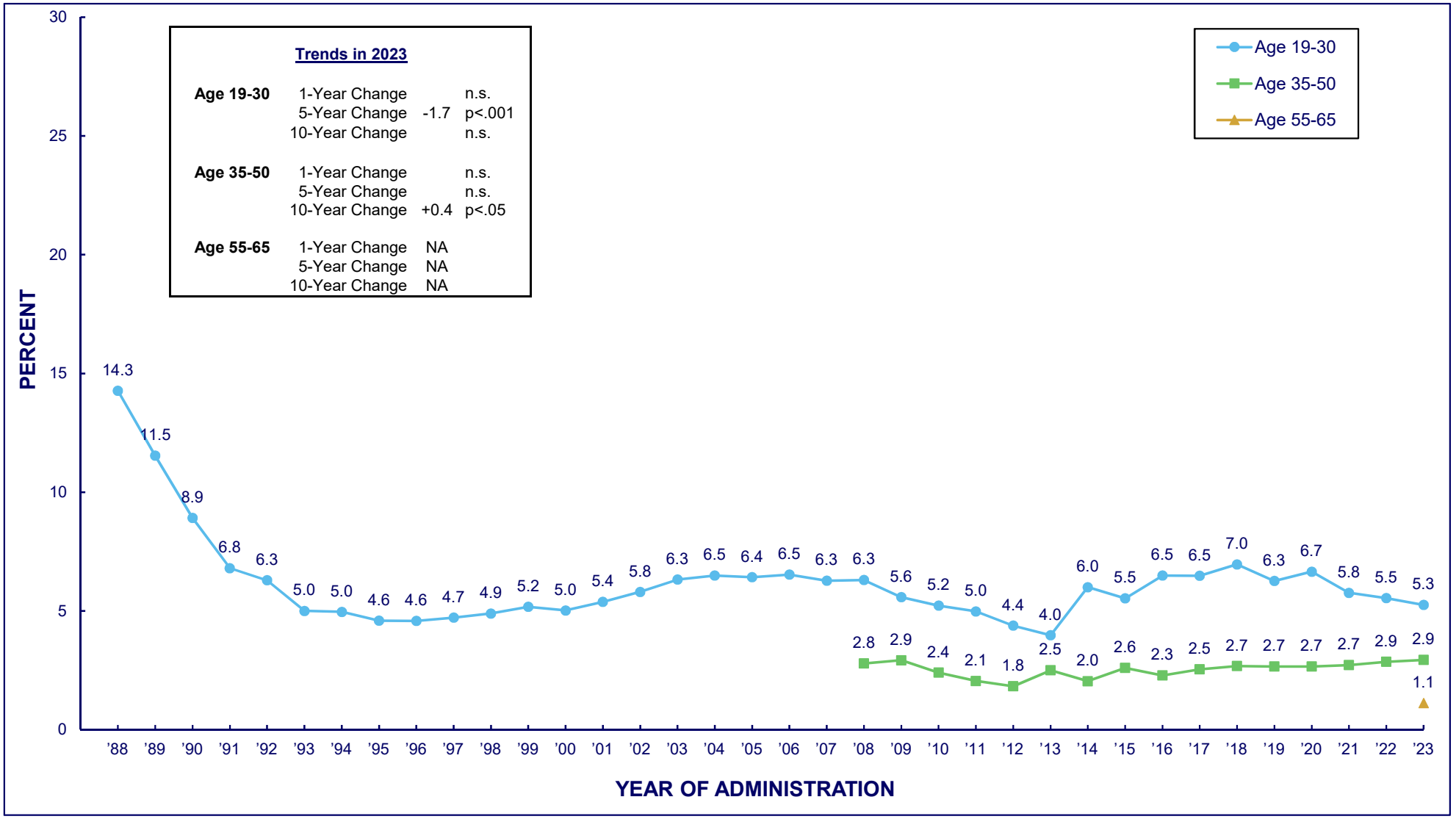
Notes. **' * ' indicates a percentage of less than 0.05%.**

MONITORING THE FUTURE

TABLE/FIGURE 71

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 72

COCAINE

Trends in 12-Month Prevalence

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

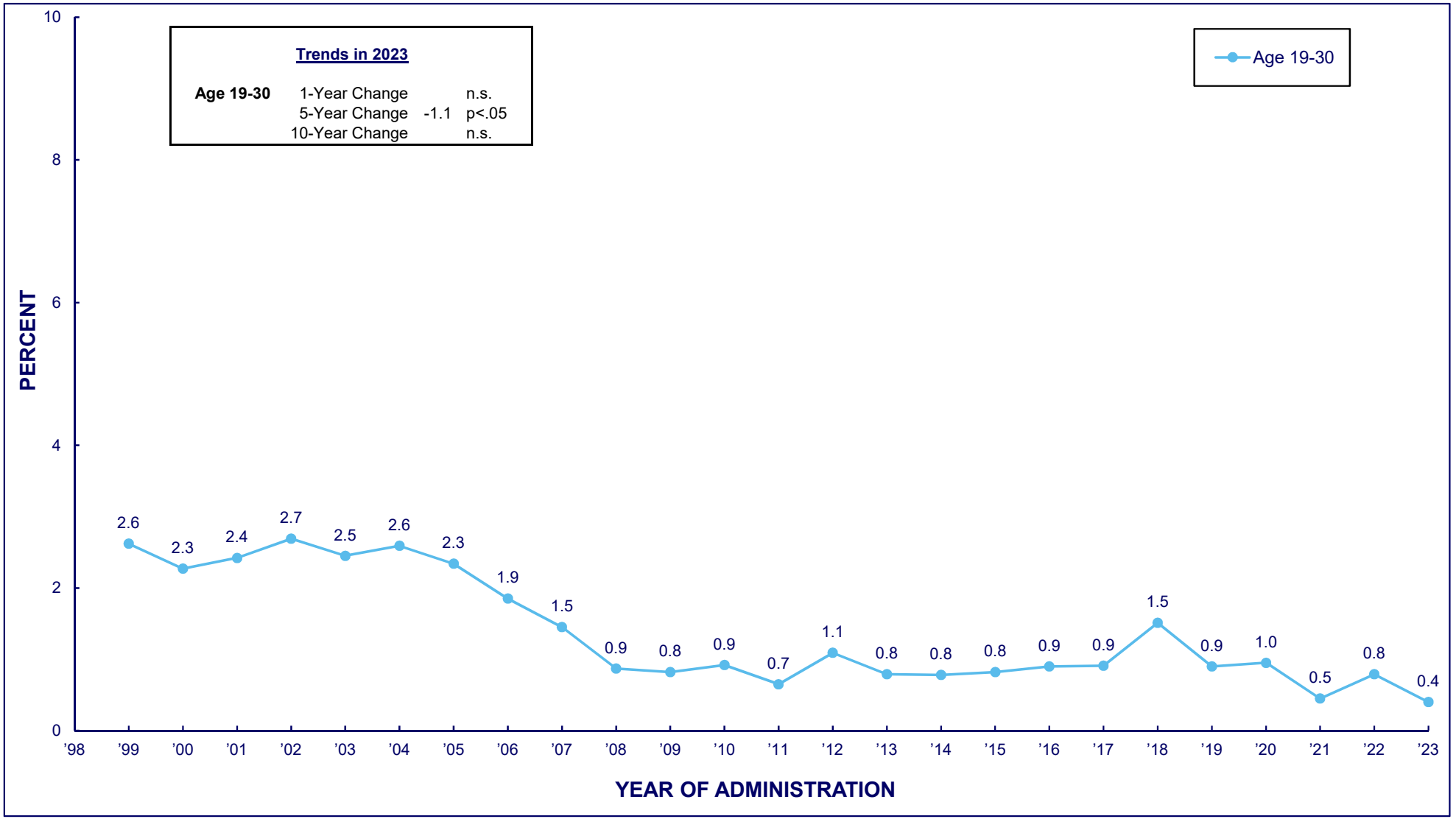
Year	Age 18	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
1976	6.0													
1977	7.2													
1978	9.0	11.9												
1979	12.0	14.9												
1980	12.3	16.7	20.5											
1981	12.4	16.8	20.5											
1982	11.5	16.9	21.8	23.4										
1983	11.4	14.5	21.6	21.0										
1984	11.6	15.3	20.9	21.0	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	6.0	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	5.6	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	4.3	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	3.2	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	8.6	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	6.3	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	7.3	5.5	7.2	5.6	4.1	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	1.8	1.1	1.2	1.1

MONITORING THE FUTURE

TABLE/FIGURE 73

METHAMPHETAMINE

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



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

TABLE/FIGURE 74

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	1.5
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

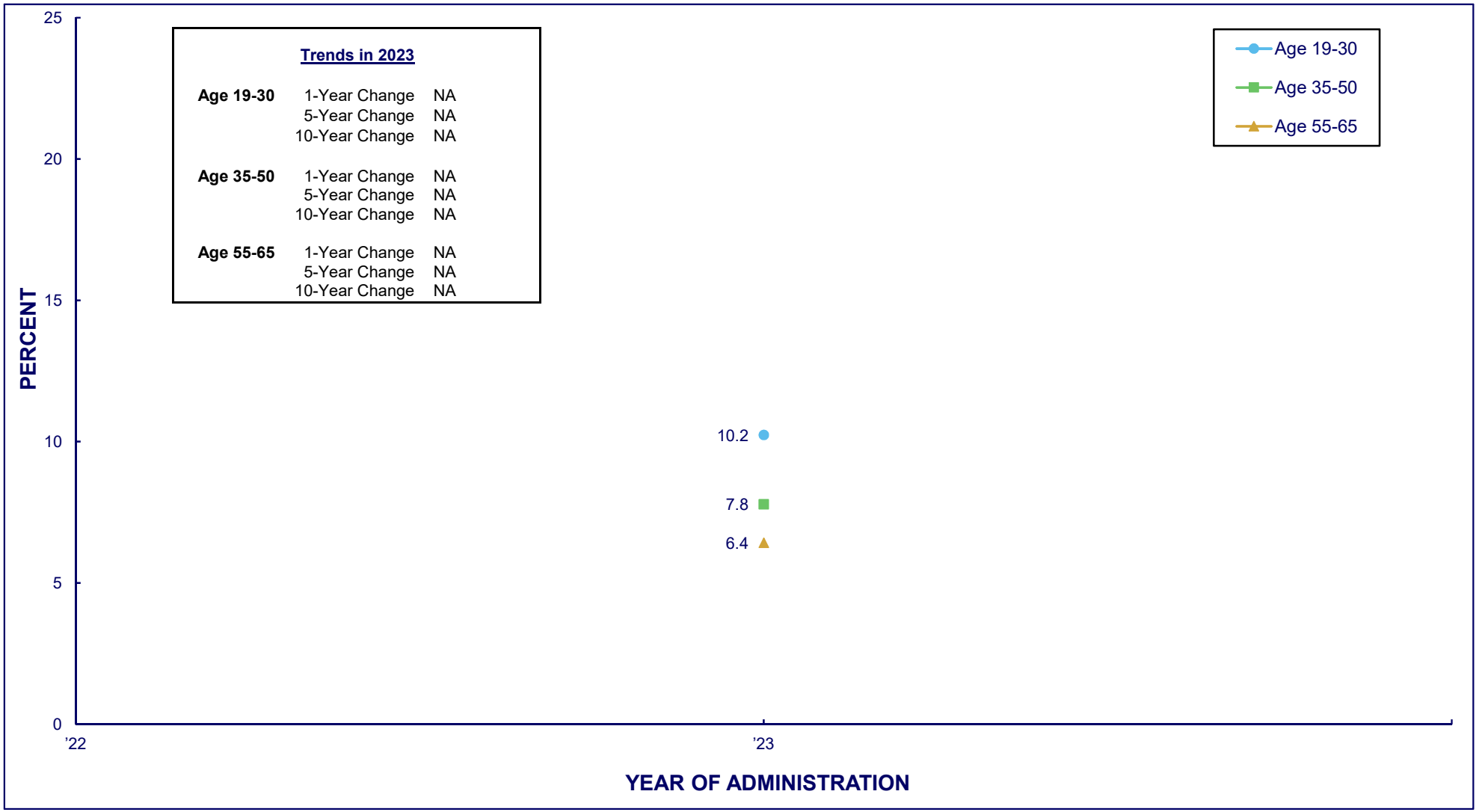
Notes. '*' indicates a percentage of less than 0.05%.

MONITORING THE FUTURE

TABLE/FIGURE 75

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 76

LARGE CIGARS

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

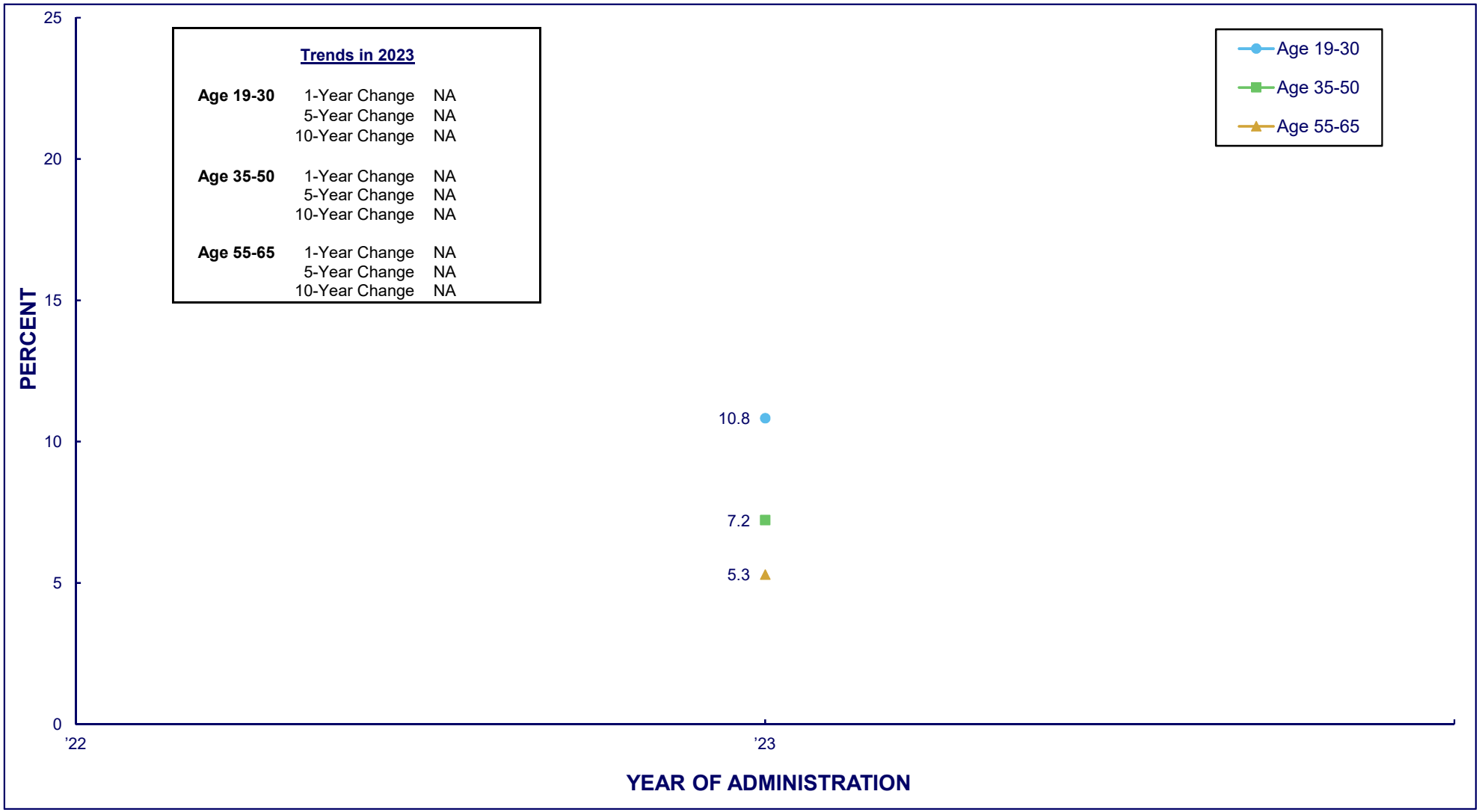
Year	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
2023	6.2	8.2	7.8	11.4	11.8	14.1	8.0	10.7	6.7	6.1	7.0	6.6	5.6

MONITORING THE FUTURE

TABLE/FIGURE 77

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 78

SMALL CIGARS

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

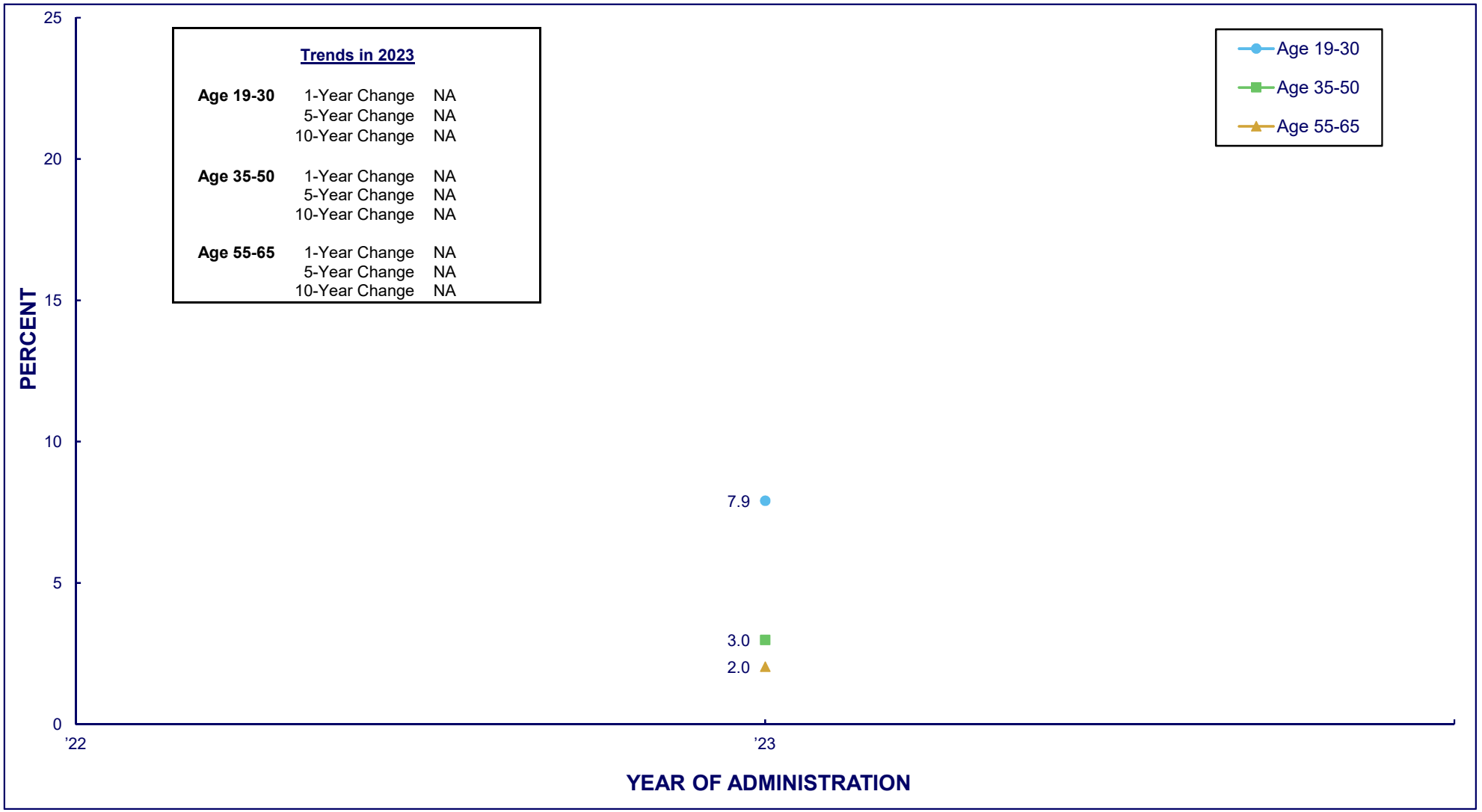
Year	Age 18	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
2010	23.1													
2011	19.5													
2012	19.9													
2013	20.4													
2014	18.9													
2015	15.9													
2016	15.6													
2017	13.3													
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

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

TABLE/FIGURE 79

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 80

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

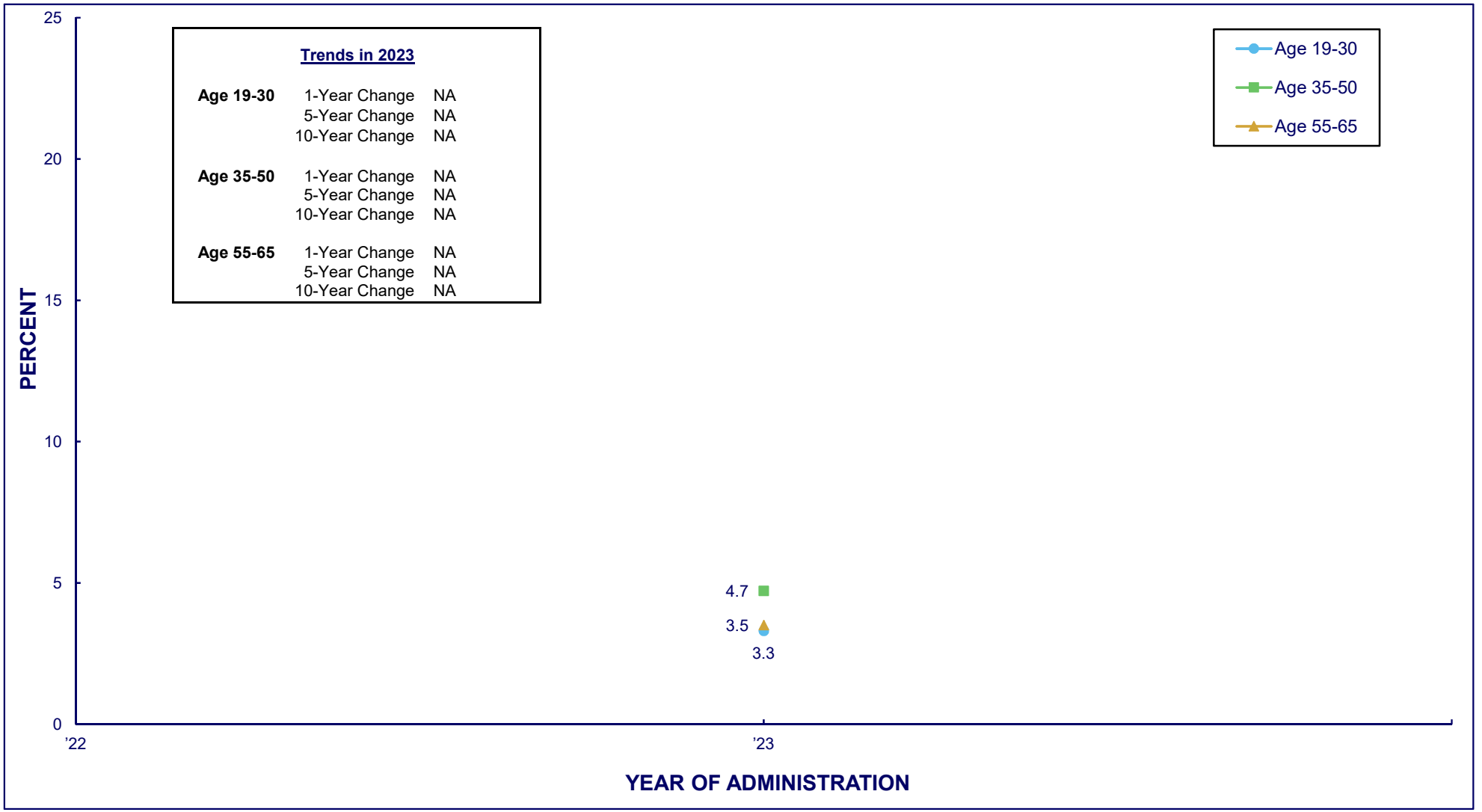
Notes. ' — ' indicates data not available.

MONITORING THE FUTURE

TABLE/FIGURE 81

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 82

SMOKELESS TOBACCO

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

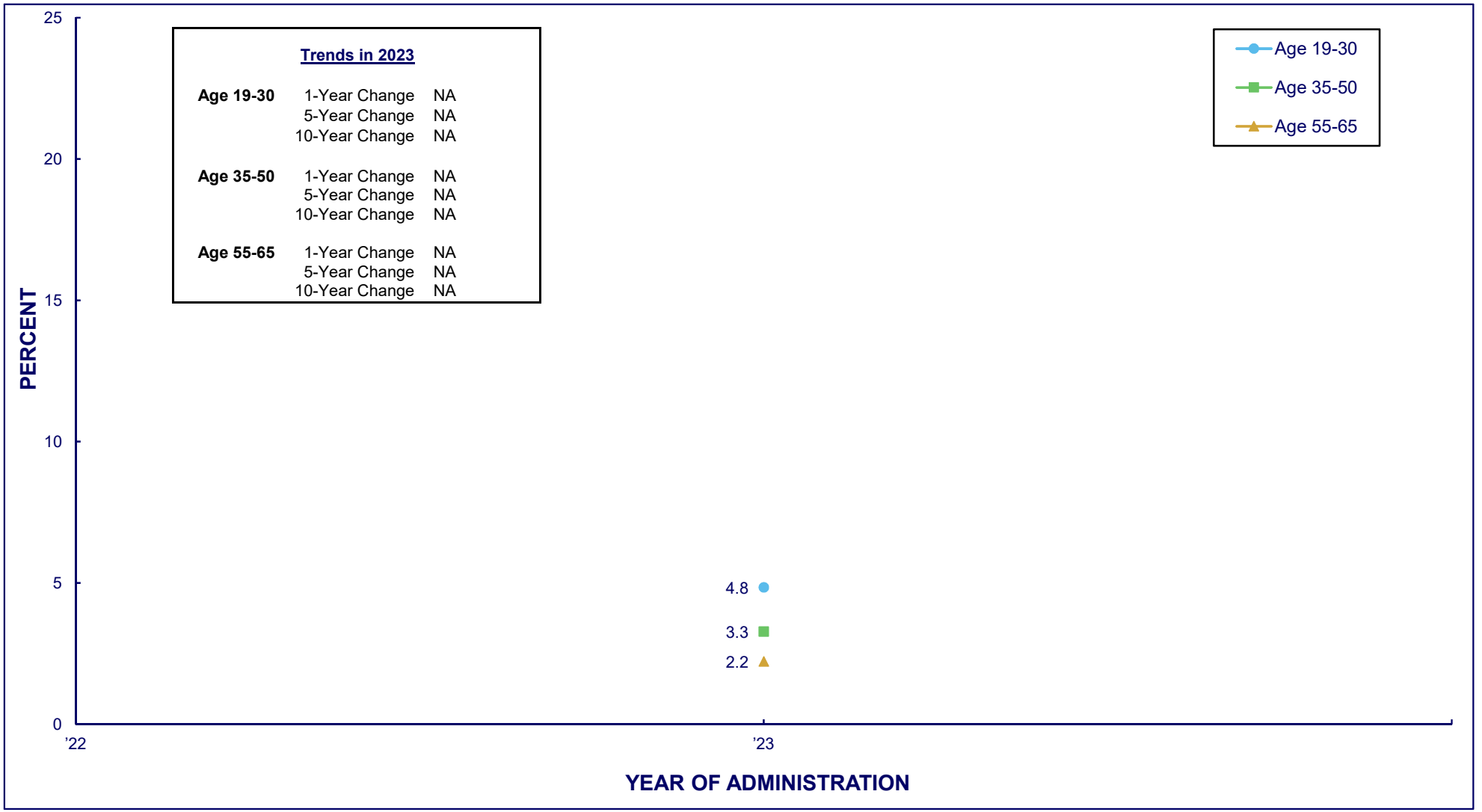
Year	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
2023	0.6	2.4	6.7	2.7	4.6	1.4	5.5	4.7	4.2	4.5	3.8	4.1	2.5

MONITORING THE FUTURE

TABLE/FIGURE 83

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 84

NICOTINE POUCHES

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

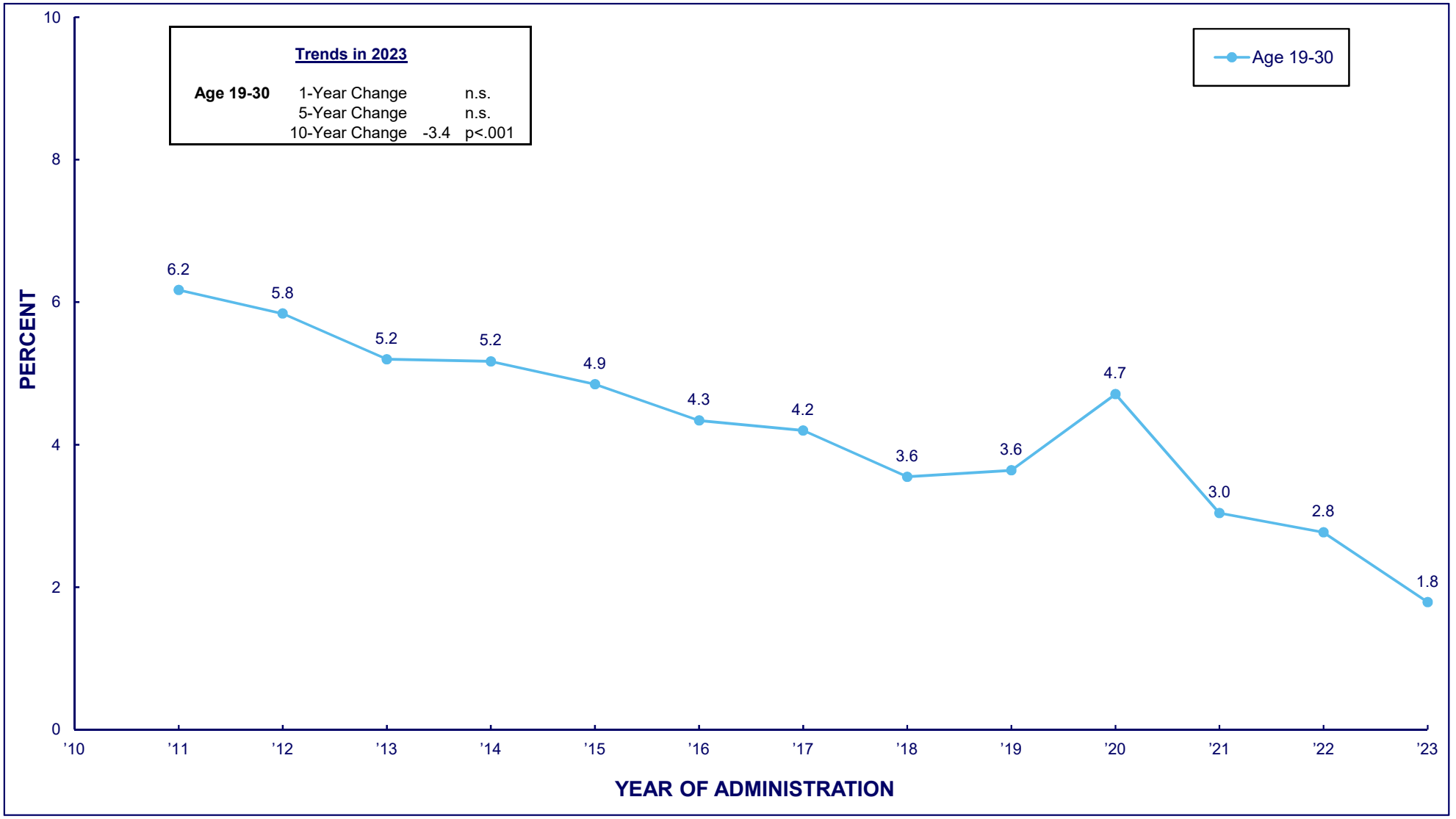
Year	Age 18	Ages 19–20	Ages 21–22	Ages 23–24	Ages 25–26	Ages 27–28	Ages 29–30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
2023	2.9	3.9	6.0	5.7	4.5	6.2	3.0	4.1	4.8	3.2	1.3	2.4	2.6	1.7

MONITORING THE FUTURE

TABLE/FIGURE 85

SNUS

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



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

TABLE/FIGURE 86

SNUS

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
2011	7.9	6.7	11.0	5.8	3.3	6.4	3.7
2012	7.9	6.3	6.4	5.3	5.5	7.6	4.1
2013	7.7	9.0	5.0	4.6	3.6	1.6	8.0
2014	5.8	7.4	5.1	4.7	2.7	5.9	5.4
2015	5.8	9.5	4.7	2.5	5.3	5.0	2.5
2016	5.8	2.2	5.1	4.9	4.8	4.1	4.8
2017	4.2	5.7	4.5	5.6	3.3	3.9	2.3
2018	4.7	2.7	2.4	4.9	4.0	3.5	3.7
2019	2.7	4.3	0.2	6.1	4.1	3.4	3.5
2020	—	6.2	5.6	1.0	9.4	4.5	2.6
2021	2.6	3.3	4.4	2.0	4.3	2.6	1.8
2022	2.4	1.2	*	7.4	0.9	2.2	4.0
2023	1.8	0.5	3.4	3.9	1.0	0.5	1.5

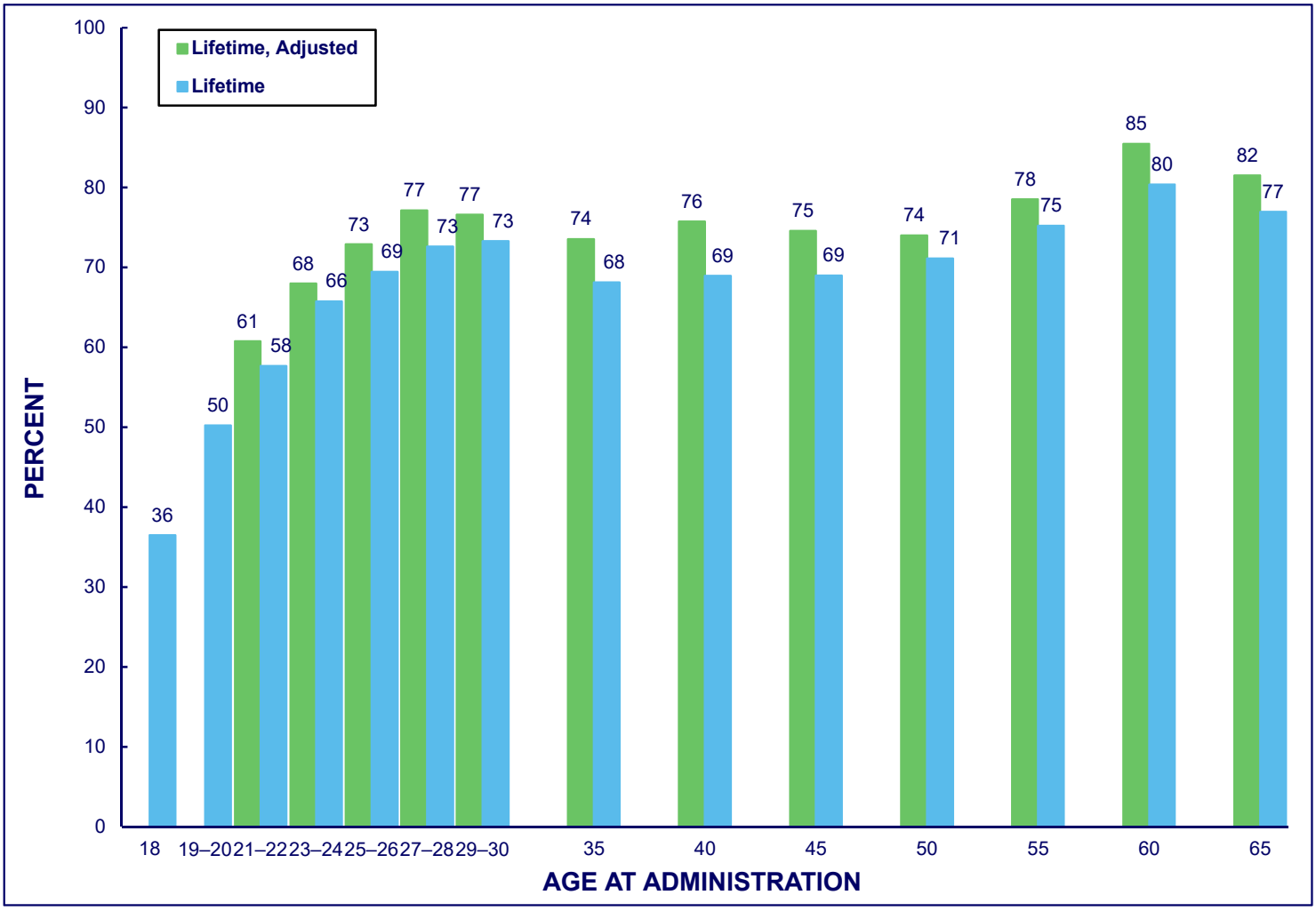
Notes. **' * ' indicates a percentage of less than 0.05%. ' — ' indicates data not available**

MONITORING THE FUTURE

TABLE/FIGURE 87

CANNABIS

Adjusted and Unadjusted Lifetime Prevalence among Respondents of Modal Ages 18 through 65 by Age Group, 2023

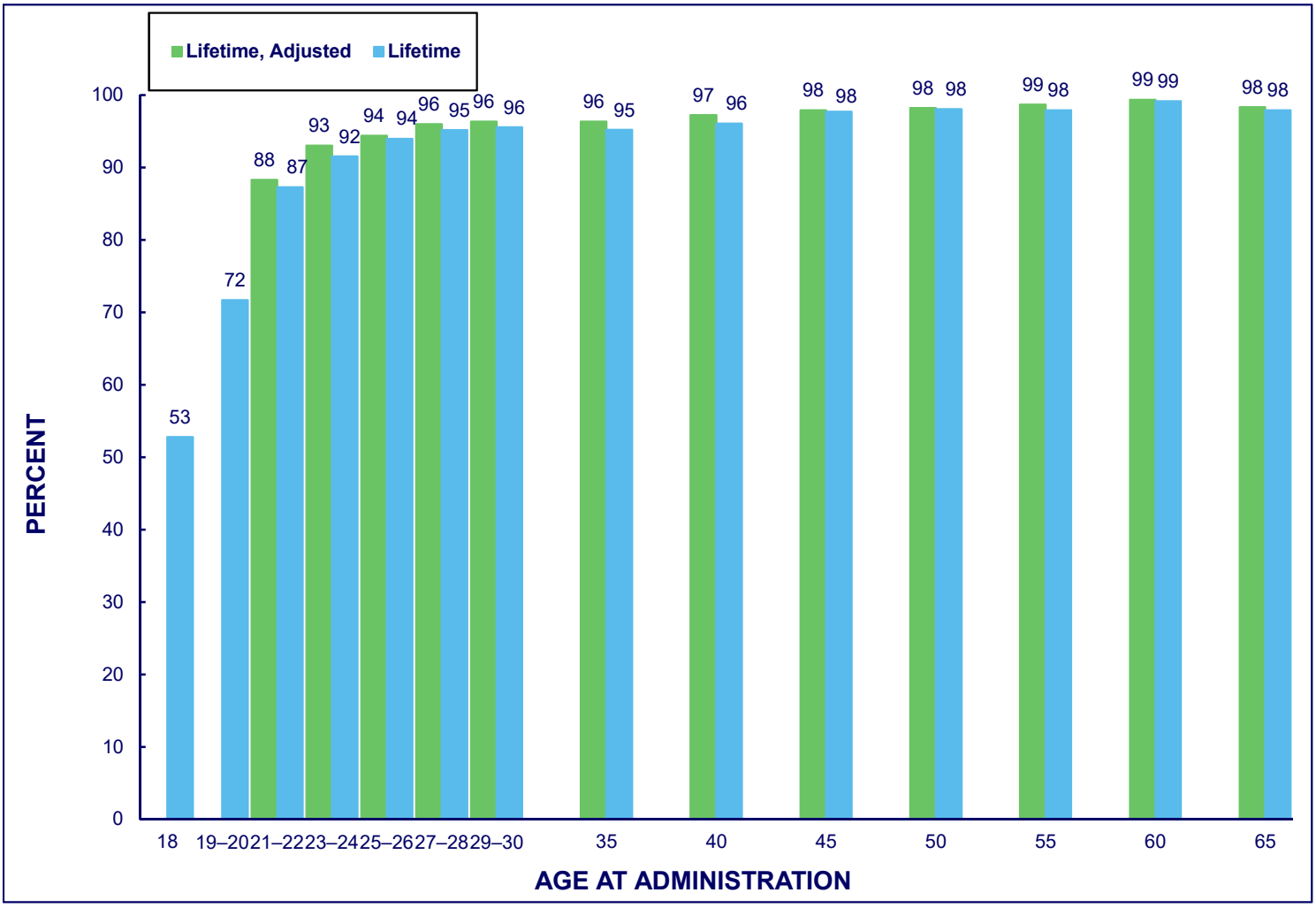


Notes. Lifetime prevalence estimates were adjusted for inconsistency in self-reports of drug use over time. See text for discussion. Due to rounding some bars with the same number may have uneven height.

TABLE/FIGURE 88

ALCOHOL

Adjusted and Unadjusted Lifetime Prevalence among Respondents of Modal Ages 18 through 65 by Age Group, 2023

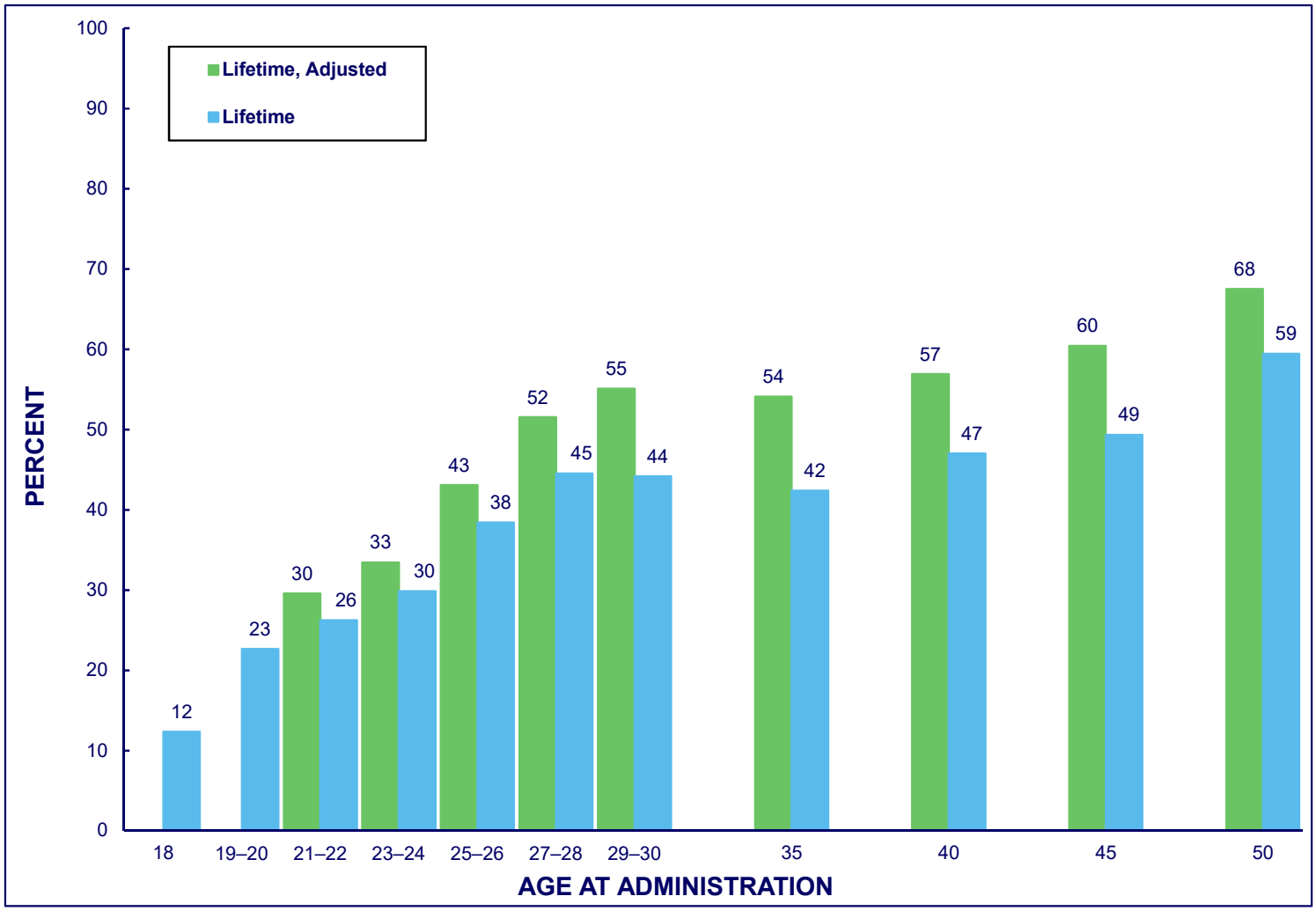


Notes. Lifetime prevalence estimates were adjusted for inconsistency in self-reports of drug use over time. See text for discussion. Due to rounding, some bars with the same number may have uneven height.

TABLE/FIGURE 89

ANY DRUG OTHER THAN CANNABIS

Adjusted and Unadjusted Lifetime Prevalence among Respondents of Modal Ages 18 through 50 by Age Group, 2023

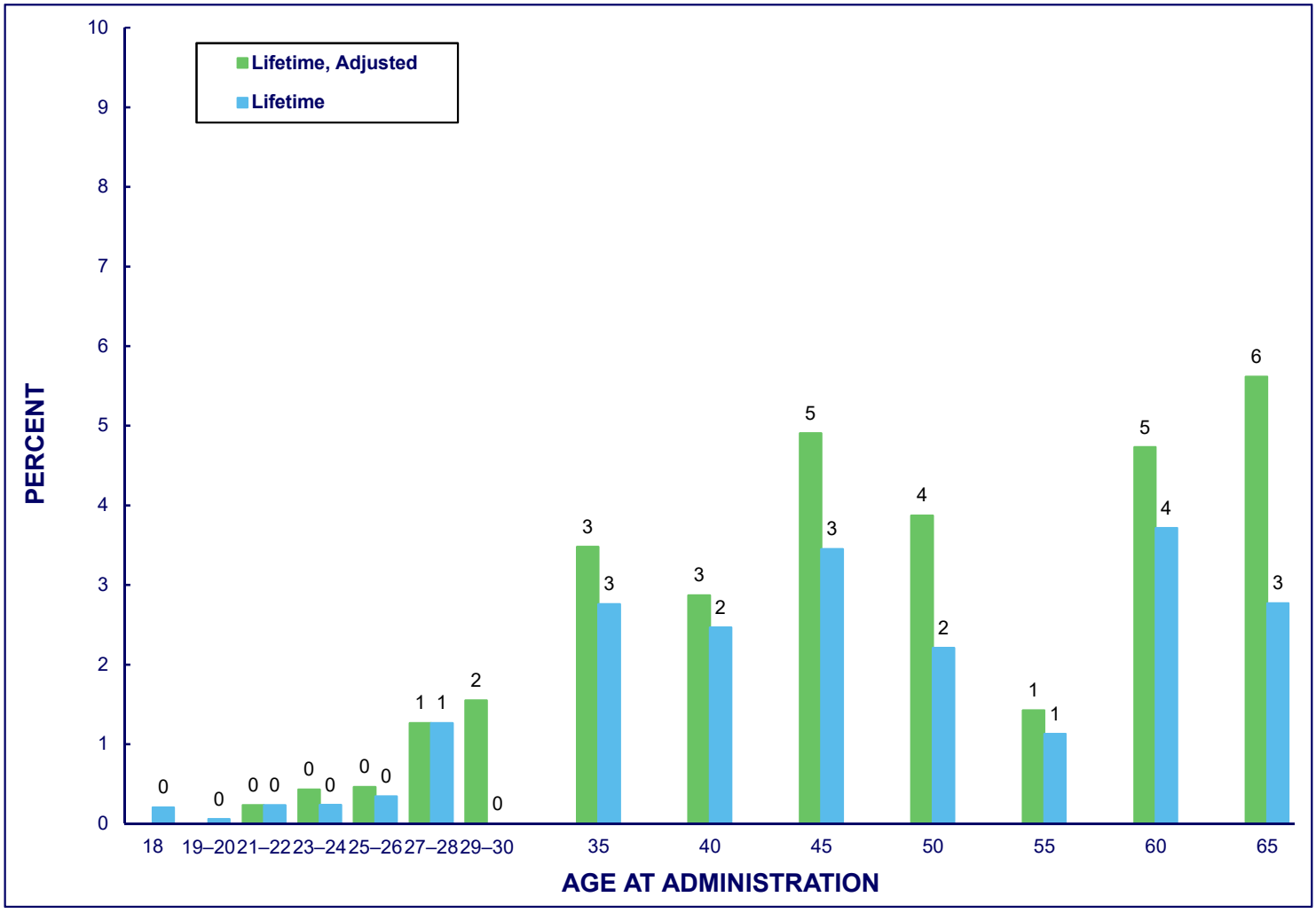


Notes. Lifetime prevalence estimates were adjusted for inconsistency in self-reports of drug use over time. See text for discussion. Due to rounding, some bars with the same number may have uneven height.

TABLE/FIGURE 90

HEROIN

Adjusted and Unadjusted Lifetime Prevalence among Respondents of Modal Ages 18 through 65 by Age Group, 2023



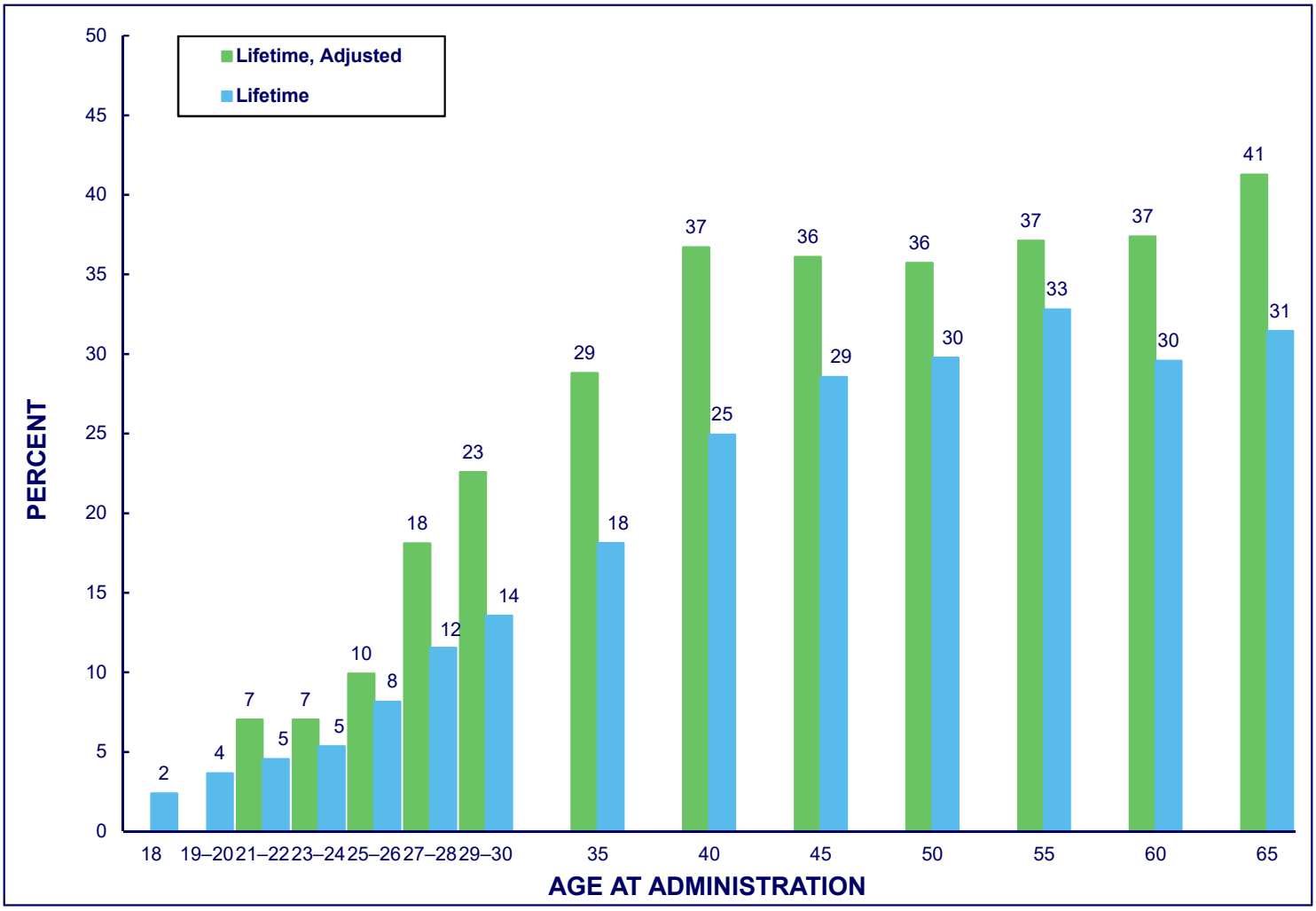
Notes. Lifetime prevalence estimates were adjusted for inconsistency in self-reports of drug use over time. See text for discussion. Due to rounding, some bars with the same number may have uneven height.

TABLE/FIGURE 91

NARCOTICS OTHER THAN HEROIN

Adjusted and Unadjusted Lifetime Prevalence among Respondents of Modal Ages 18 through 65 by Age Group, 2023

MONITORING THE FUTURE

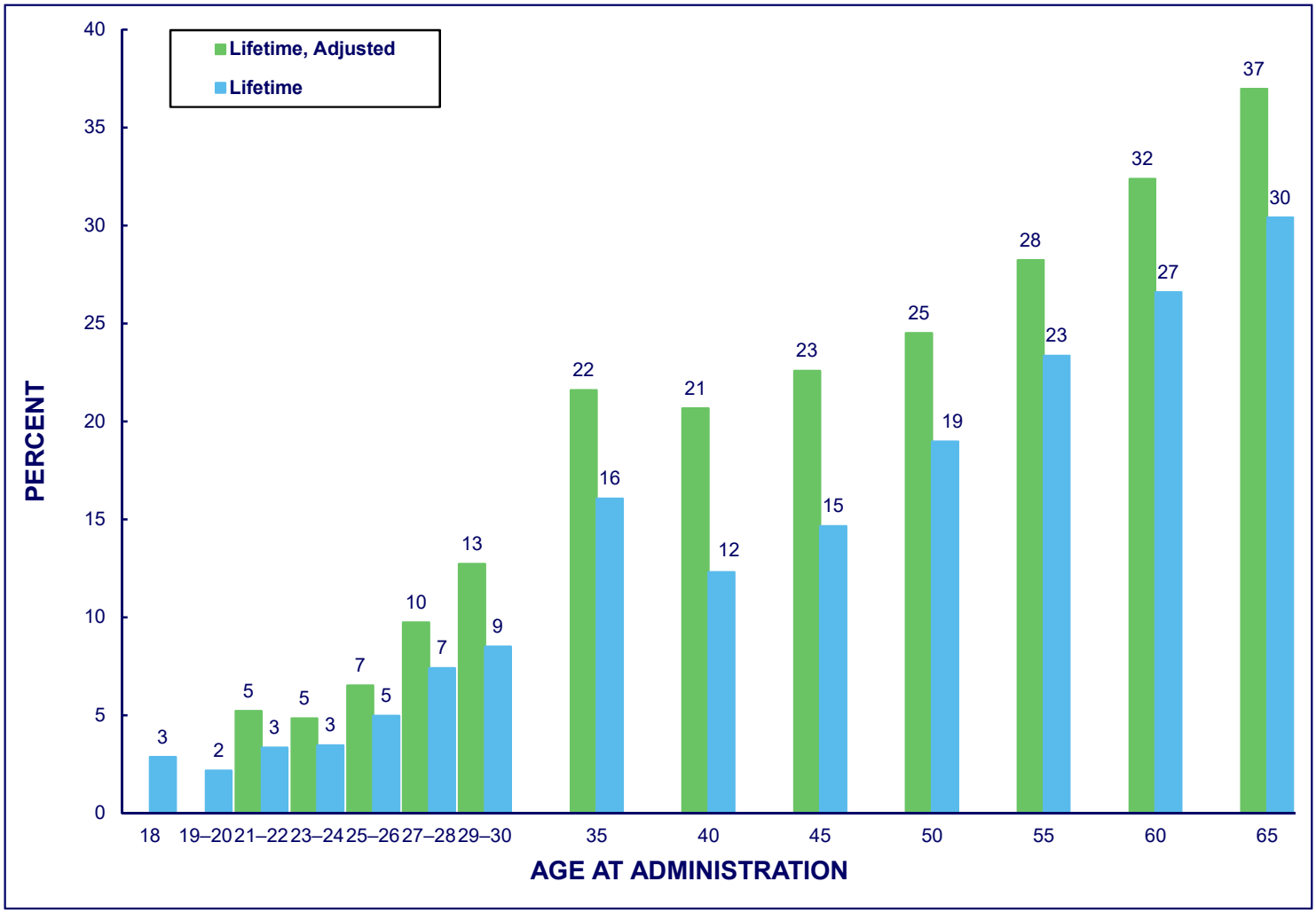


Notes. Lifetime prevalence estimates were adjusted for inconsistency in self-reports of drug use over time. See text for discussion. Due to rounding, some bars with the same number may have uneven height.

TABLE/FIGURE 92

SEDATIVES (BARBITURATES)

Adjusted and Unadjusted Lifetime Prevalence among Respondents of Modal Ages 18 through 65 by Age Group, 2023

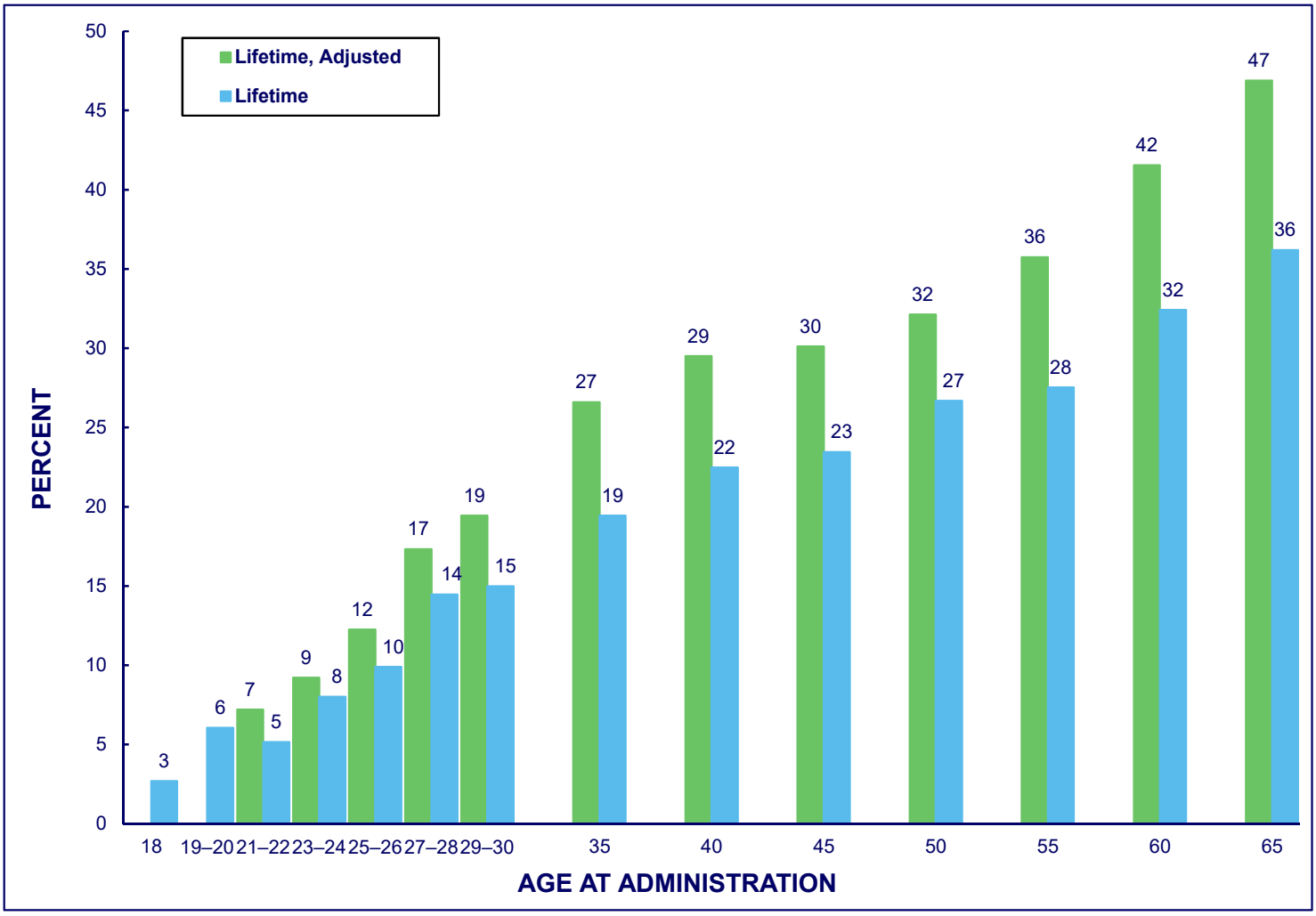


Notes. Lifetime prevalence estimates were adjusted for inconsistency in self-reports of drug use over time. See text for discussion. Due to rounding, some bars with the same number may have uneven height.

TABLE/FIGURE 93

TRANQUILIZERS

Adjusted and Unadjusted Lifetime Prevalence among Respondents of Modal Ages 18 through 65 by Age Group, 2023

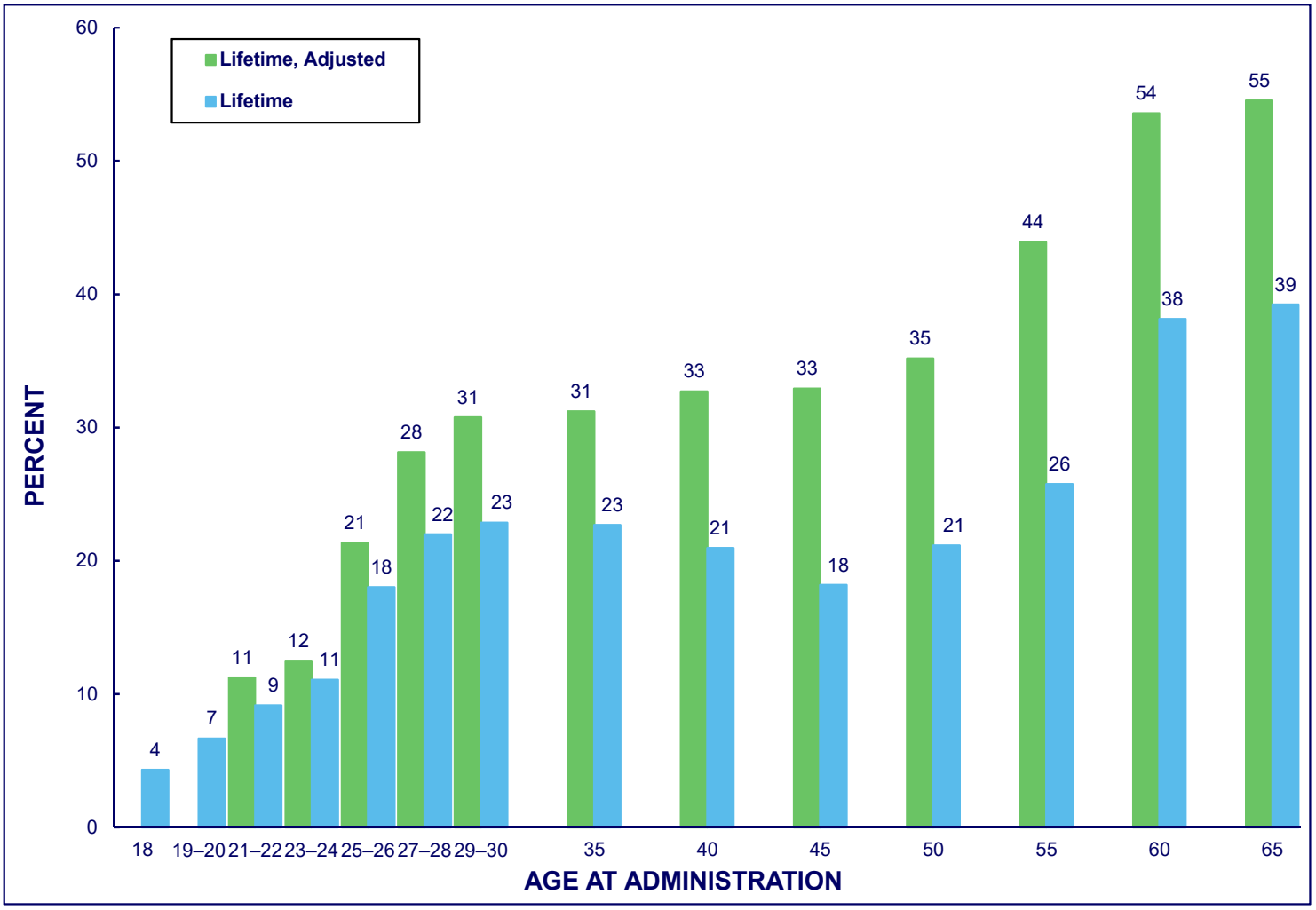


Notes. Lifetime prevalence estimates were adjusted for inconsistency in self-reports of drug use over time. See text for discussion. Due to rounding, some bars with the same number may have uneven height.

TABLE/FIGURE 94

AMPHETAMINES

Adjusted and Unadjusted Lifetime Prevalence among Respondents of Modal Ages 18 through 65 by Age Group, 2023

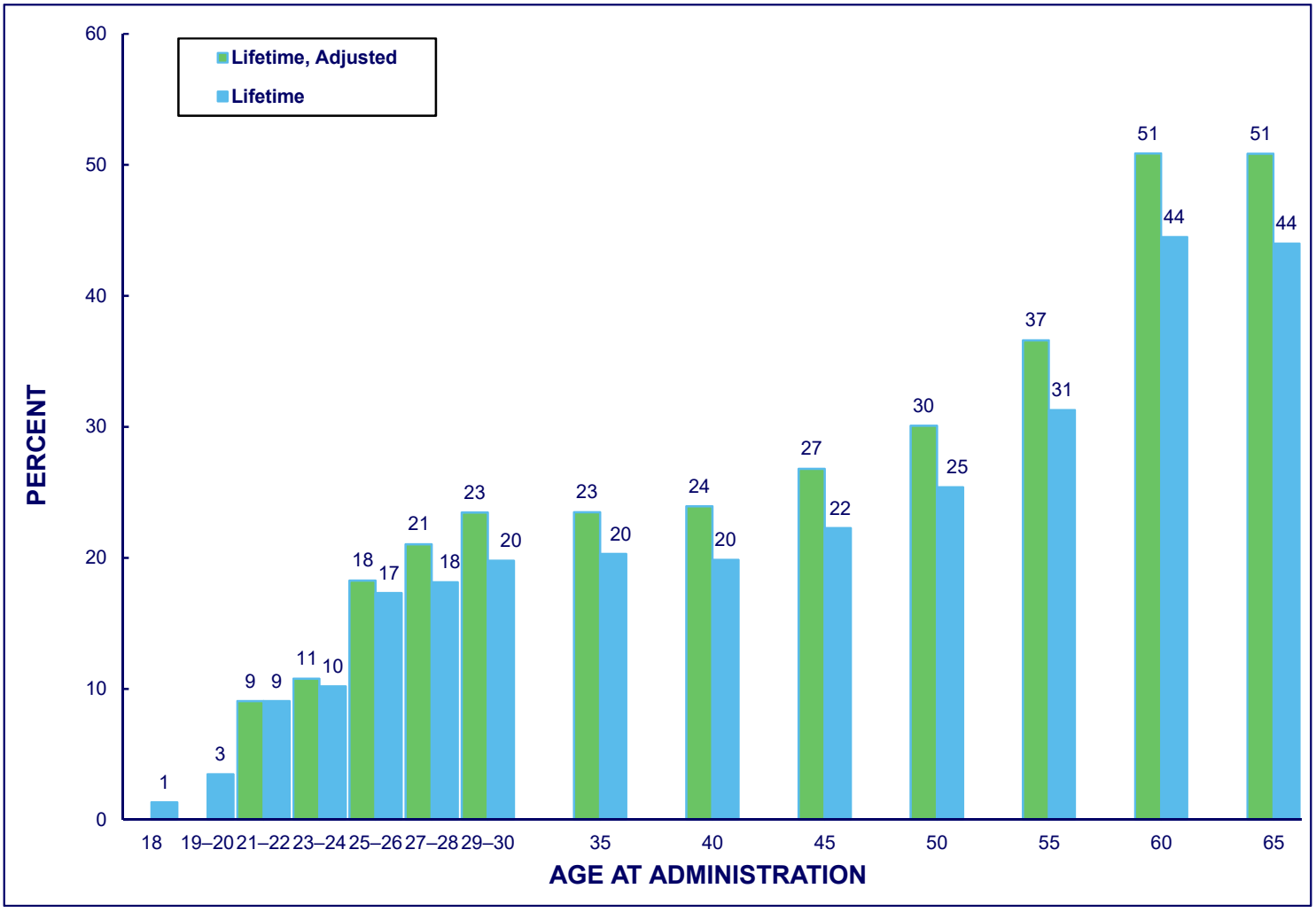


Notes. Lifetime prevalence estimates were adjusted for inconsistency in self-reports of drug use over time. See text for discussion. Due to rounding, some bars with the same number may have uneven height.

TABLE/FIGURE 95

COCAINE

Adjusted and Unadjusted Lifetime Prevalence among Respondents of Modal Ages 18 through 65 by Age Group, 2023



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 96
12-Month Prevalence of Use for Various Types of Drugs, 2023: College vs. Noncollege Young Adults 1 to 4 Years beyond High School by Gender

	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	39.5	38.9	n.s.	38.7	36.2	39.8	41.9	n.s.	n.s.
Vaping Cannabis	24.7	26.4	n.s.	28.0	25.6	22.1	27.7	n.s.	n.s.
Delta-8	13.2	12.5	n.s.	11.7	8.6	14.1	14.3	n.s.	n.s.
Alcohol	74.9	72.5	n.s.	71.8	69.5	77.8	77.8	n.s.	n.s.
Cigarettes	13.7	20.3	p<.05	15.3	26.2	12.4	12.0	n.s.	p<.01
Vaping Nicotine	25.8	35.6	p<.01	25.7	37.8	25.9	33.2	n.s.	n.s.
Any Drug other than Cannabis	12.0	15.2	n.s.	16.0	16.0	8.3	14.7	p<.05	n.s.
Hallucinogens	7.5	10.8	n.s.	11.5	12.2	3.7	9.0	p<.01	n.s.
LSD	1.8	2.3	n.s.	3.2	2.6	0.6	2.2	n.s.	n.s.
Hallucinogens other than LSD	7.4	10.4	n.s.	11.4	11.8	3.5	8.6	p<.01	n.s.
Ketamine	1.8	0.9	n.s.	4.7	*	*	1.9	n.s.	n.s.
MDMA (ecstasy, molly)	0.3	1.2	n.s.	*	0.5	0.5	2.1	n.s.	n.s.
Heroin	*	*	n.s.	*	*	*	*	n.s.	n.s.
Narcotics other than Heroin	0.5	1.2	n.s.	1.0	1.8	0.2	0.5	n.s.	n.s.
OxyContin	0.7	2.5	n.s.	1.8	3.0	*	2.2	n.s.	n.s.
Vicodin	*	0.3	n.s.	*	*	*	0.7	n.s.	n.s.
Sedatives (Barbiturates)	0.6	0.9	n.s.	1.1	0.9	0.1	0.8	n.s.	n.s.
Tranquilizers	1.2	1.6	n.s.	1.8	0.7	0.7	2.9	n.s.	n.s.
Amphetamines	3.6	2.6	n.s.	4.2	3.1	3.3	2.0	n.s.	n.s.
Adderall	2.4	0.8	n.s.	3.5	*	1.8	1.8	n.s.	n.s.
Ritalin	0.7	0.4	n.s.	1.1	*	0.5	0.8	n.s.	n.s.
Any Prescription Drug	4.4	5.4	n.s.	5.0	5.1	4.1	6.1	n.s.	n.s.
Cocaine	2.2	2.9	n.s.	3.1	3.9	1.5	1.8	n.s.	n.s.
Methamphetamine	*	*	n.s.	*	*	*	*	n.s.	n.s.
Large Cigars	7.0	7.5	n.s.	12.5	12.1	3.7	3.3	p<.05	n.s.
Small Cigars	6.9	9.1	n.s.	10.7	8.9	4.7	8.2	n.s.	n.s.
Tobacco using a Hookah	3.7	4.1	n.s.	8.6	1.2	0.7	7.3	n.s.	n.s.
Smokeless Tobacco	0.4	2.1	n.s.	*	3.5	0.7	0.9	n.s.	n.s.
Snus	1.4	2.4	n.s.	2.3	3.1	0.9	2.1	n.s.	n.s.
Nicotine Pouches	4.4	5.5	n.s.	9.5	8.9	1.3	2.4	p<.05	n.s.
Any Nicotine Use [1]	32.5	38.4	n.s.	33.0	39.1	31.4	38.0	n.s.	n.s.

Notes. '*' indicates a prevalence rate of less than 0.05%.
[1]Includes use of cigarettes, large cigars, small cigars, tobacco using a hookah, smokeless tobacco, or vaping nicotine.

MONITORING THE FUTURE

TABLE/FIGURE 97
Thirty-Day Prevalence of Use for Various Types of Drugs, 2023: College vs. Noncollege Young Adults 1 to 4 Years beyond High School by Gender

	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	26.1	28.8	n.s.	26.7	27.9	25.6	29.9	n.s.	n.s.
Vaping Cannabis	14.2	19.6	p<.05	15.5	20.0	13.5	19.5	n.s.	n.s.
Alcohol	55.0	51.9	n.s.	51.0	53.3	58.4	52.0	n.s.	n.s.
Cigarettes	4.0	8.3	p<.05	3.7	11.3	4.0	3.8	n.s.	p<.01
Vaping Nicotine	18.0	28.8	p<.001	19.1	31.5	16.9	25.3	n.s.	n.s.
Any Drug other than Cannabis	4.2	5.4	n.s.	7.0	6.7	1.7	3.5	p<.01	n.s.
Hallucinogens	2.3	2.9	n.s.	3.7	3.8	0.8	1.6	p<.05	n.s.
Hallucinogens other than LSD	1.5	2.9	n.s.	2.2	3.8	0.8	1.4	n.s.	n.s.
MDMA (ecstasy, molly)	*	0.3	n.s.	*	0.7	*	*	n.s.	n.s.
Narcotics other than Heroin	0.1	0.1	n.s.	0.2	0.2	0.1	*	n.s.	n.s.
Sedatives (Barbiturates)	0.3	0.1	n.s.	0.6	0.2	*	*	n.s.	n.s.
Tranquilizers	0.5	0.2	n.s.	0.5	0.1	0.4	0.4	n.s.	n.s.
Amphetamines	0.8	0.9	n.s.	1.6	1.3	0.3	0.5	n.s.	n.s.
Any Prescription Drug	1.3	1.2	n.s.	2.1	1.5	0.7	0.8	n.s.	n.s.
Cocaine	0.4	1.6	n.s.	1.0	2.3	*	0.7	n.s.	n.s.

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

MONITORING THE FUTURE

TABLE/FIGURE 98

Thirty-Day Prevalence of Daily Use for Various Types of Drugs, 2023: College vs. Noncollege Young Adults 1 to 4 Years beyond High School by Gender

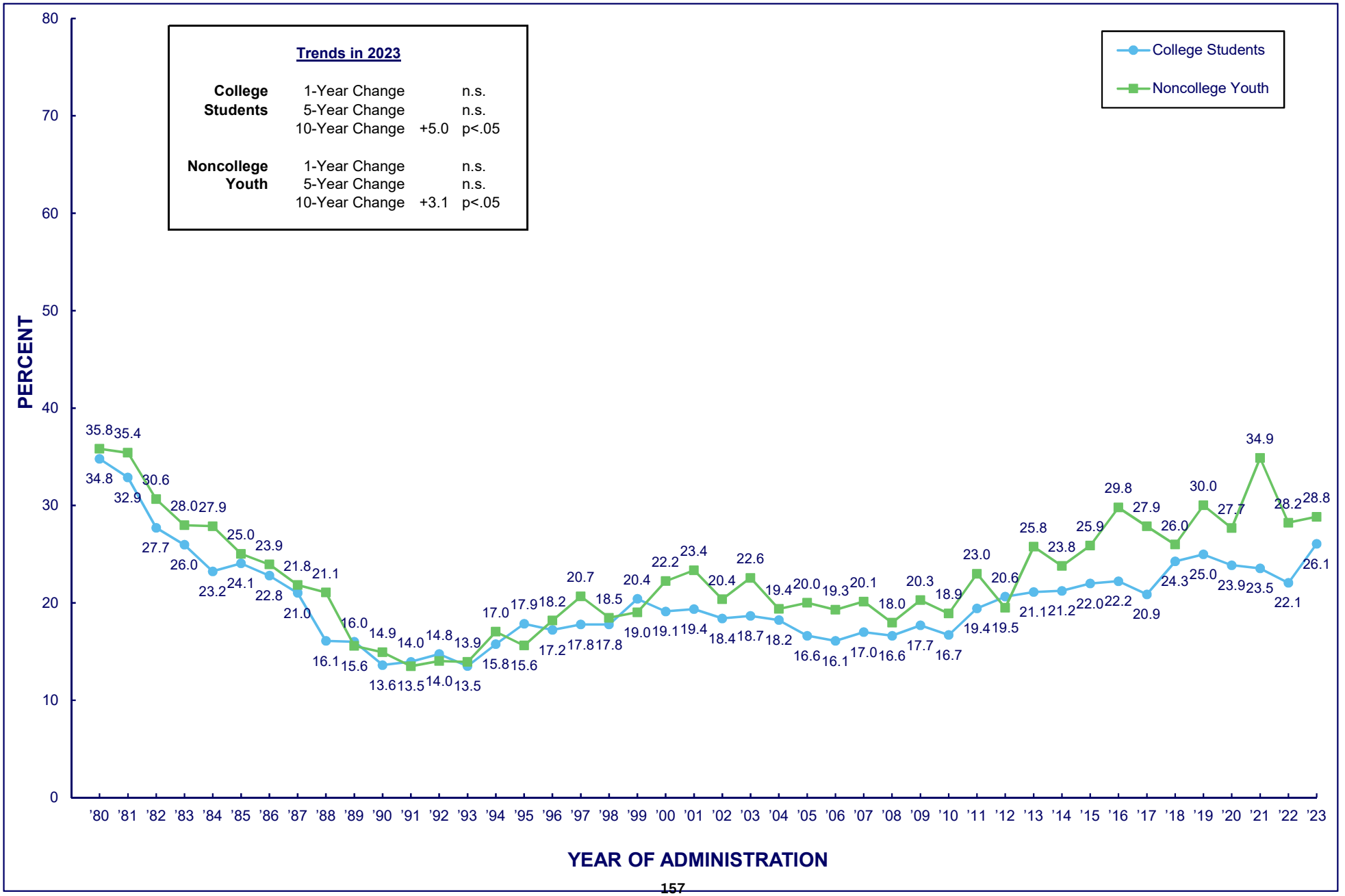
	Total			Men		Women		Sex Differences	
	Full-Time College	Non-College	College/Non-College Differences	Full-Time College	Non-College	Full-Time College	Non-College	Full-Time College	Non-College
Cannabis	6.3	11.6	p<.05	8.0	13.2	5.1	9.9	n.s.	n.s.
Alcohol									
Daily	1.9	2.8	n.s.	3.5	3.3	0.8	2.2	p<.05	n.s.
5+ Drinks in a Row in Last 2 Weeks	21.9	20.3	n.s.	24.4	25.1	19.9	14.9	n.s.	p<.05
10+ Drinks in a Row in Last 2 Weeks	5.1	8.4	n.s.	7.9	13.1	3.0	2.0	p<.05	p<.01
Cigarettes									
Daily	0.6	2.2	p<.05	0.6	2.6	0.6	1.0	n.s.	n.s.
1/2 Pack+/Day	0.4	0.4	n.s.	0.6	0.5	0.3	0.4	n.s.	n.s.

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

TABLE/FIGURE 99

CANNABIS

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

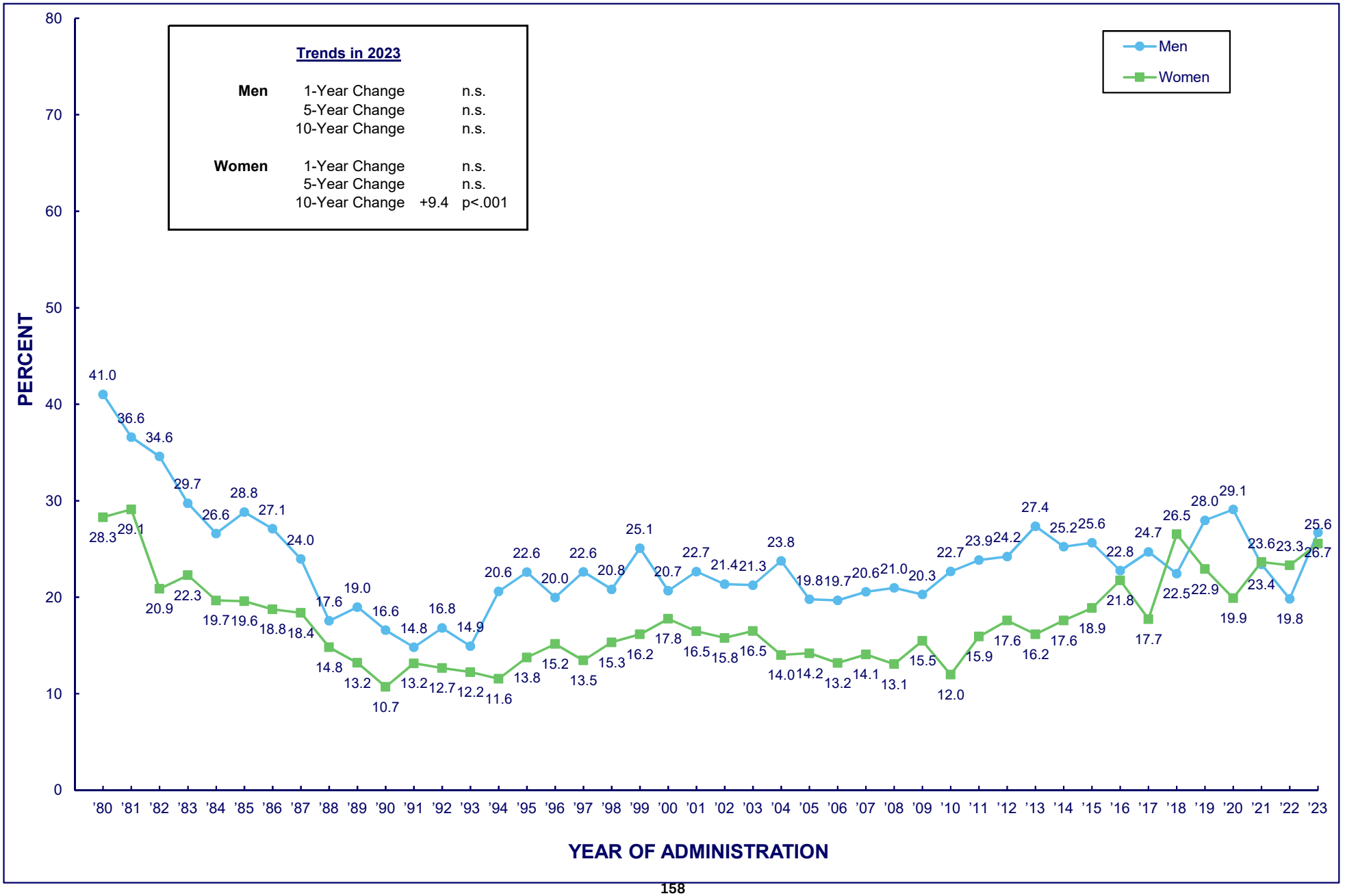


TABLE/FIGURE 100

CANNABIS

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

MONITORING THE FUTURE

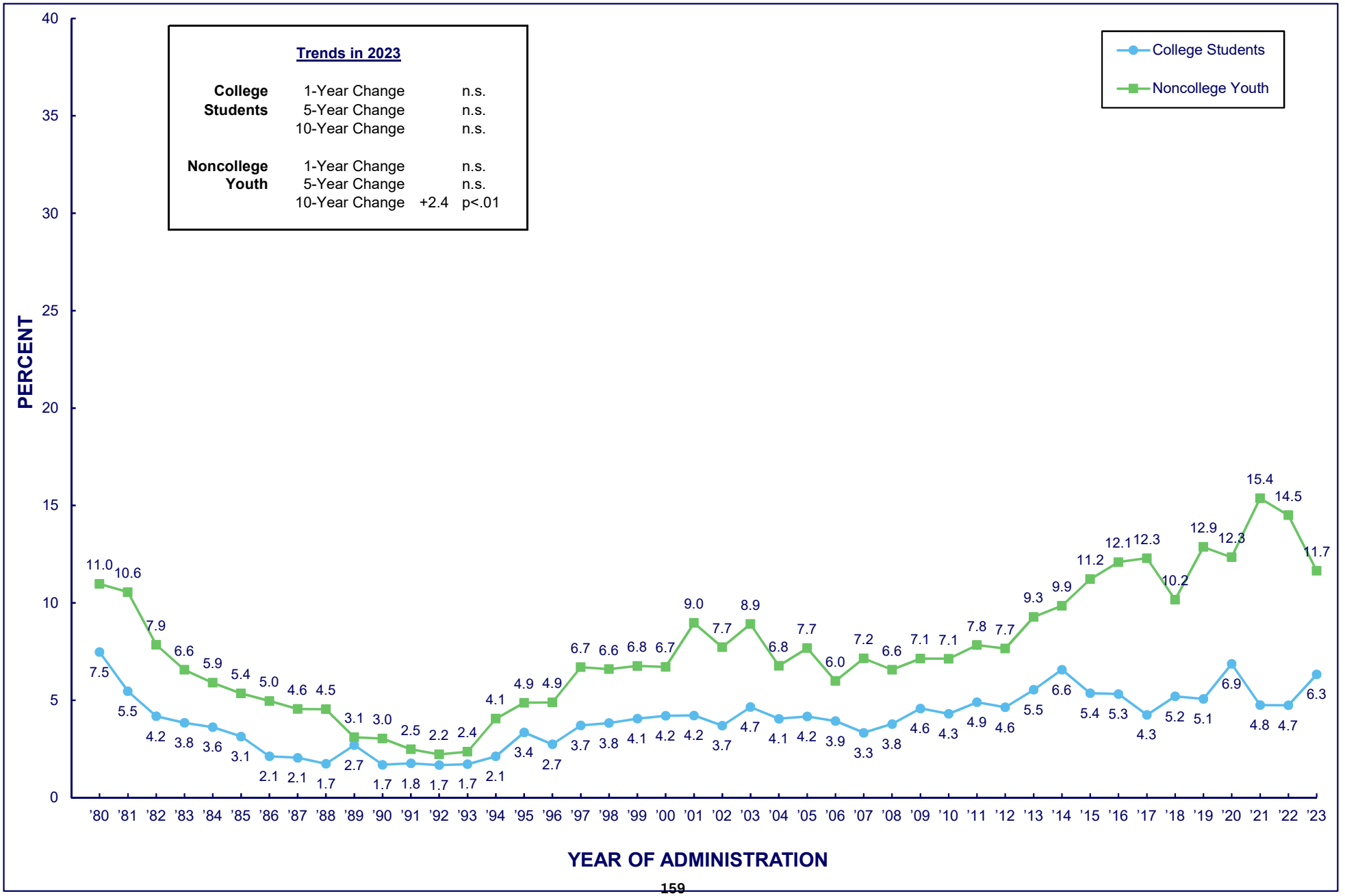


TABLE/FIGURE 101

CANNABIS

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

MONITORING THE FUTURE

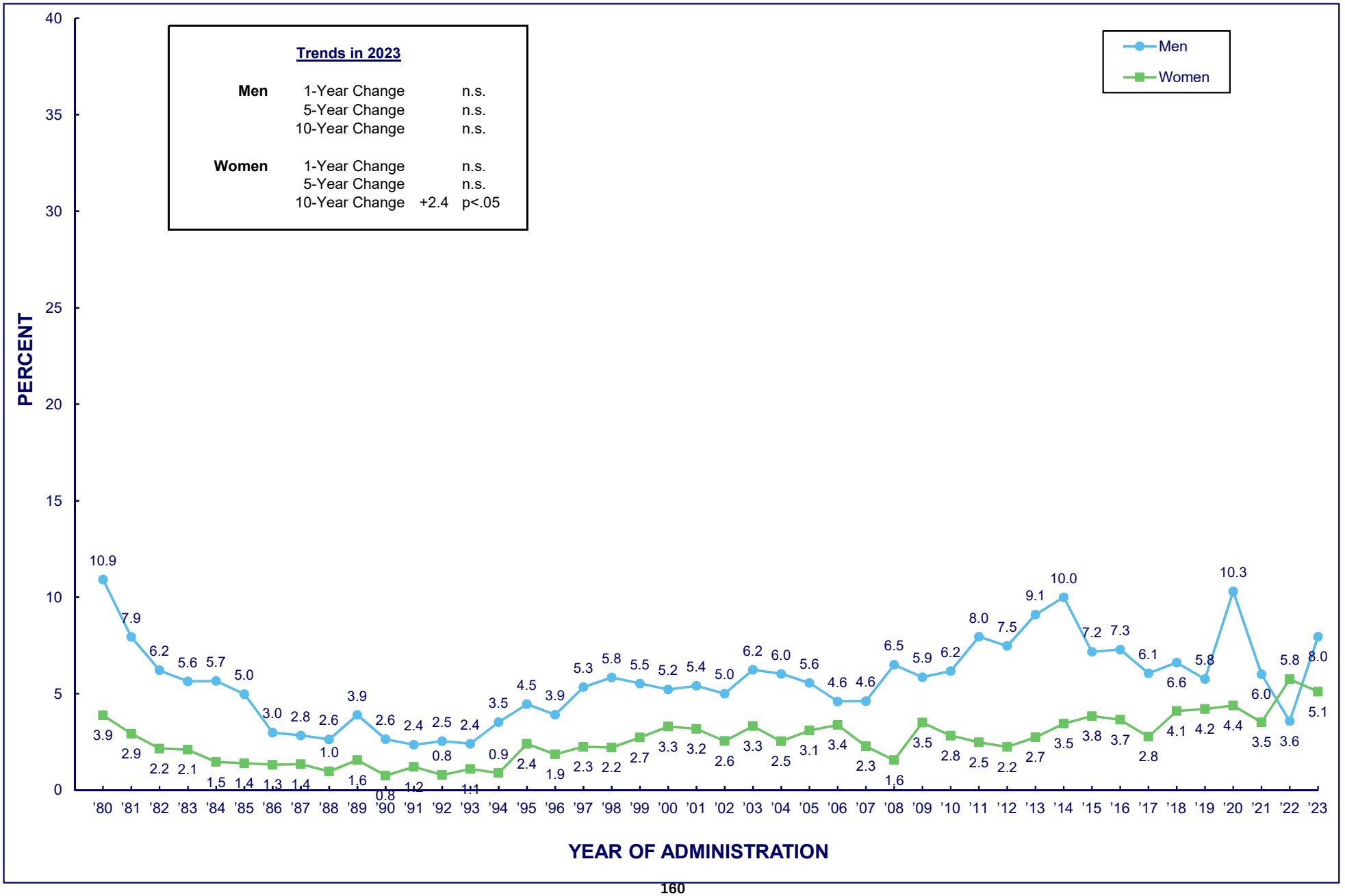


TABLE/FIGURE 102

CANNABIS

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

MONITORING THE FUTURE

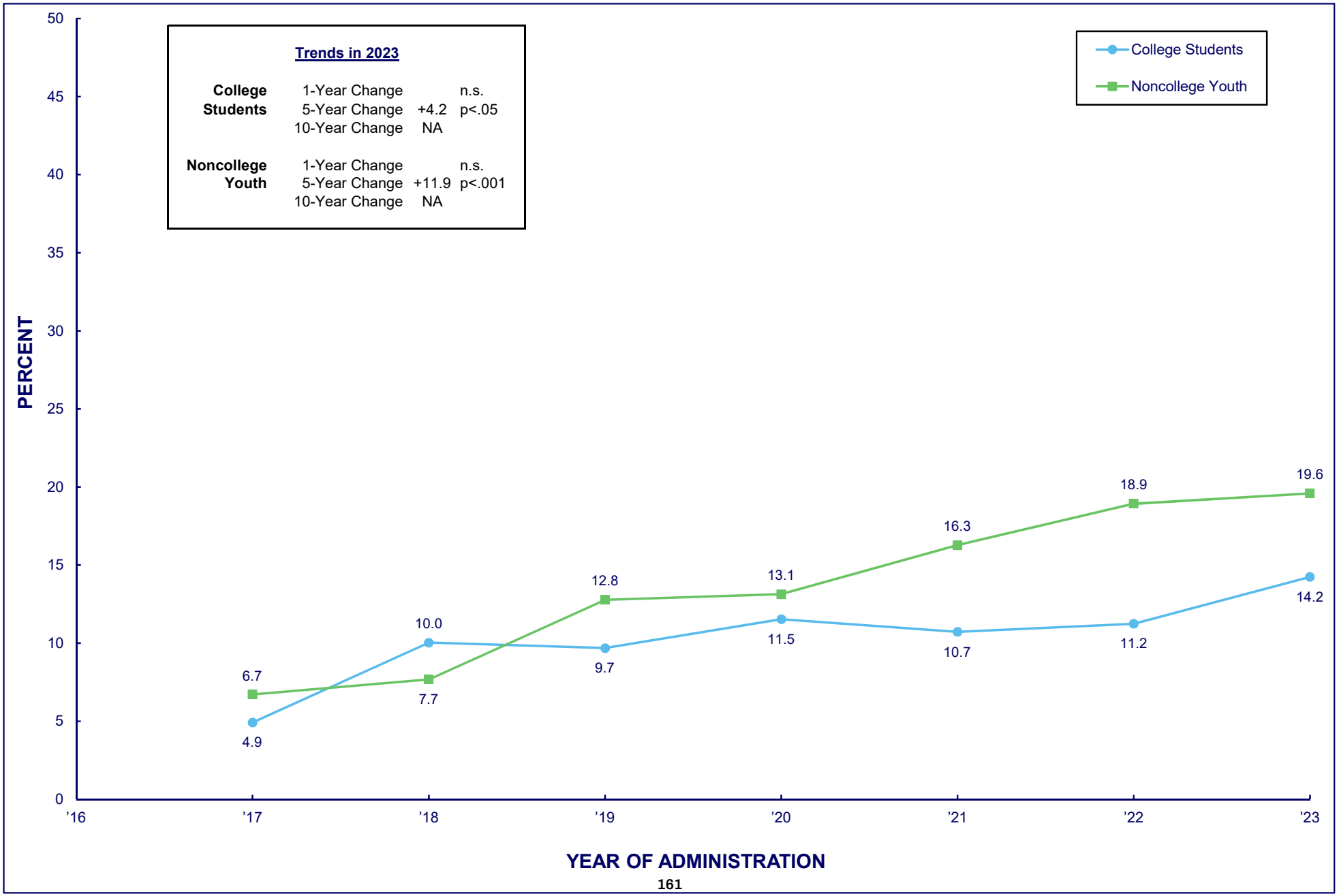


TABLE/FIGURE 103

VAPING CANNABIS

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

MONITORING THE FUTURE

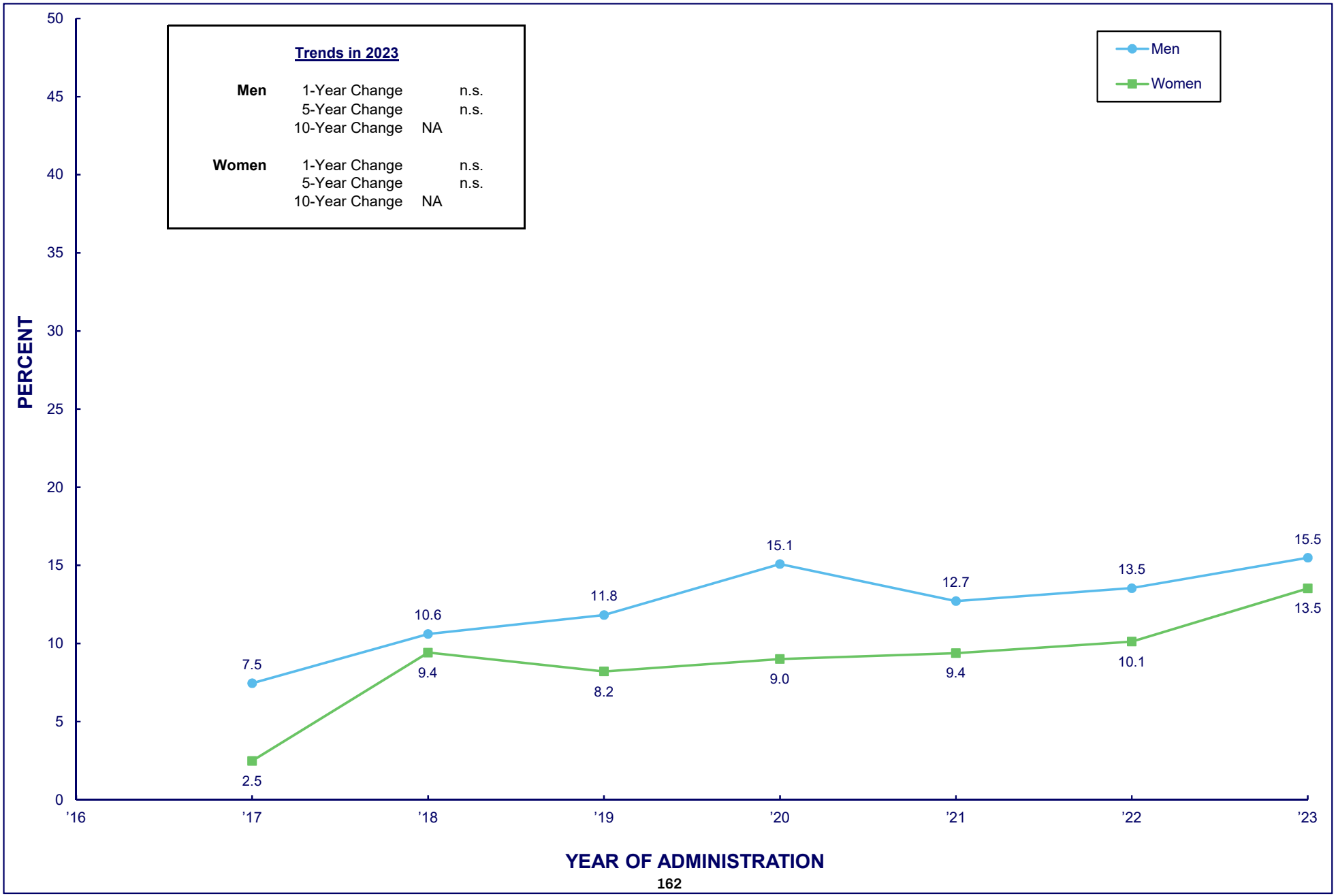


TABLE/FIGURE 104

VAPING CANNABIS

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

MONITORING THE FUTURE

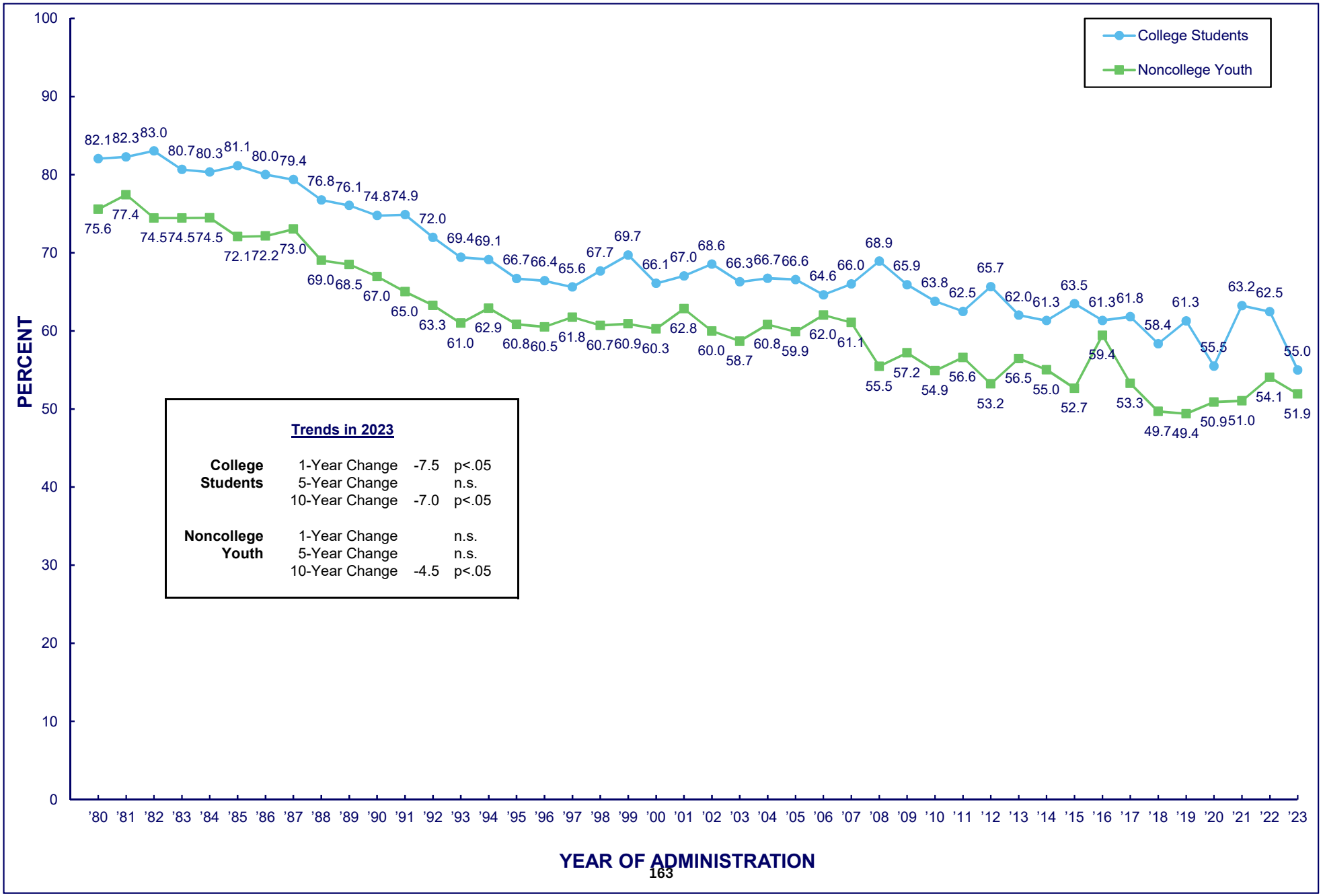


TABLE/FIGURE 105

ALCOHOL

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

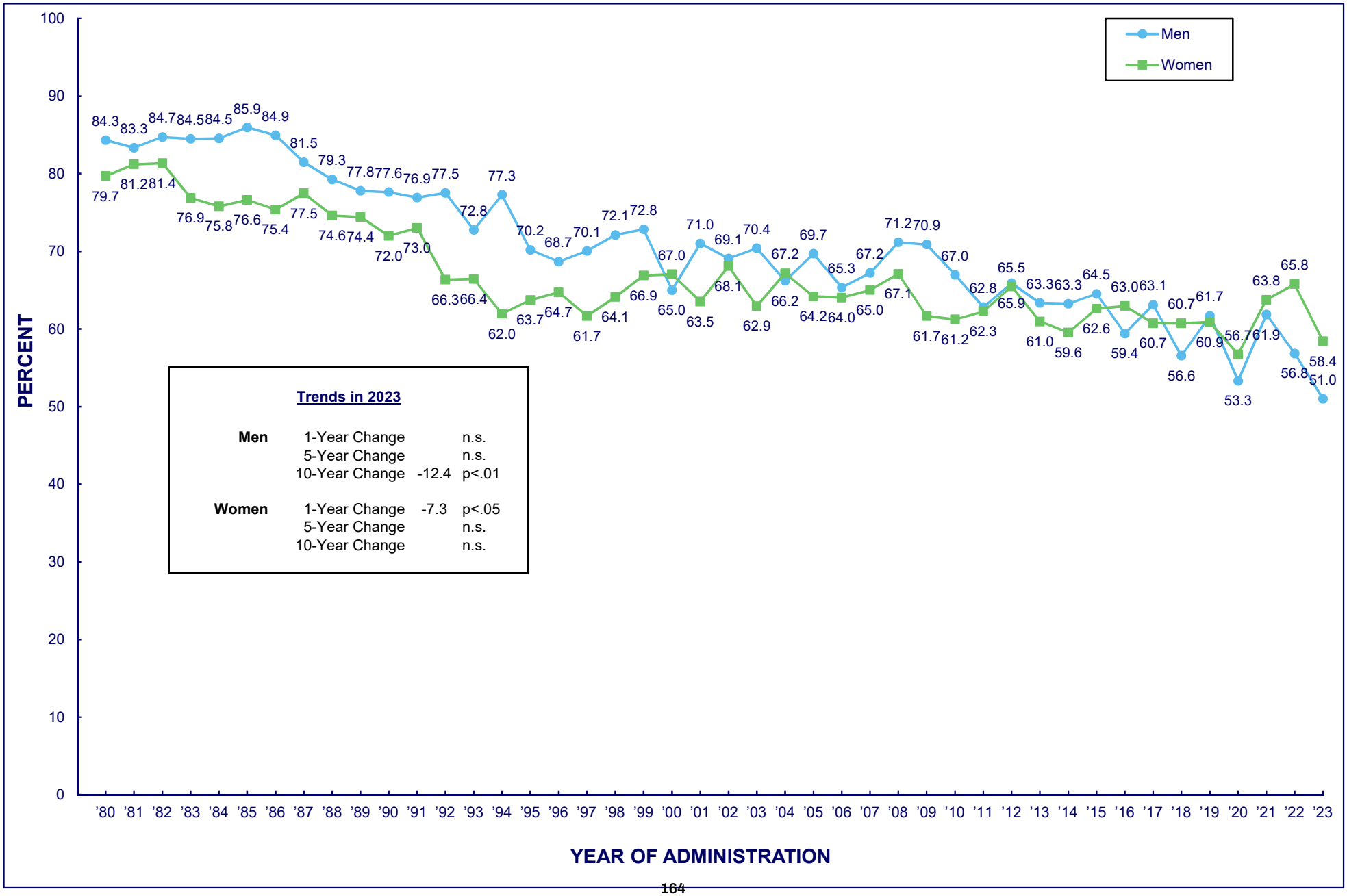
MONITORING THE FUTURE



TABLE/FIGURE 106

ALCOHOL

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

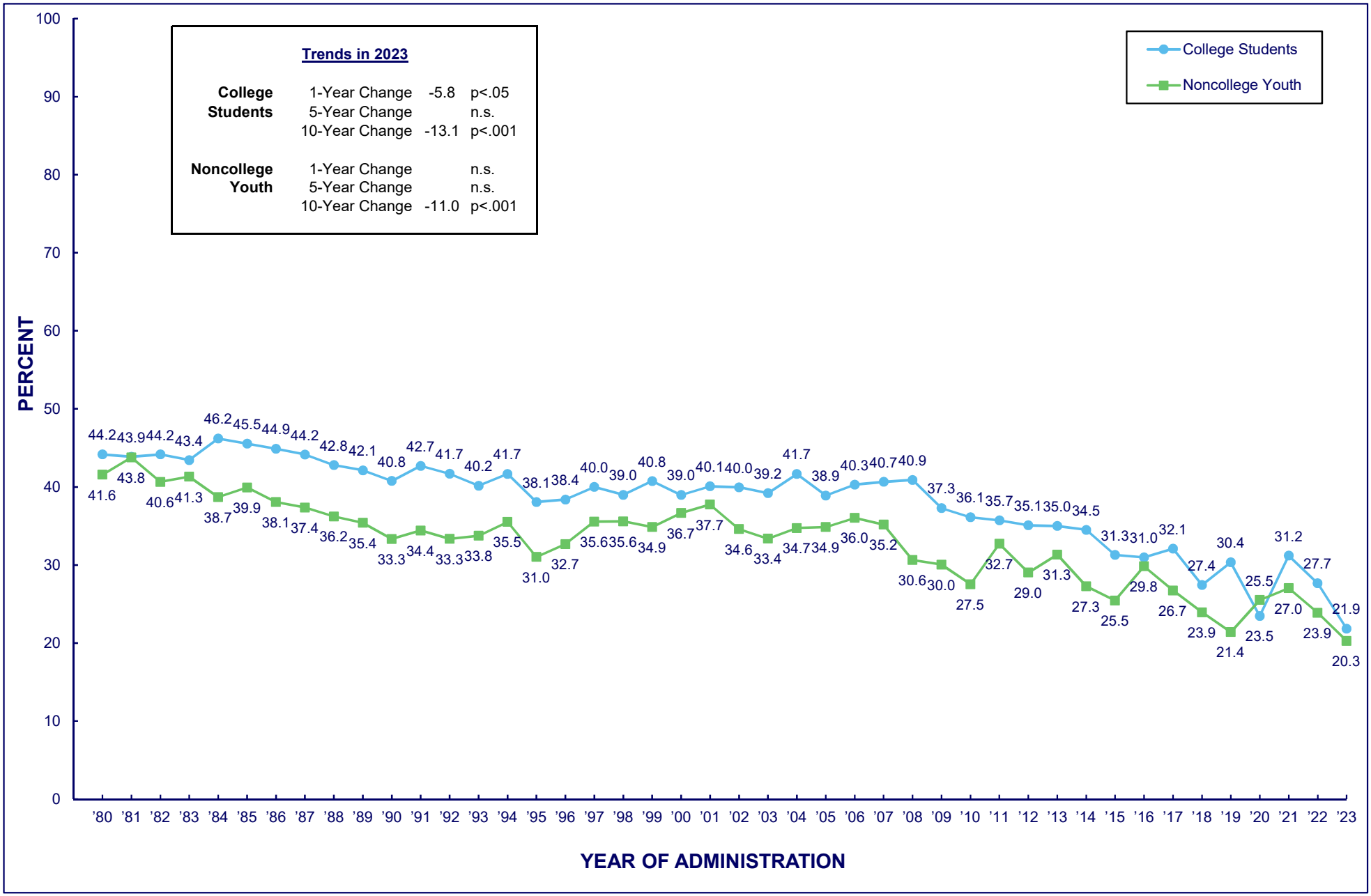


TABLE/FIGURE 107

ALCOHOL

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

MONITORING THE FUTURE

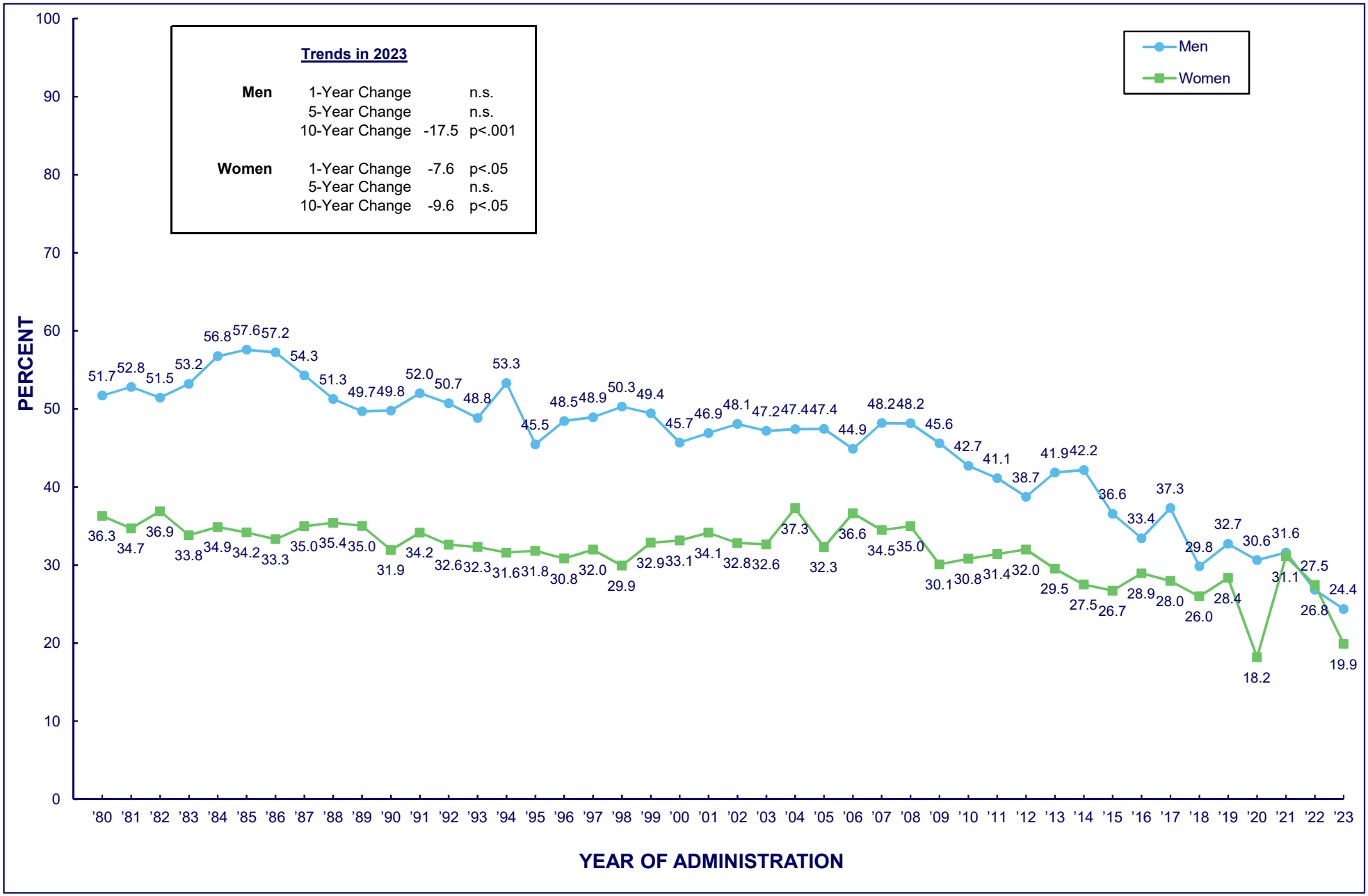


TABLE/FIGURE 108

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

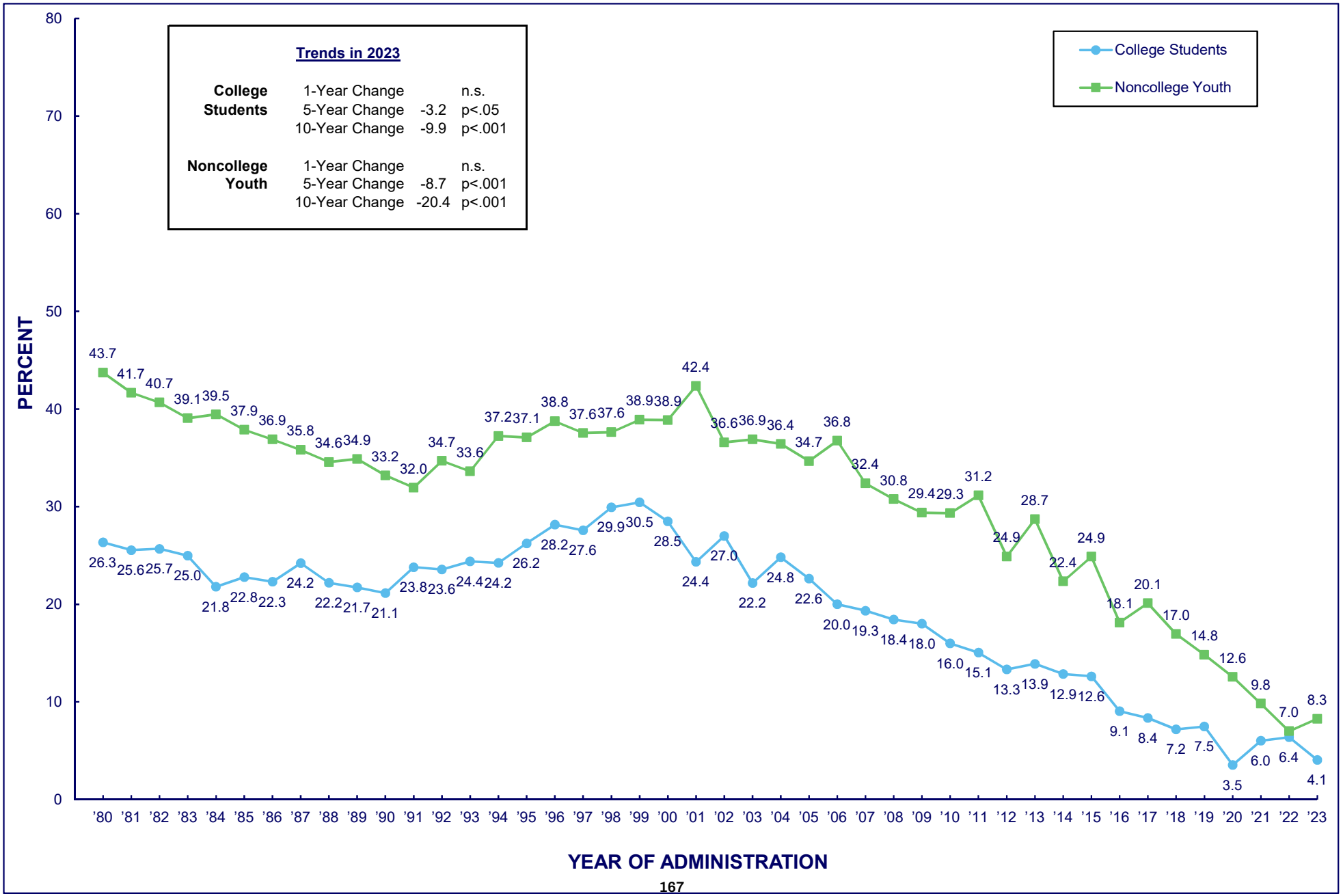


TABLE/FIGURE 109

CIGARETTES

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

MONITORING THE FUTURE

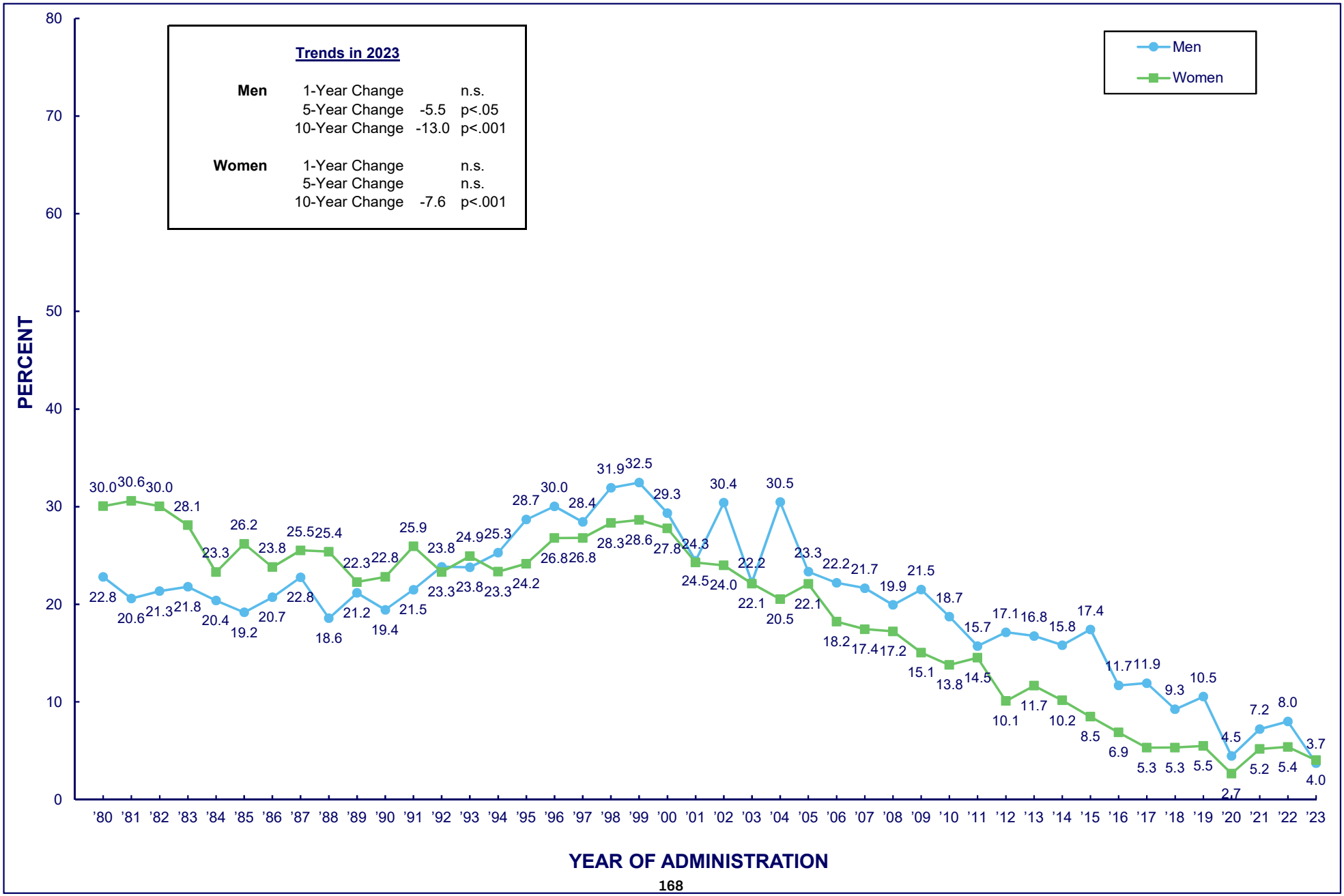


TABLE/FIGURE 110

CIGARETTES

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

MONITORING THE FUTURE

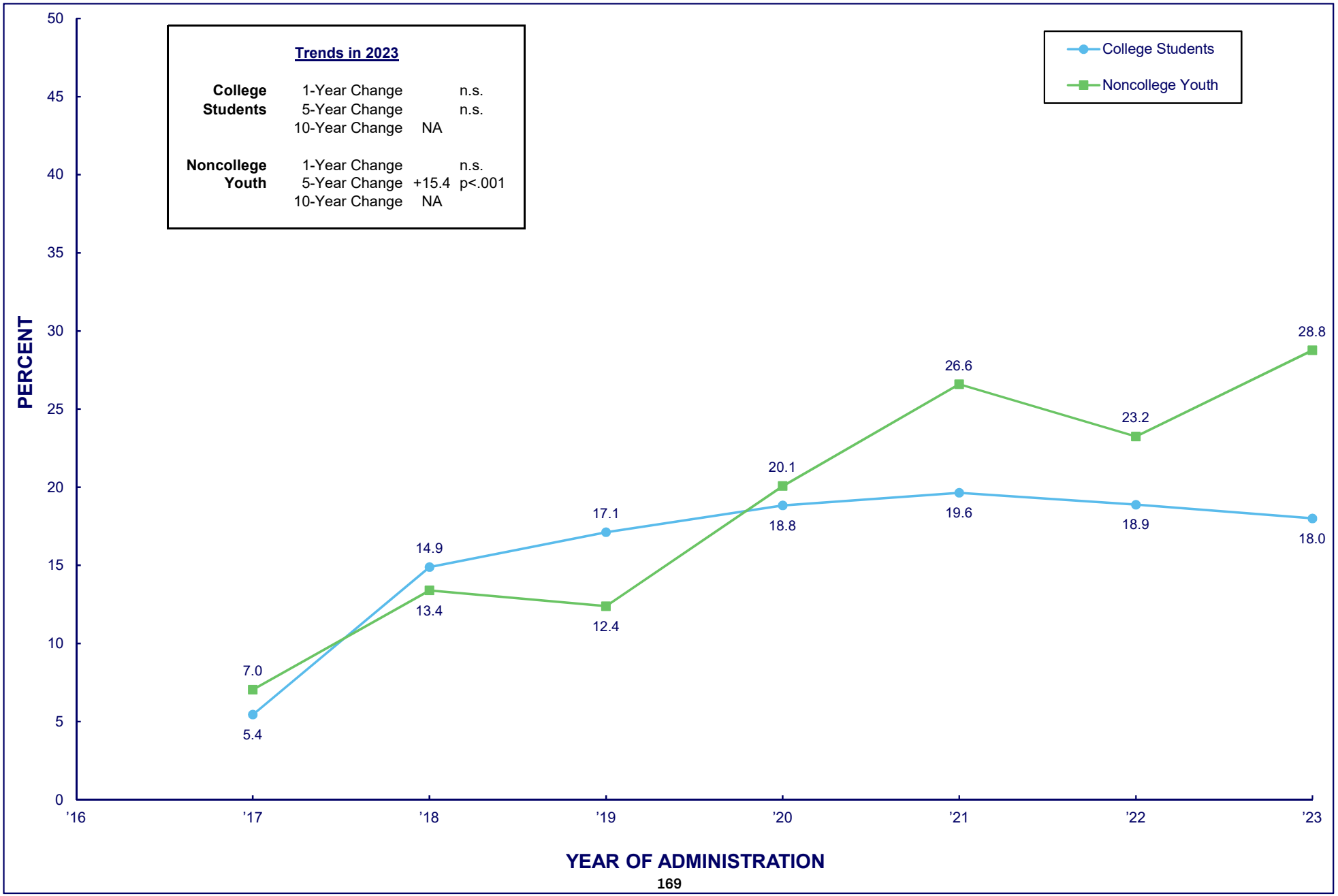


TABLE/FIGURE 111

VAPING NICOTINE

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

MONITORING THE FUTURE

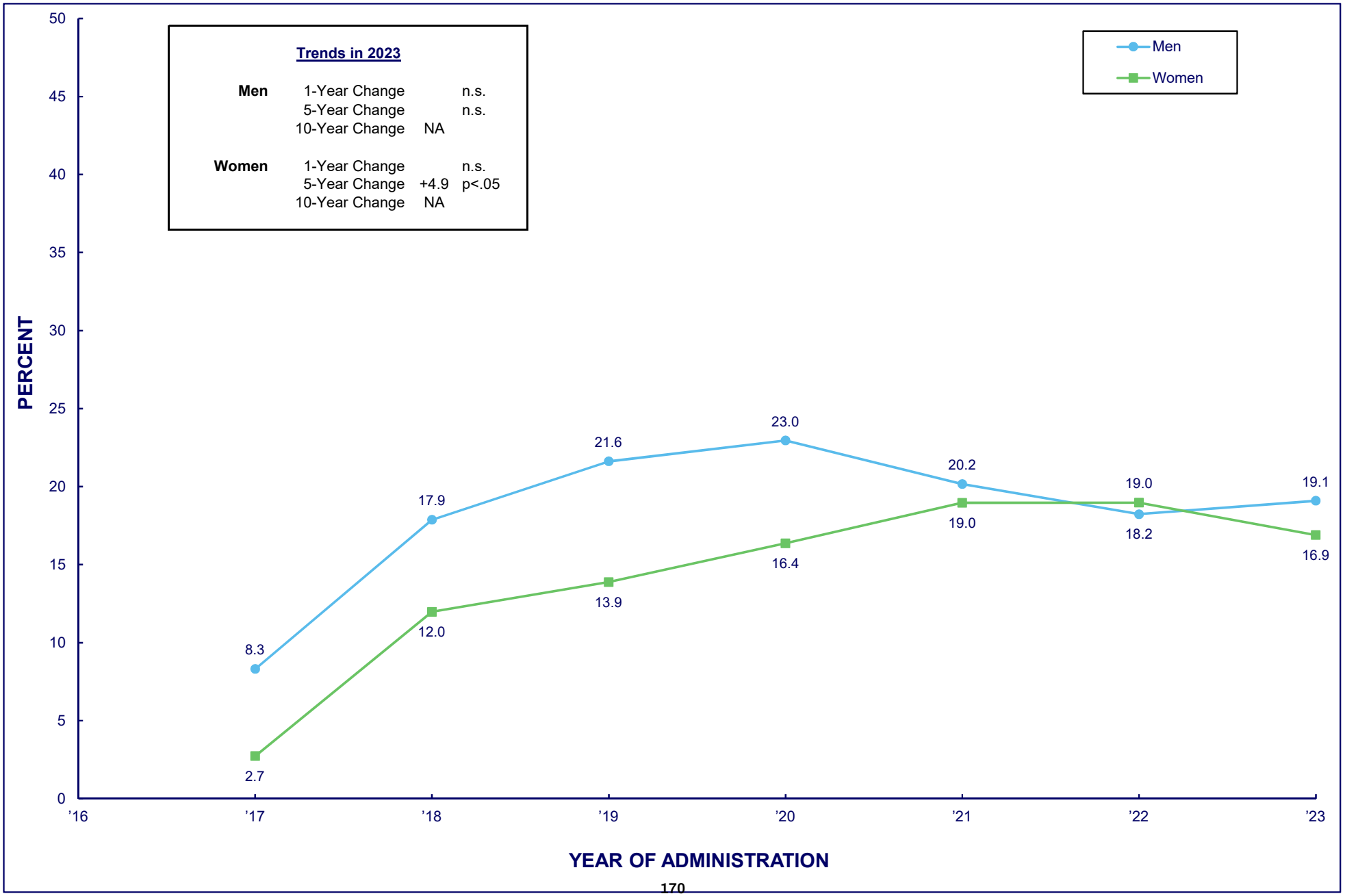


TABLE/FIGURE 112

VAPING NICOTINE

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

MONITORING THE FUTURE

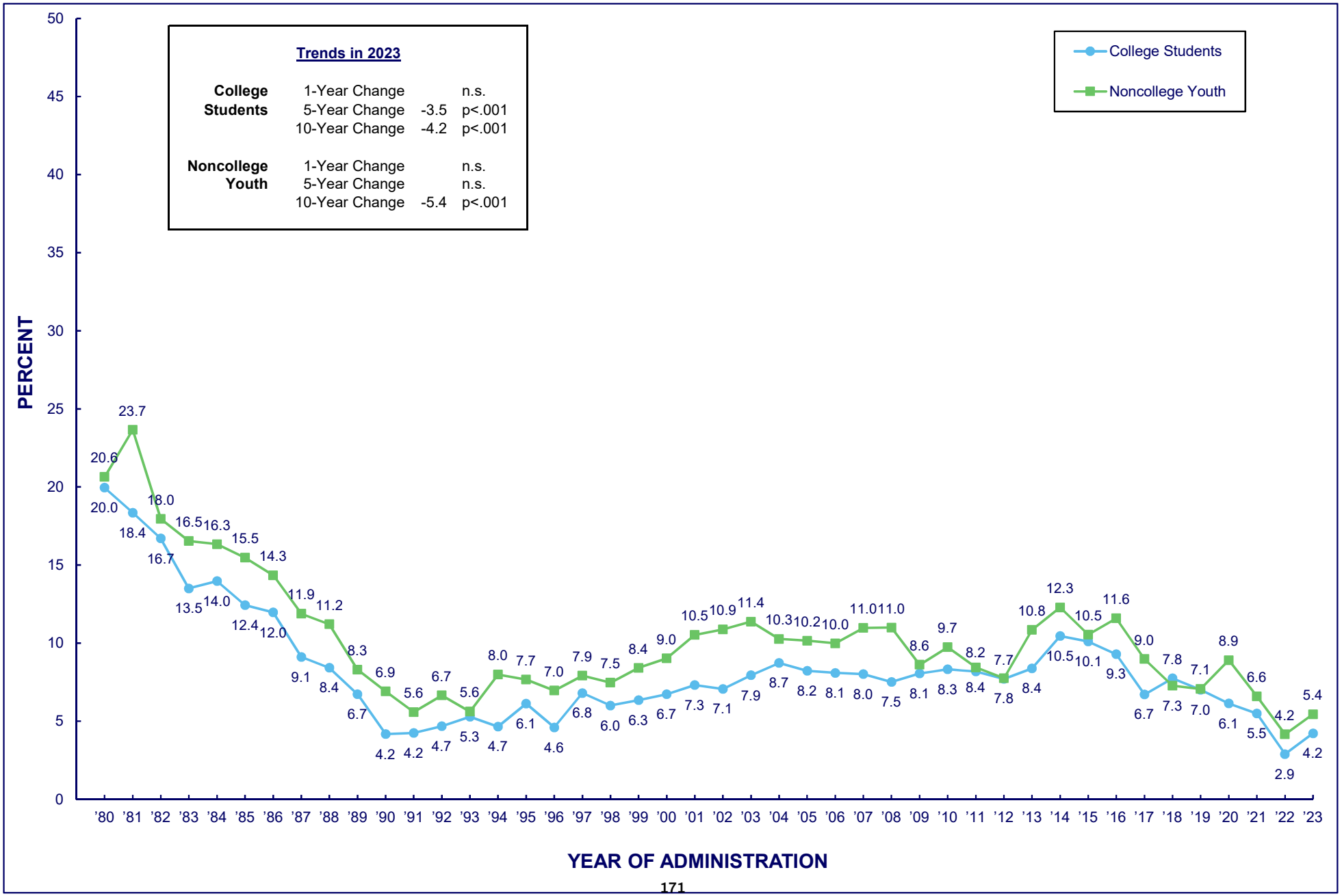


TABLE/FIGURE 113

ANY DRUG OTHER THAN CANNABIS

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

MONITORING THE FUTURE



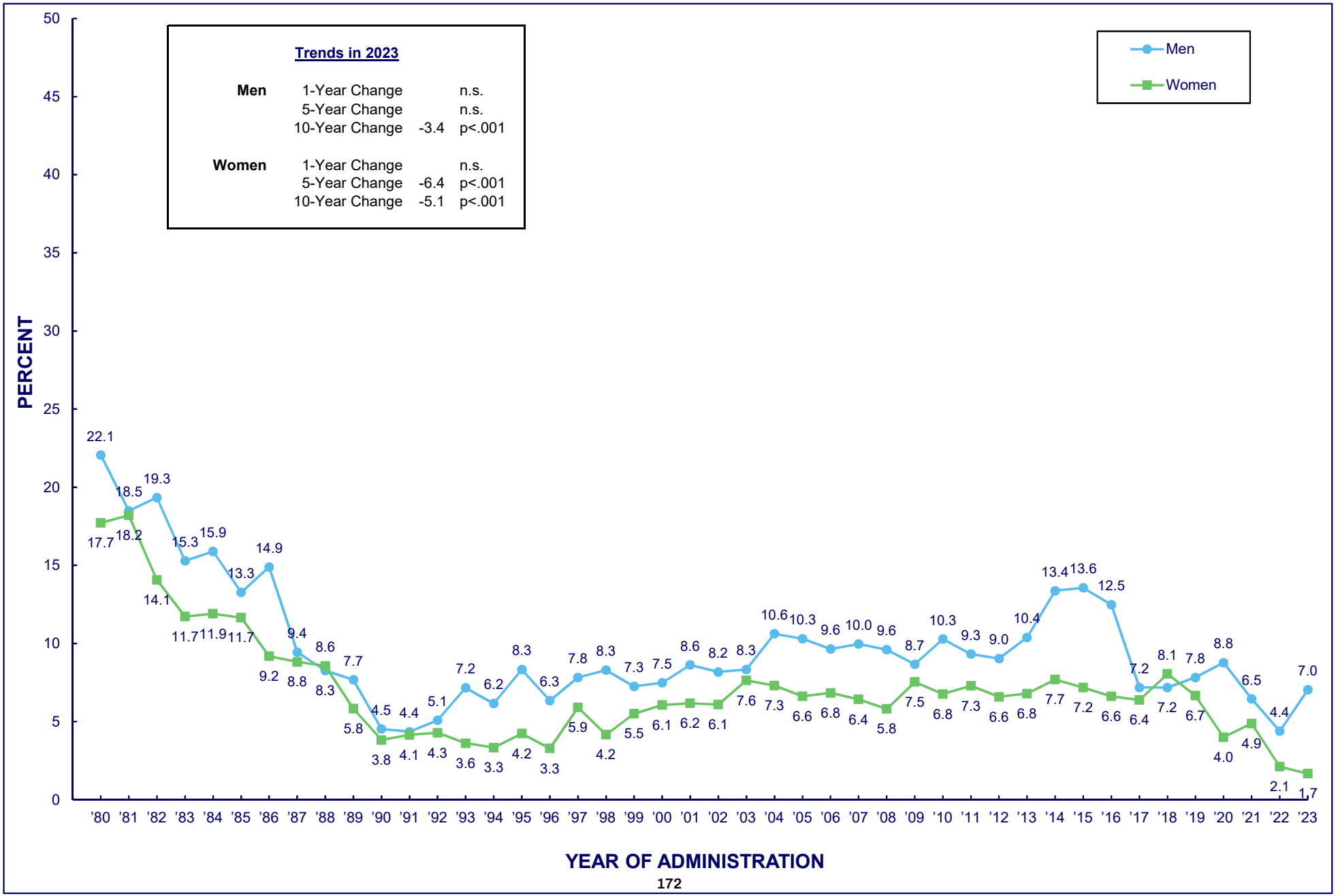
TABLE/FIGURE 114

ANY DRUG OTHER THAN CANNABIS

Trends in 30-Day Prevalence

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

MONITORING THE FUTURE



TABLE/FIGURE 115
Demographic Distribution of 2023 MTF Panel Sample

	Young Adults		Early Midlife Adults		Midlife Adults	
	Original Age 18	Age 19-30	Original Age 18	Age 35-50	Original Age 18	Age 55-65
Year Reported	(2011-2022)	(2023)	(1991, 1996, 2001, 2006)	(2023)	(1976, 1981, 1986)	(2023)
Sex/Gender [1]						
Male/Man	47.9	45.4	47.8	47.2	49.4	48.4
Female/Woman	51.5	49.0	52.2	52.0	50.6	50.0
Transgender	NA	1.0	NA	0.2	NA	0.0
Non-binary	NA	2.7	NA	0.3	NA	0.1
Other or Prefer not to answer (2021 or later)	0.6	0.9	NA	0.4	NA	0.7
N	4747	4810	3328	3299	3011	2997
Race/Ethnicity [2]						
Hispanic	24.2	24.2	11.4	NA	4.1	NA
American Indian or Alaska Native	1.2	0.6	1.4	NA	1.6	NA
Asian American	4.1	4.4	3.5	NA	1.6	NA
Black or African American	12.0	11.4	12.3	NA	12.0	NA
Middle Eastern [3]	0.1	0.5	NA	NA	NA	NA
Native Hawaiian or Other Pacific Islander [4]	0.4	0.0	0.1	NA	NA	NA
White	54.2	54.4	70.6	NA	80.7	NA
More than One Race	3.8	4.5	0.7	NA	NA	NA
N	4756	4641	3230	NA	2941	NA
Sexual Orientation						
Straight	NA	79.5	NA	93.3	NA	95.9
Gay or Lesbain	NA	4.2	NA	2.4	NA	2.8
Bisexual	NA	12.9	NA	3.3	NA	0.9
Other	NA	3.5	NA	1.1	NA	0.4
N	NA	4644	NA	3287	NA	2970

[1]From 1976-2020, the MTF in-school age 18 surveys included two response options to the question "What is your sex?": 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: male, female, other, and prefer not to answer. Starting in 2019 in the MTF Panel study, a gender identity question was added for ages 19+ asking, "How do you describe yourself?" Since 2022, respondents have been able to check all that apply from six response options: female/woman, male/man, non-binary, transgender, other, and prefer not to answer.

[2]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. Race/ethnicity is not included in the surveys for ages 40+.

[3]Added as a response option in 2021.

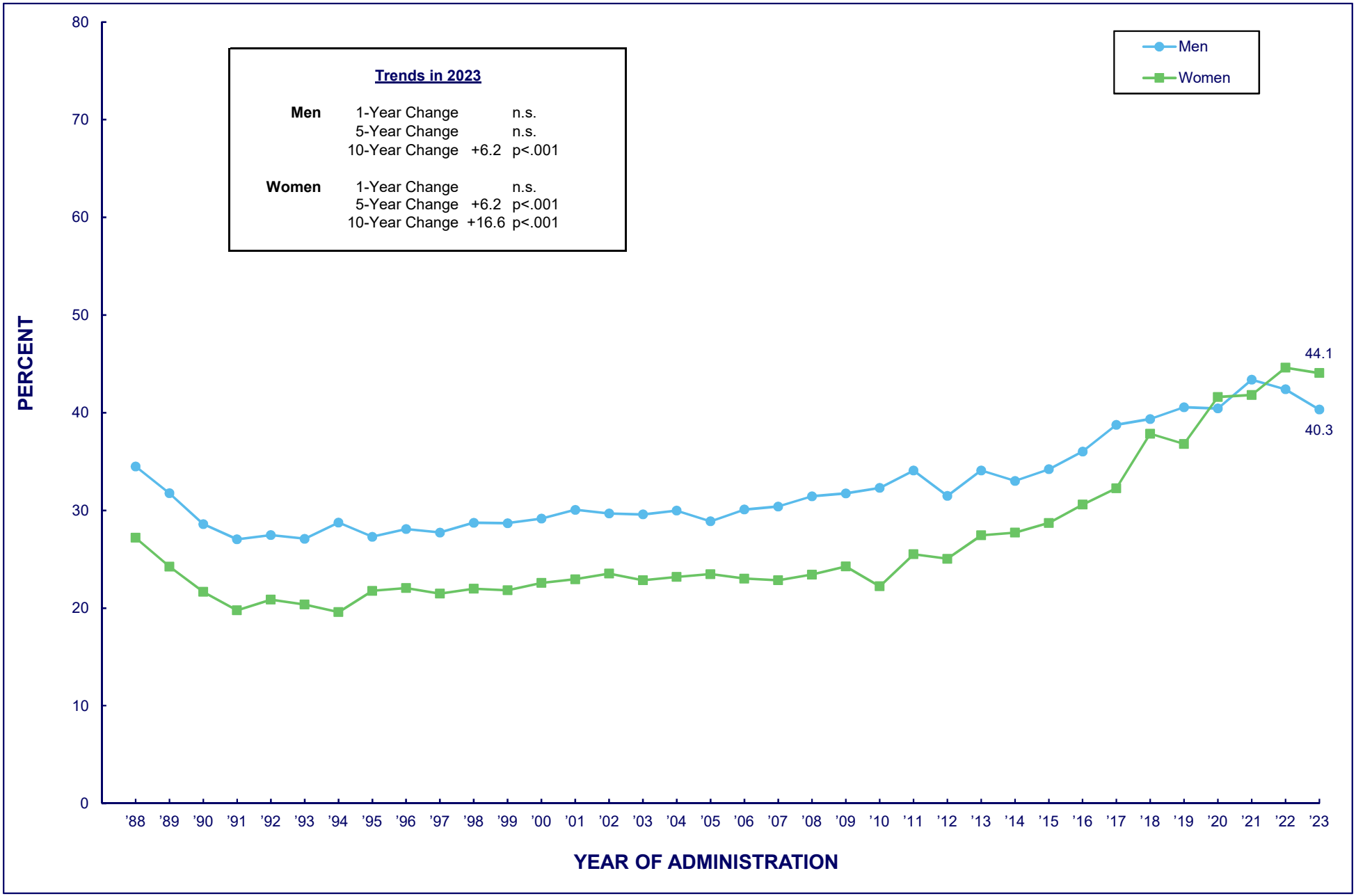
[4]Added as a response option in 2005.

TABLE/FIGURE 116

CANNABIS

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

MONITORING THE FUTURE

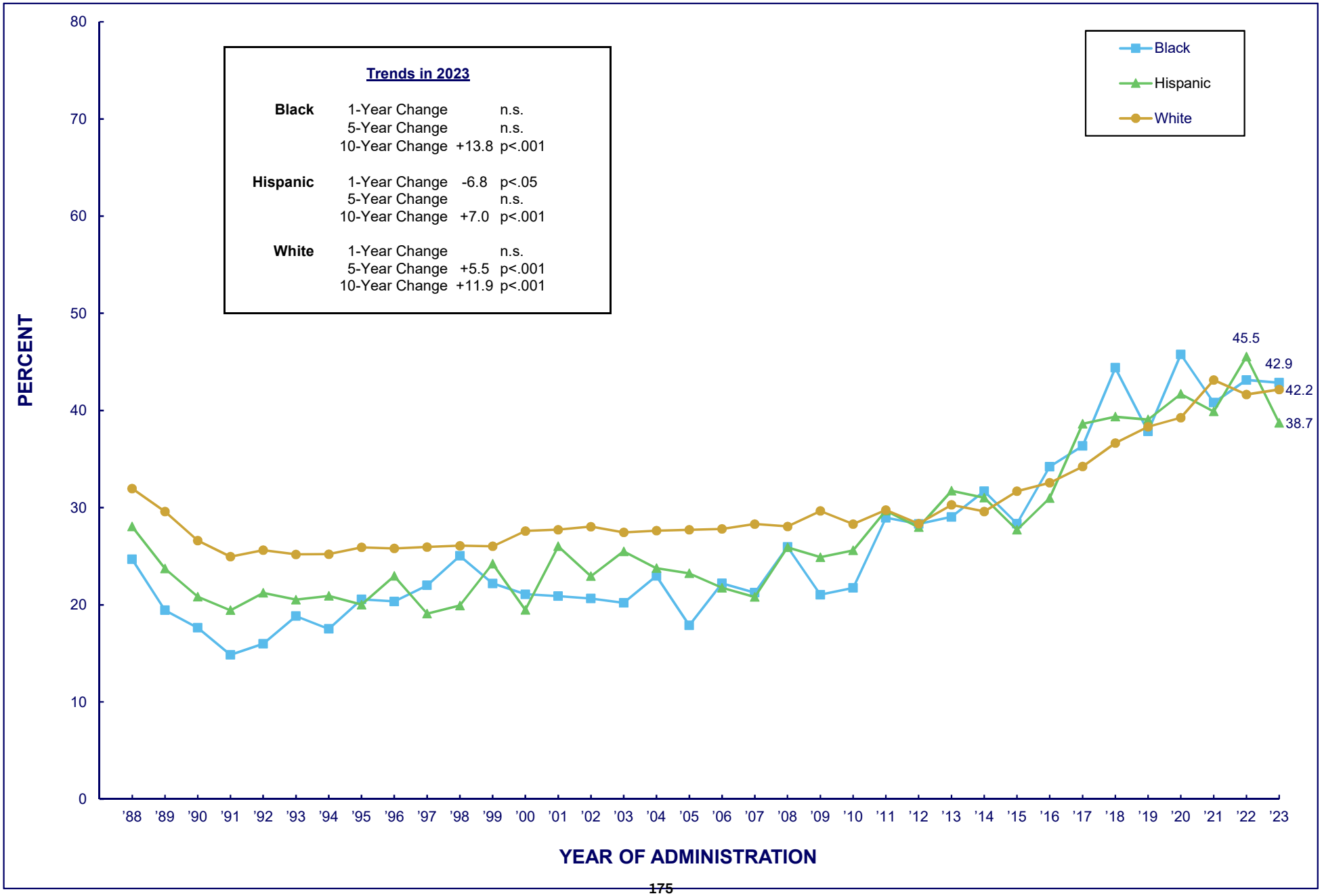


TABLE/FIGURE 117

CANNABIS

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

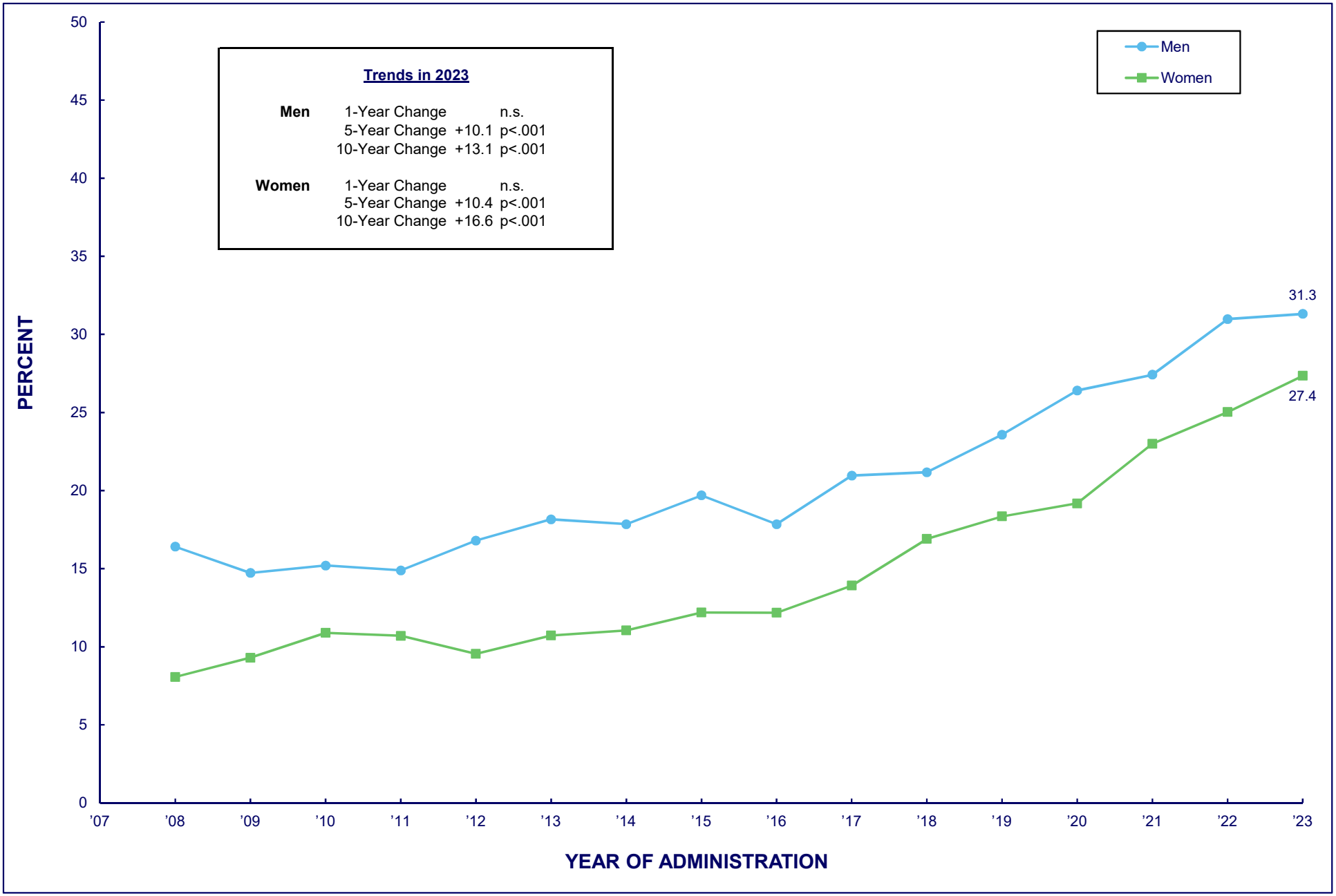
MONITORING THE FUTURE



TABLE/FIGURE 118

CANNABIS

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

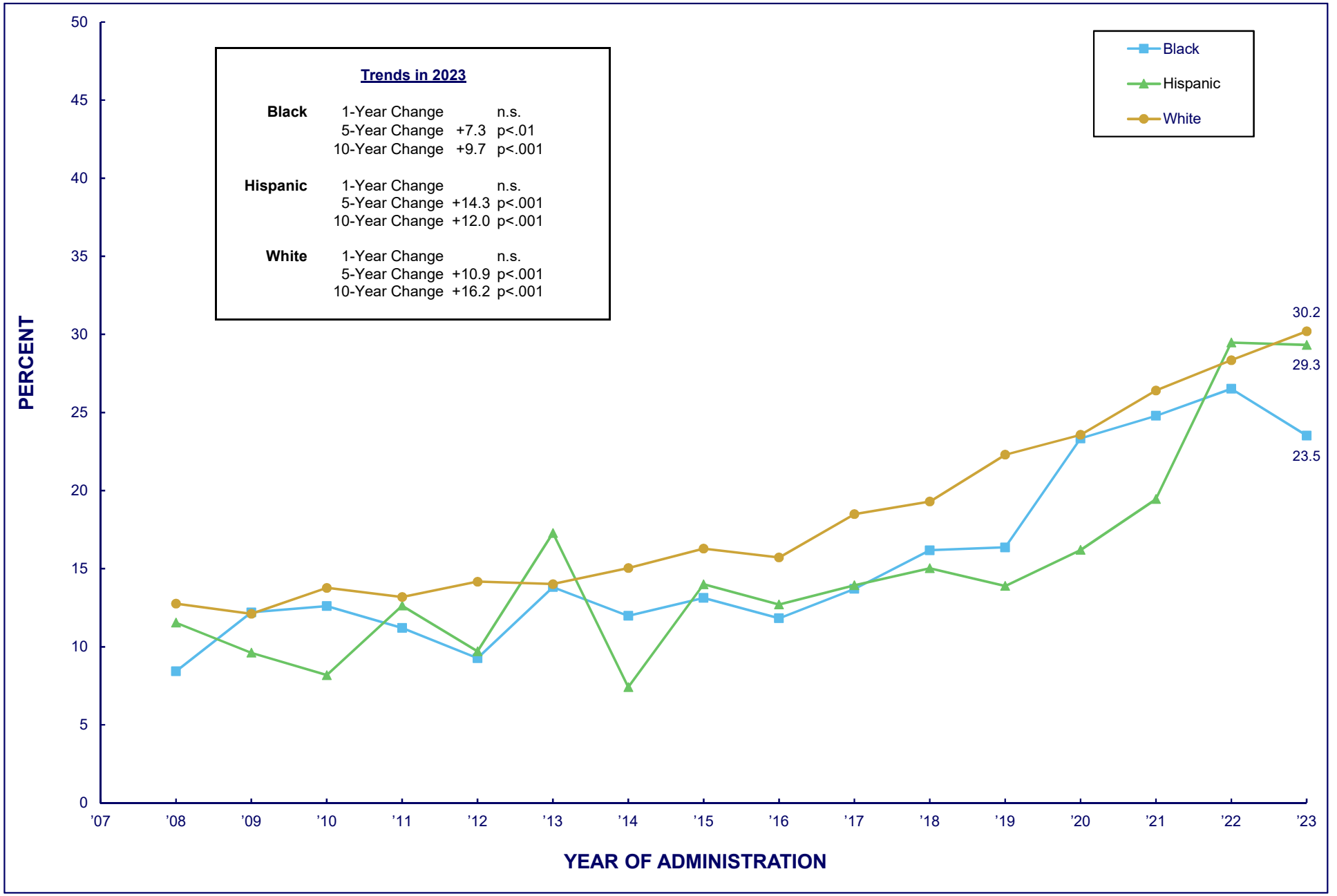


TABLE/FIGURE 119

CANNABIS

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

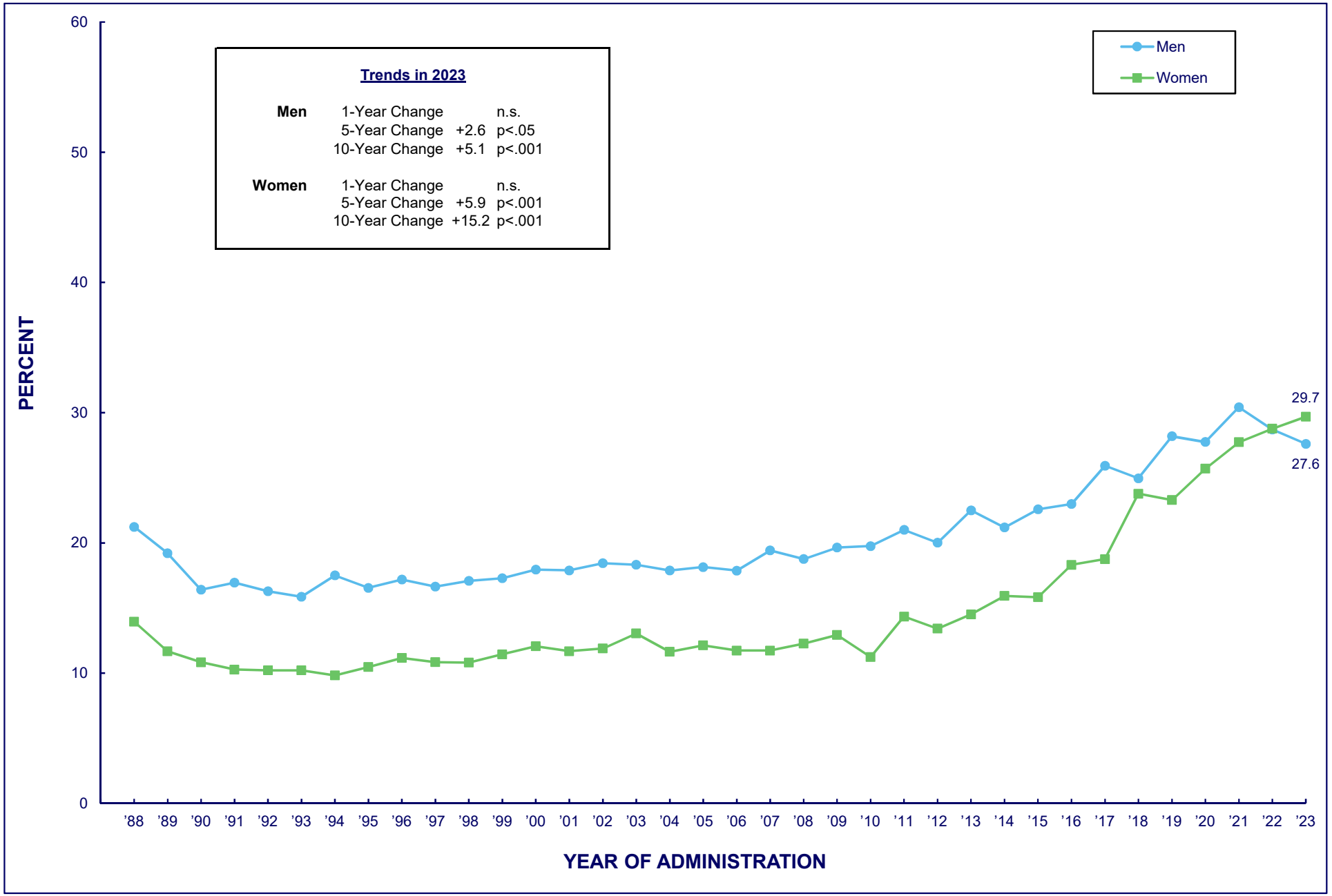
MONITORING THE FUTURE



TABLE/FIGURE 120

CANNABIS

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

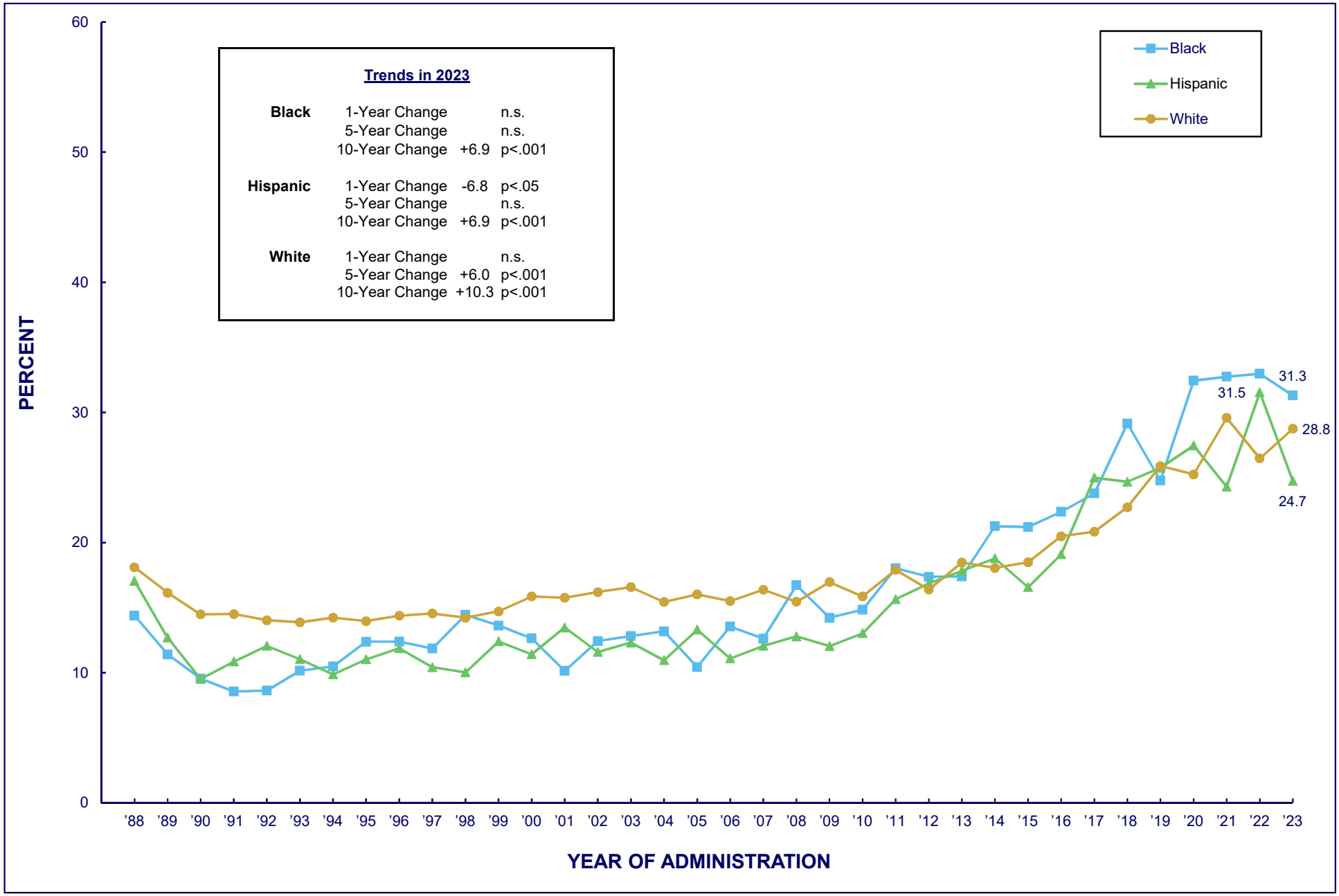


TABLE/FIGURE 121

CANNABIS

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

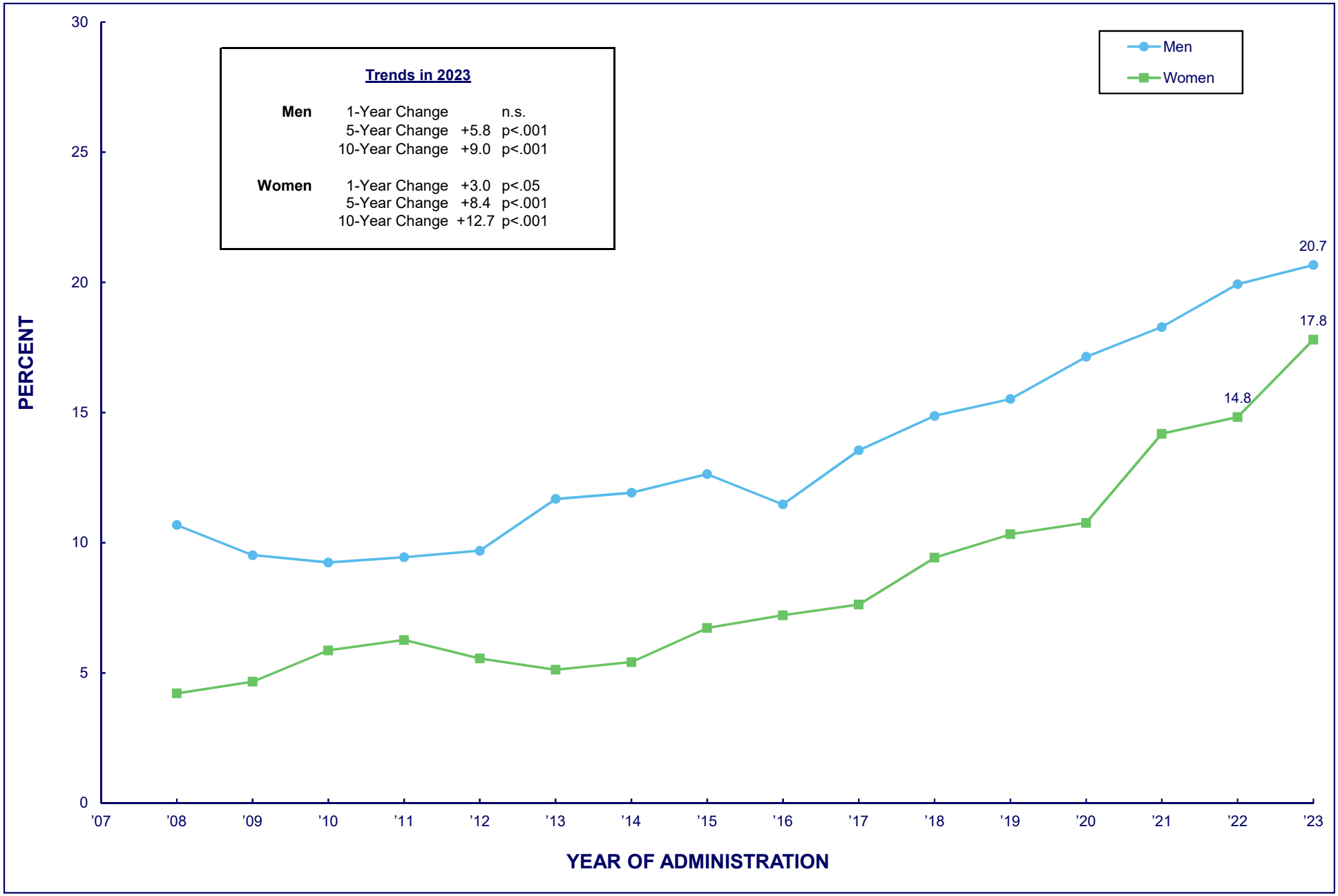
MONITORING THE FUTURE



TABLE/FIGURE 122

CANNABIS

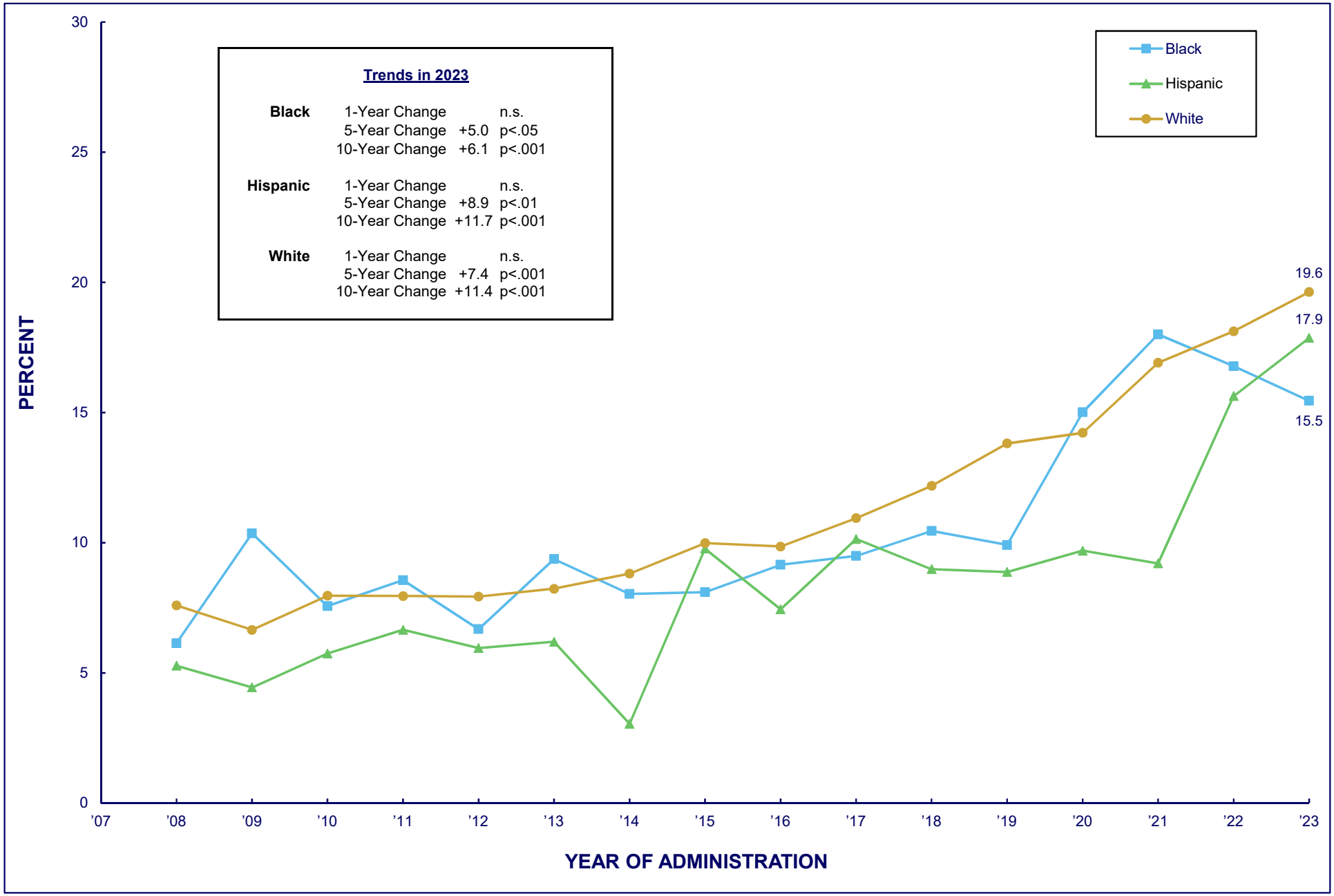
Trends in 30-Day Prevalence among Respondents of Modal Ages 35 through 50, by Sex



TABLE/FIGURE 123

CANNABIS

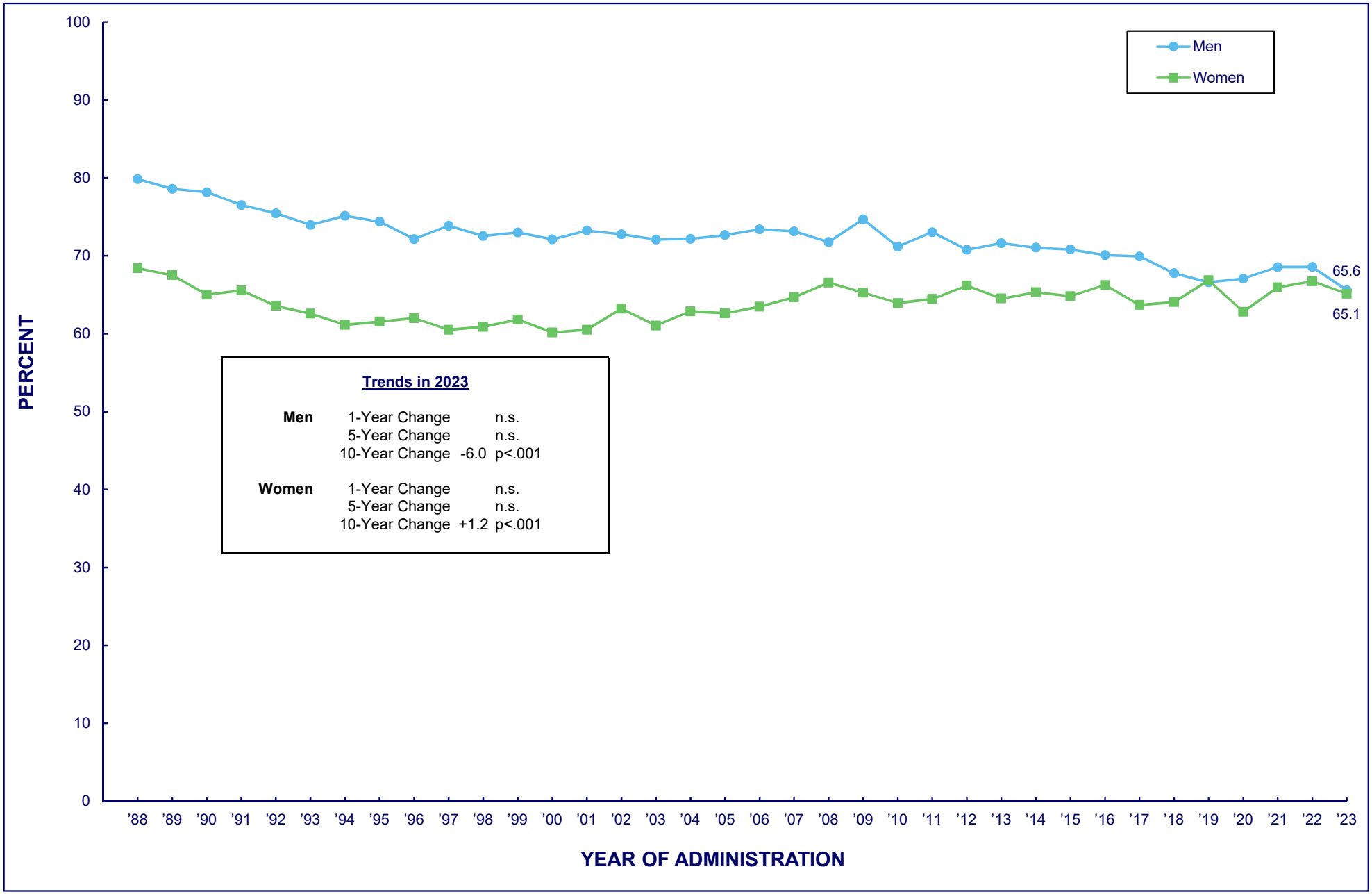
Trends in 30-Day Prevalence among Respondents of Modal Ages 35 through 50, by Race/Ethnicity



TABLE/FIGURE 124

ALCOHOL

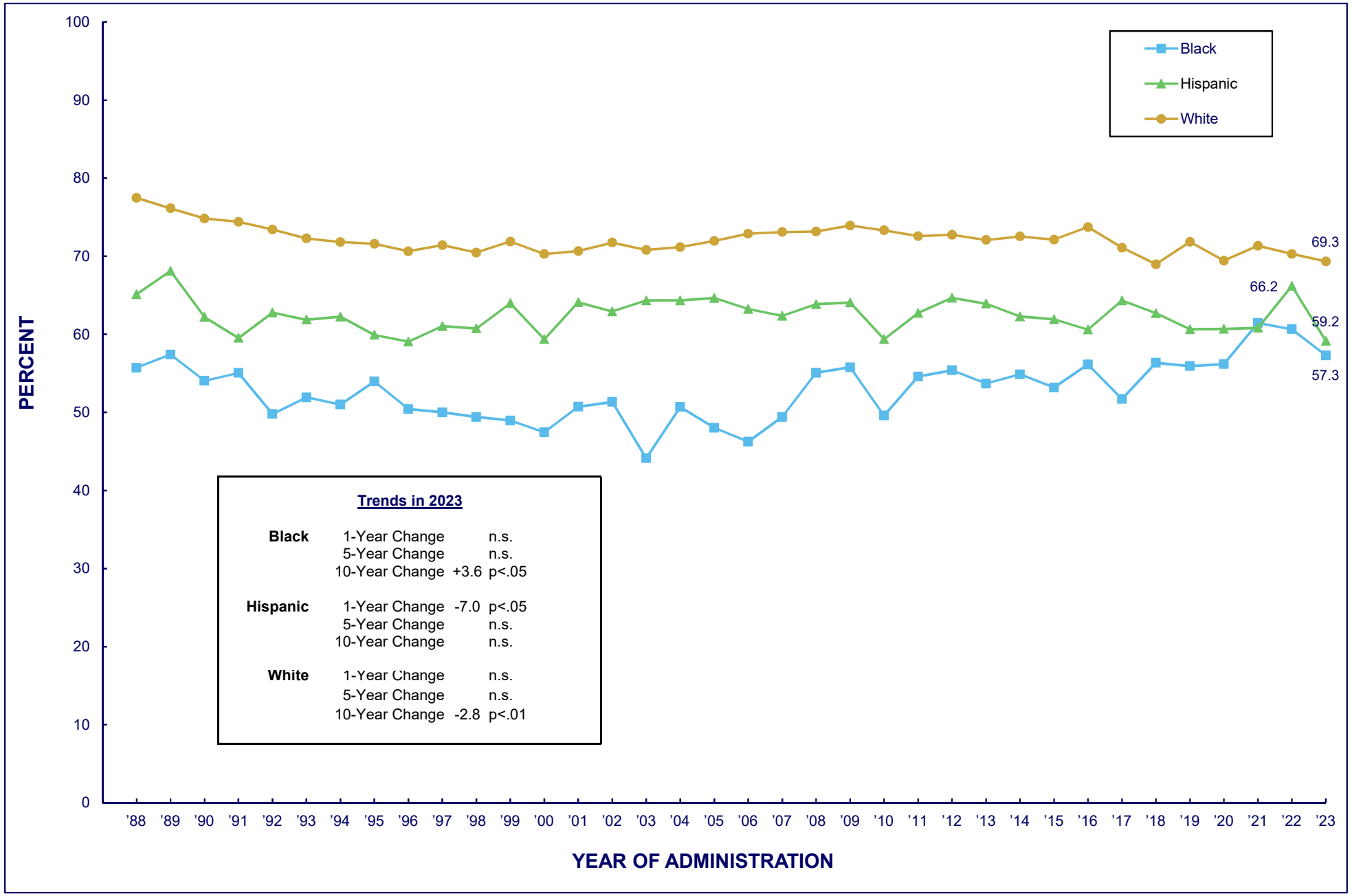
Trends in 30-Day Prevalence among Respondents of Modal Ages 19 through 30, by Sex



TABLE/FIGURE 125

ALCOHOL

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

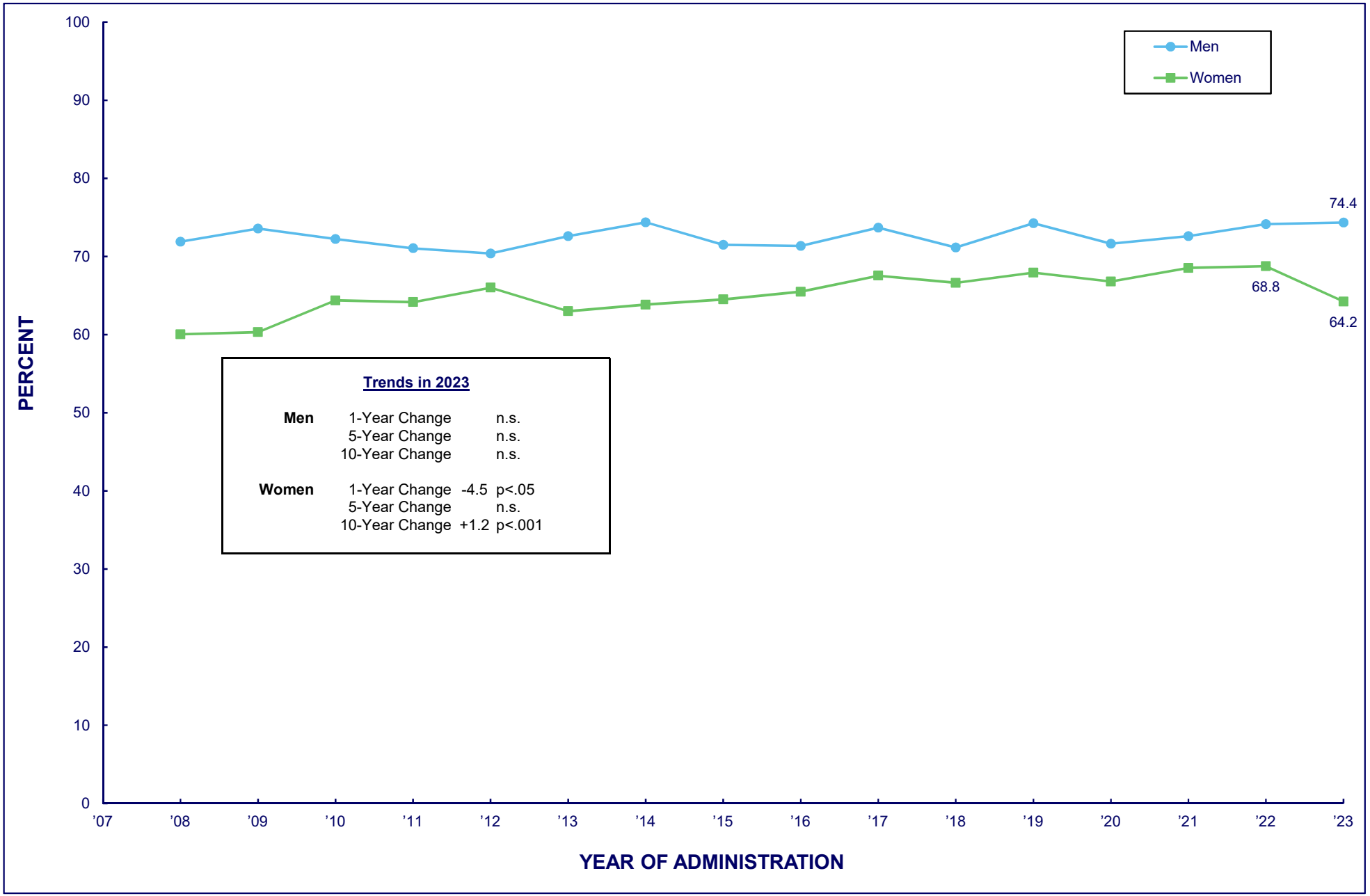


TABLE/FIGURE 126

ALCOHOL

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

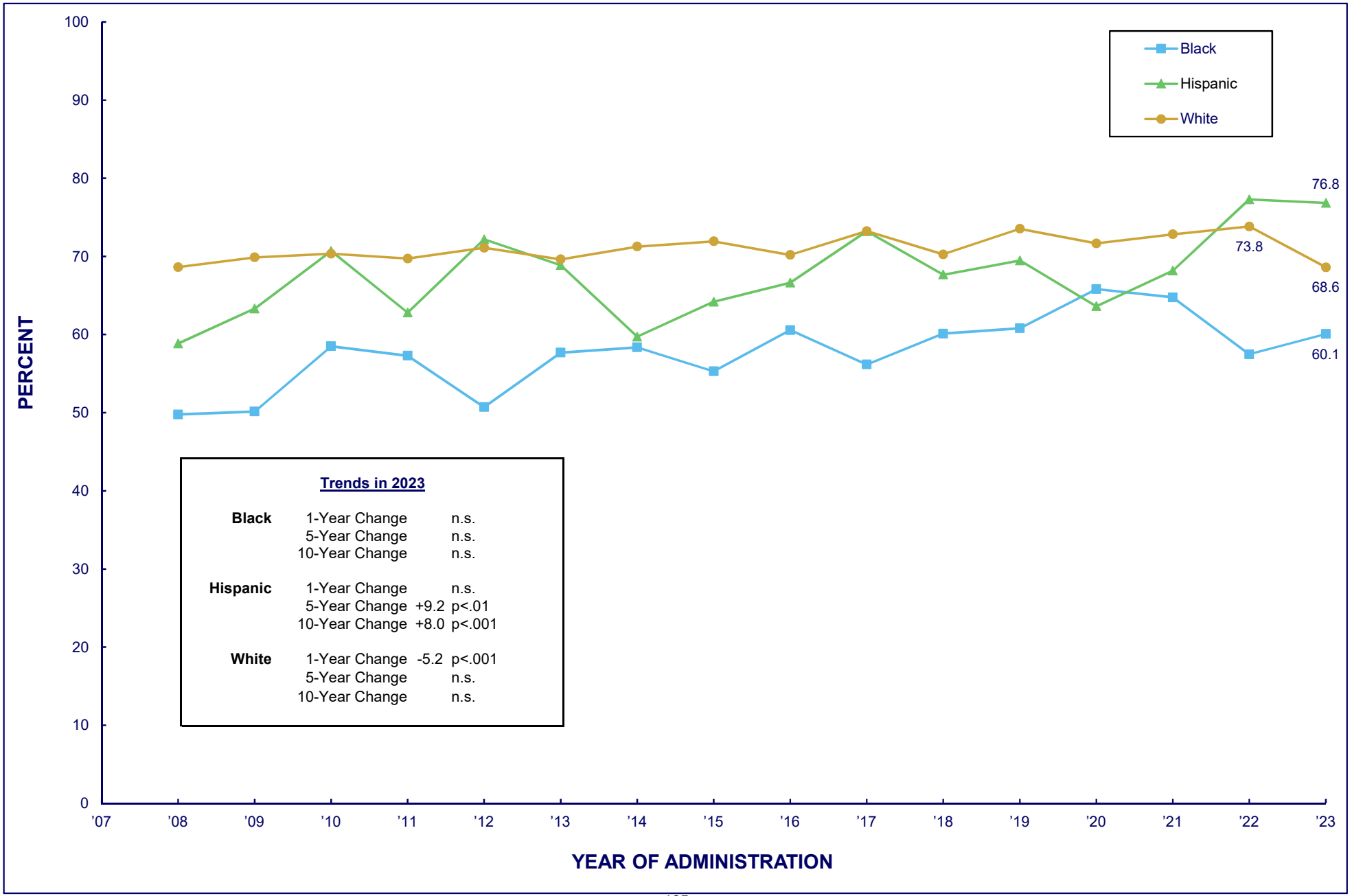
MONITORING THE FUTURE



TABLE/FIGURE 127

ALCOHOL

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

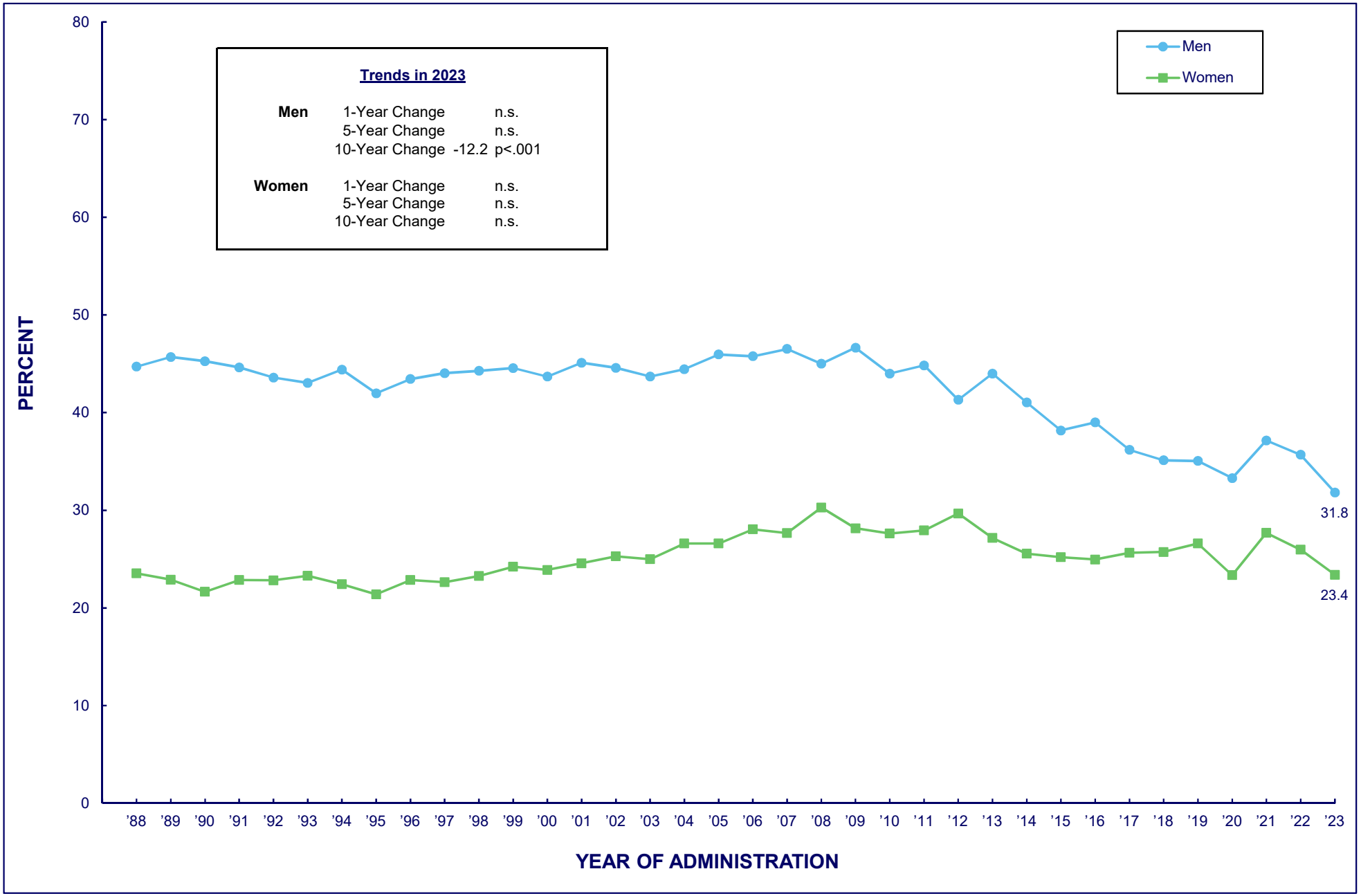


TABLE/FIGURE 128

ALCOHOL

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

MONITORING THE FUTURE

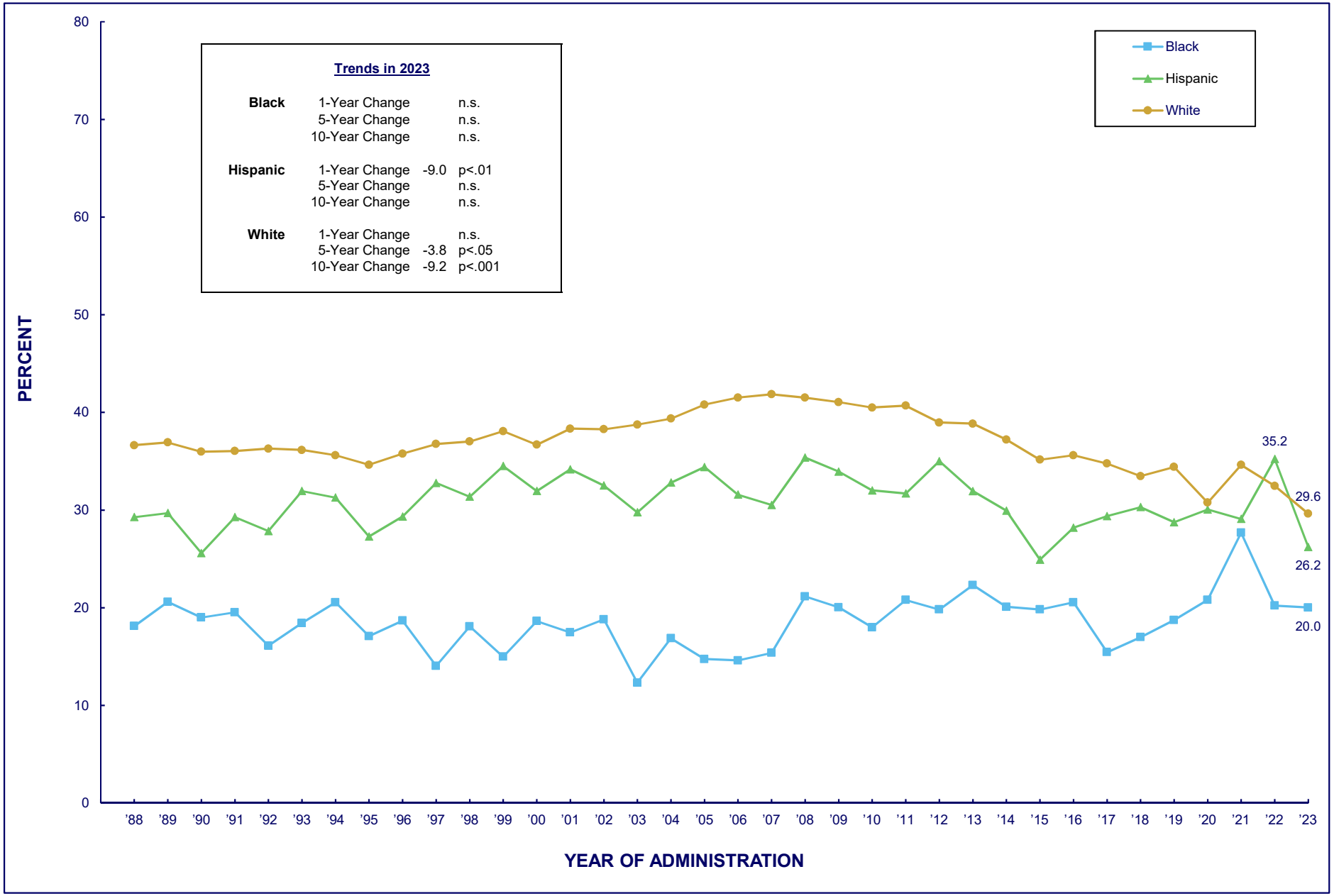


TABLE/FIGURE 129

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

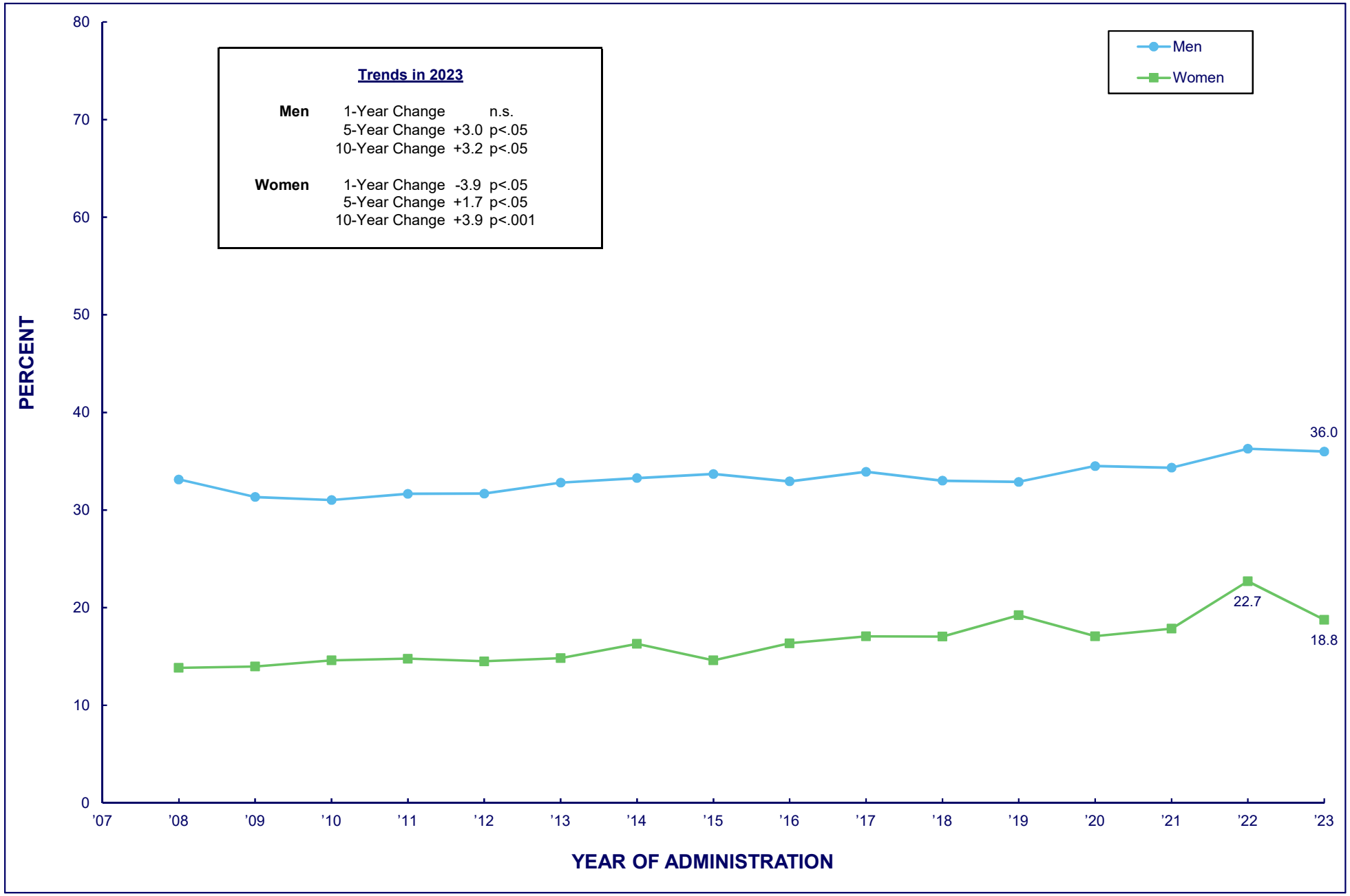
MONITORING THE FUTURE



TABLE/FIGURE 130

ALCOHOL

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

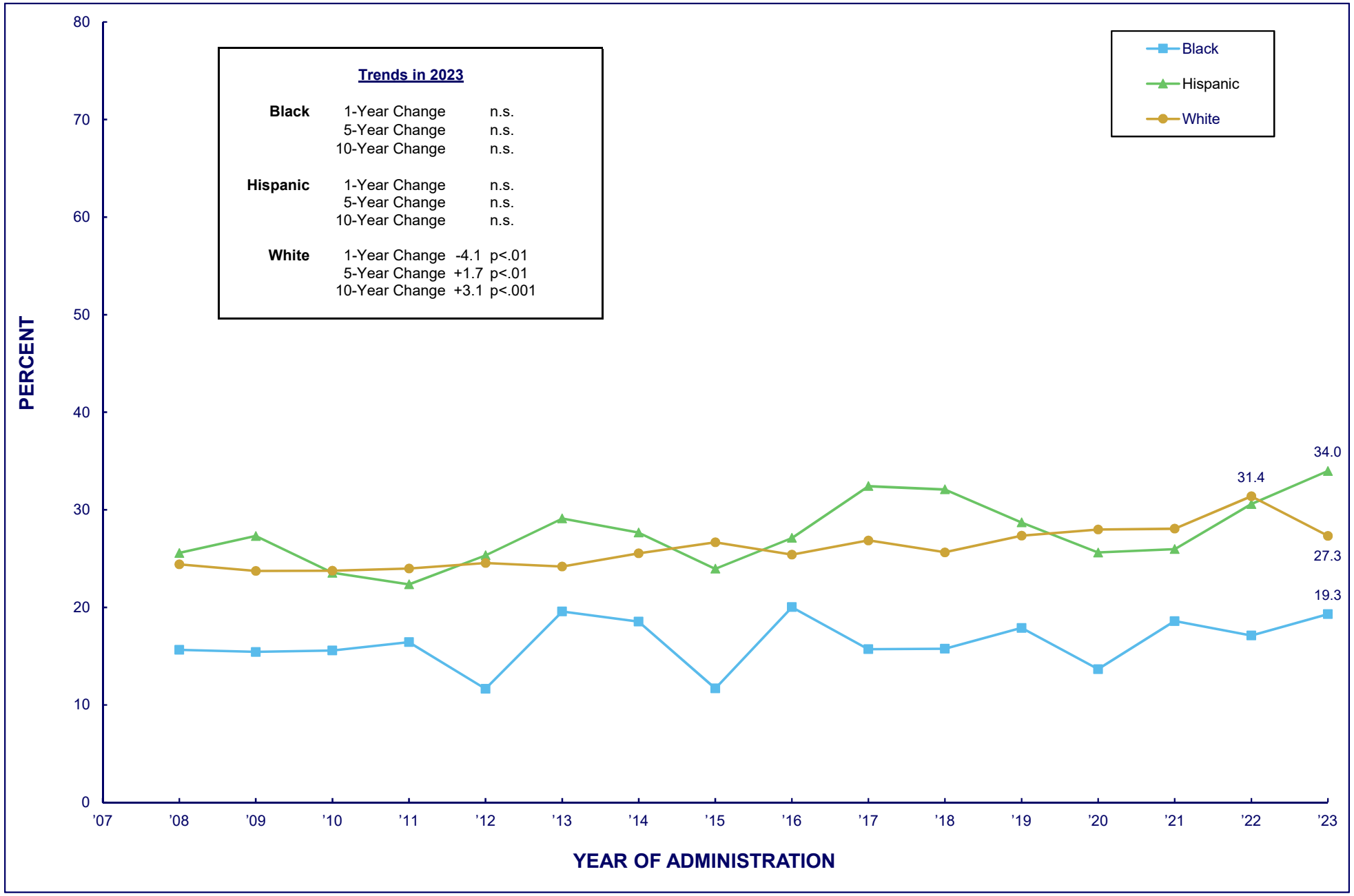


TABLE/FIGURE 131

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

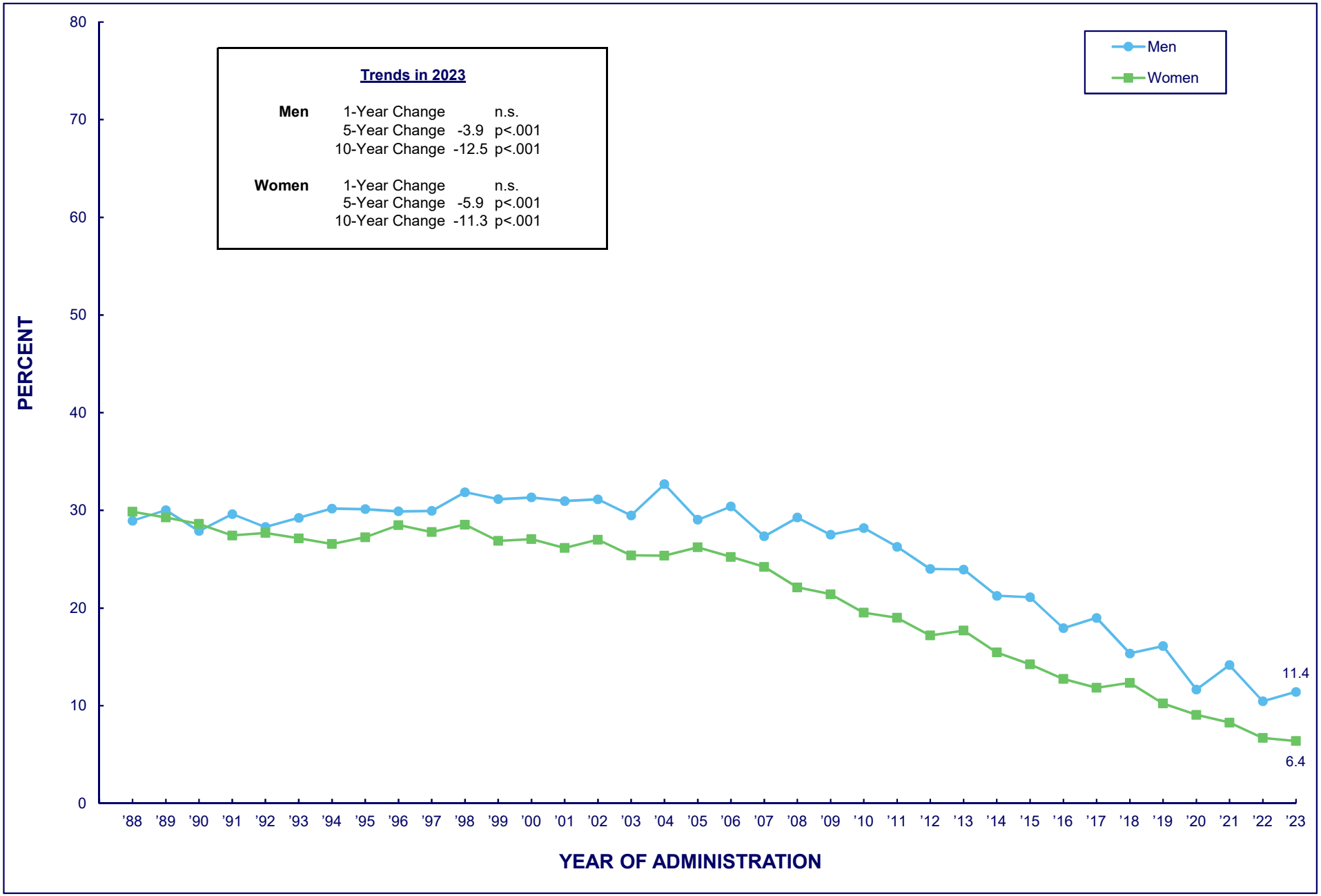


TABLE/FIGURE 132

CIGARETTES

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

MONITORING THE FUTURE

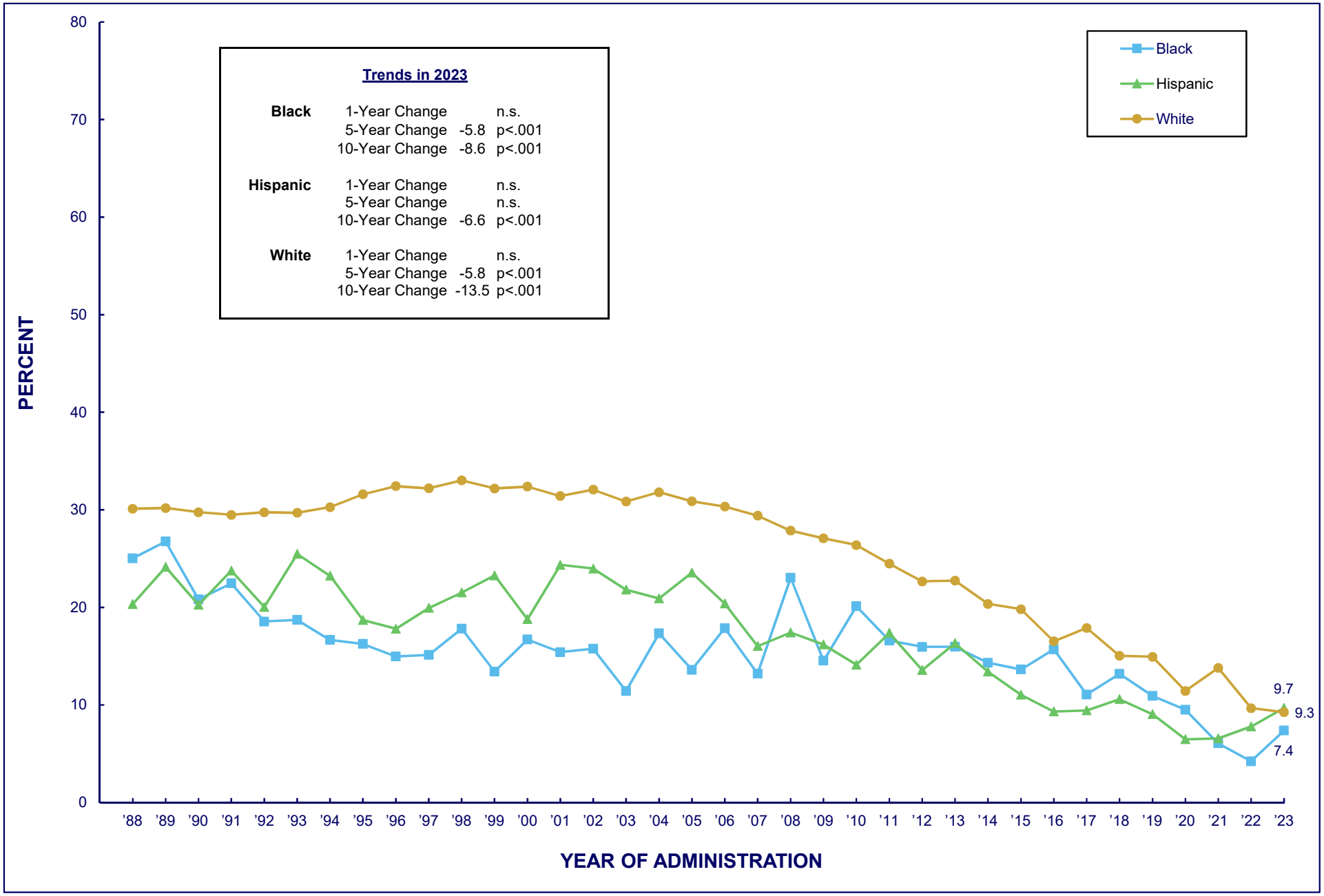


TABLE/FIGURE 133

CIGARETTES

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

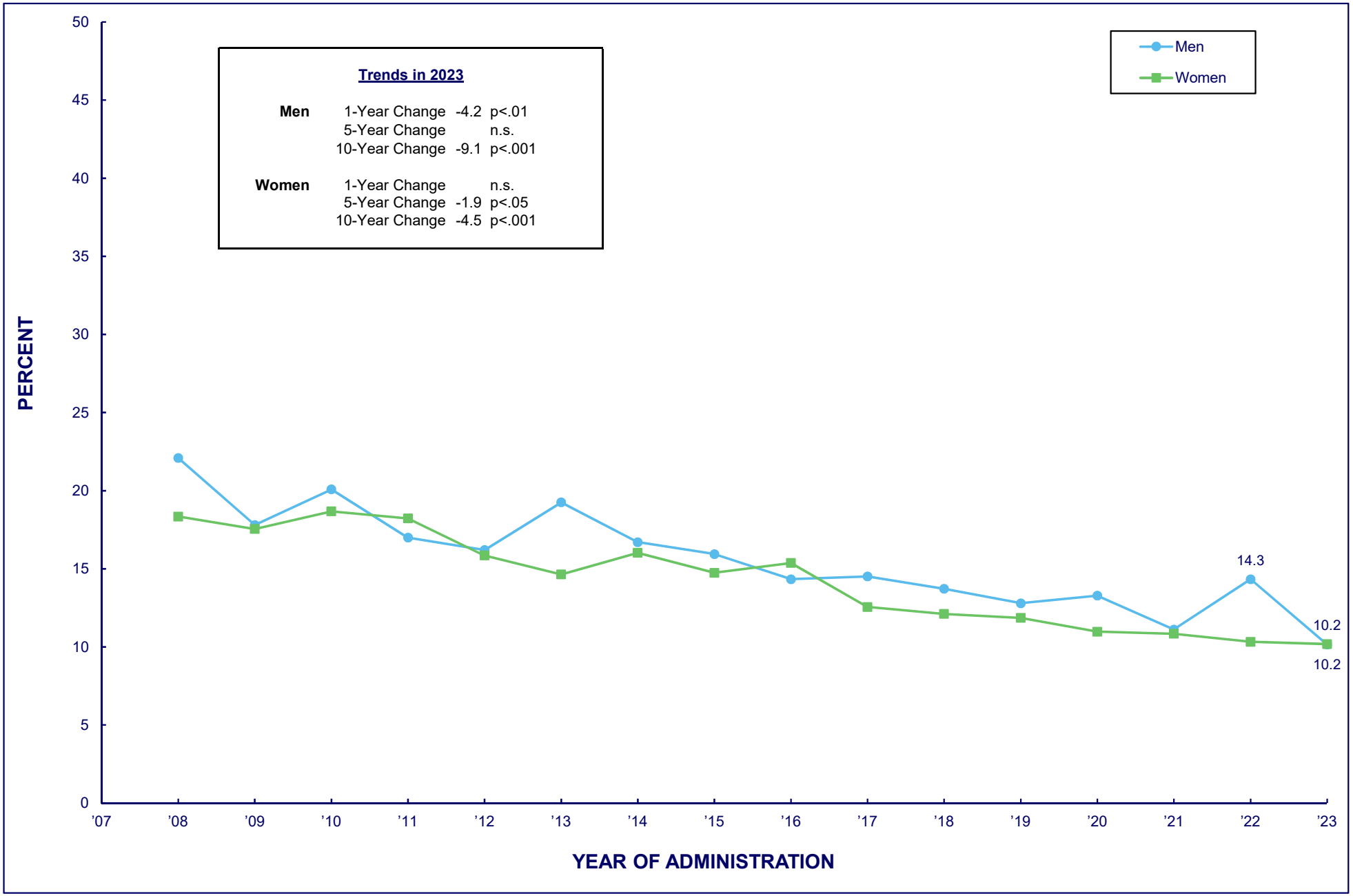
MONITORING THE FUTURE



TABLE/FIGURE 134

CIGARETTES

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

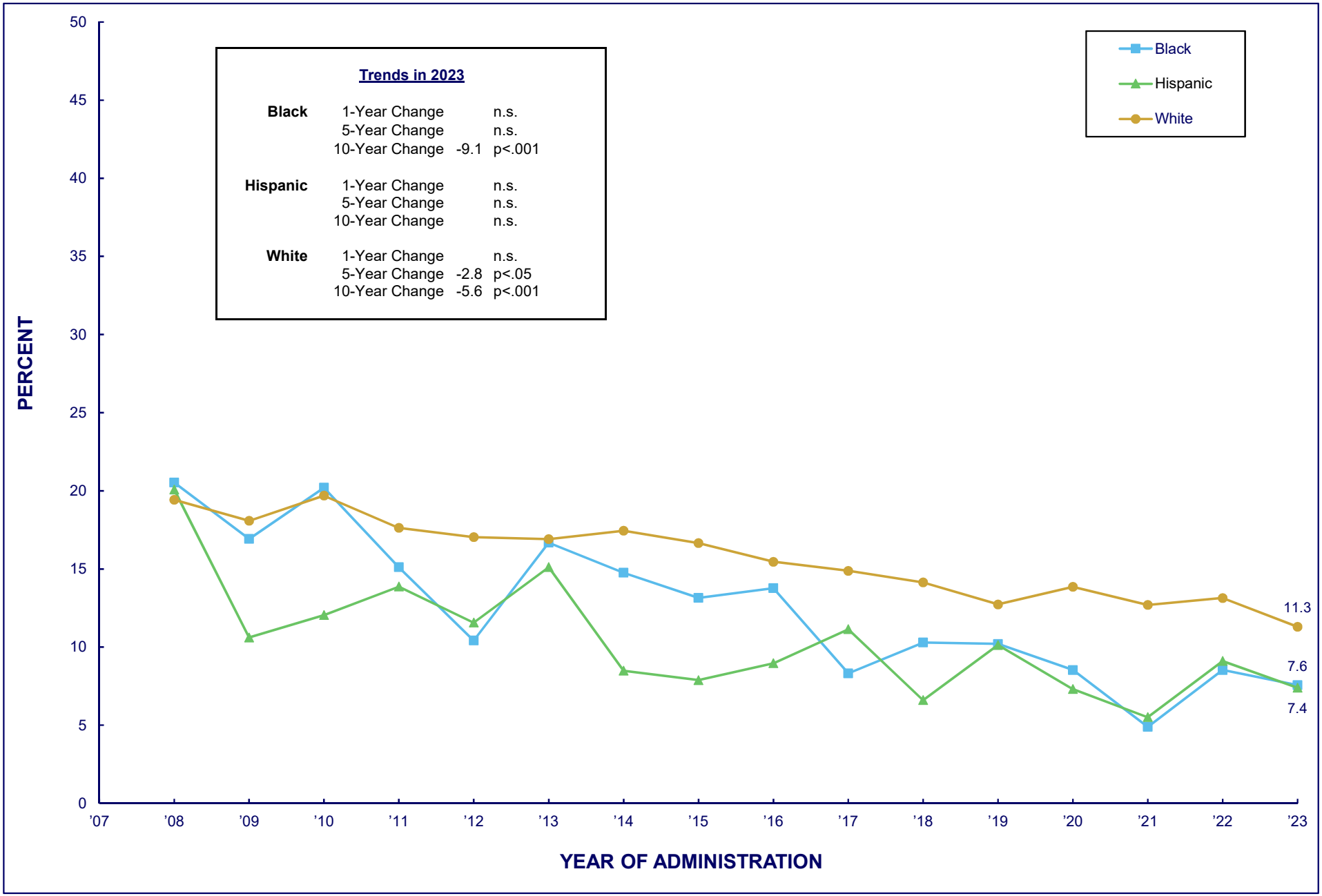


TABLE/FIGURE 135

CIGARETTES

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

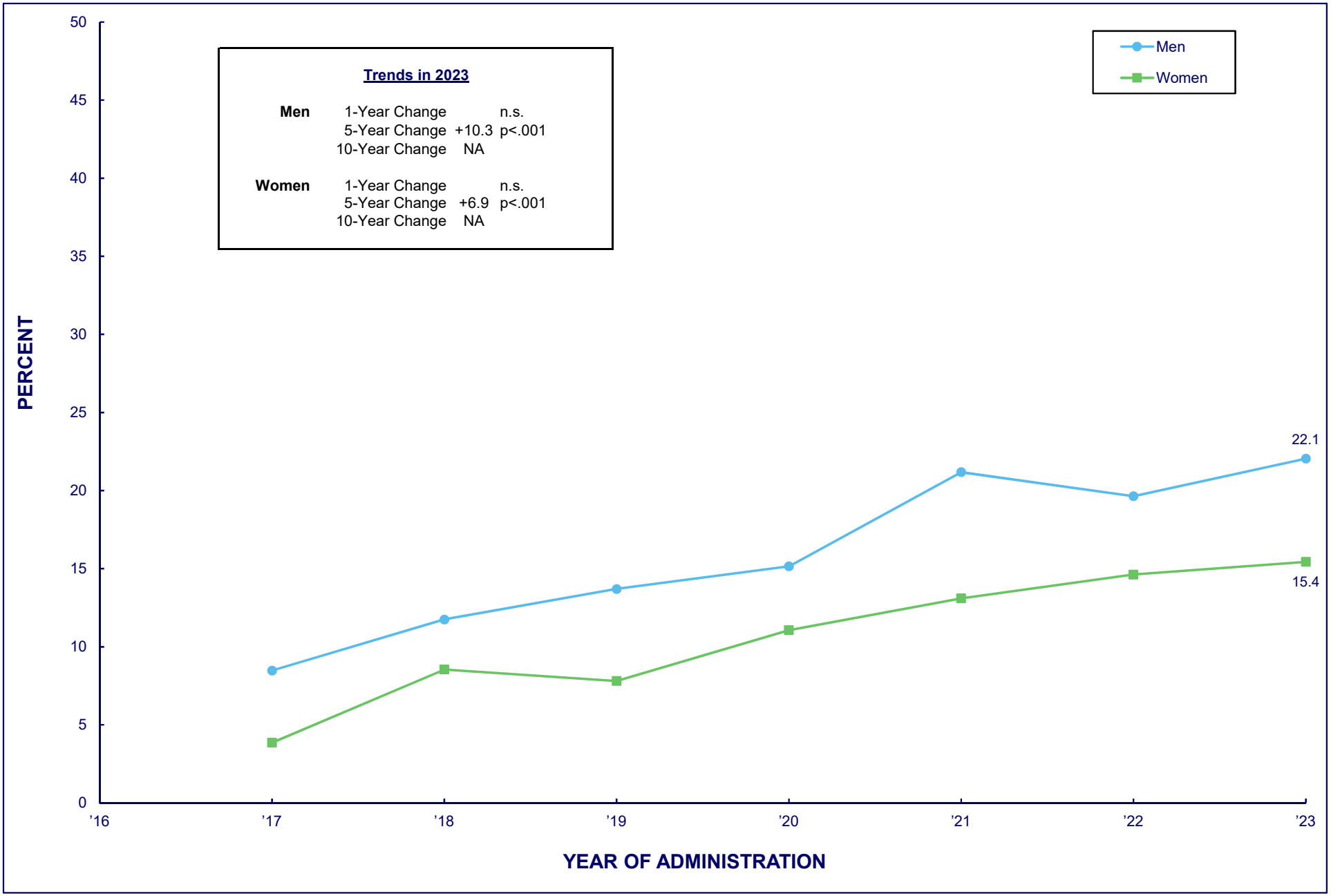
MONITORING THE FUTURE



TABLE/FIGURE 136

VAPING NICOTINE

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

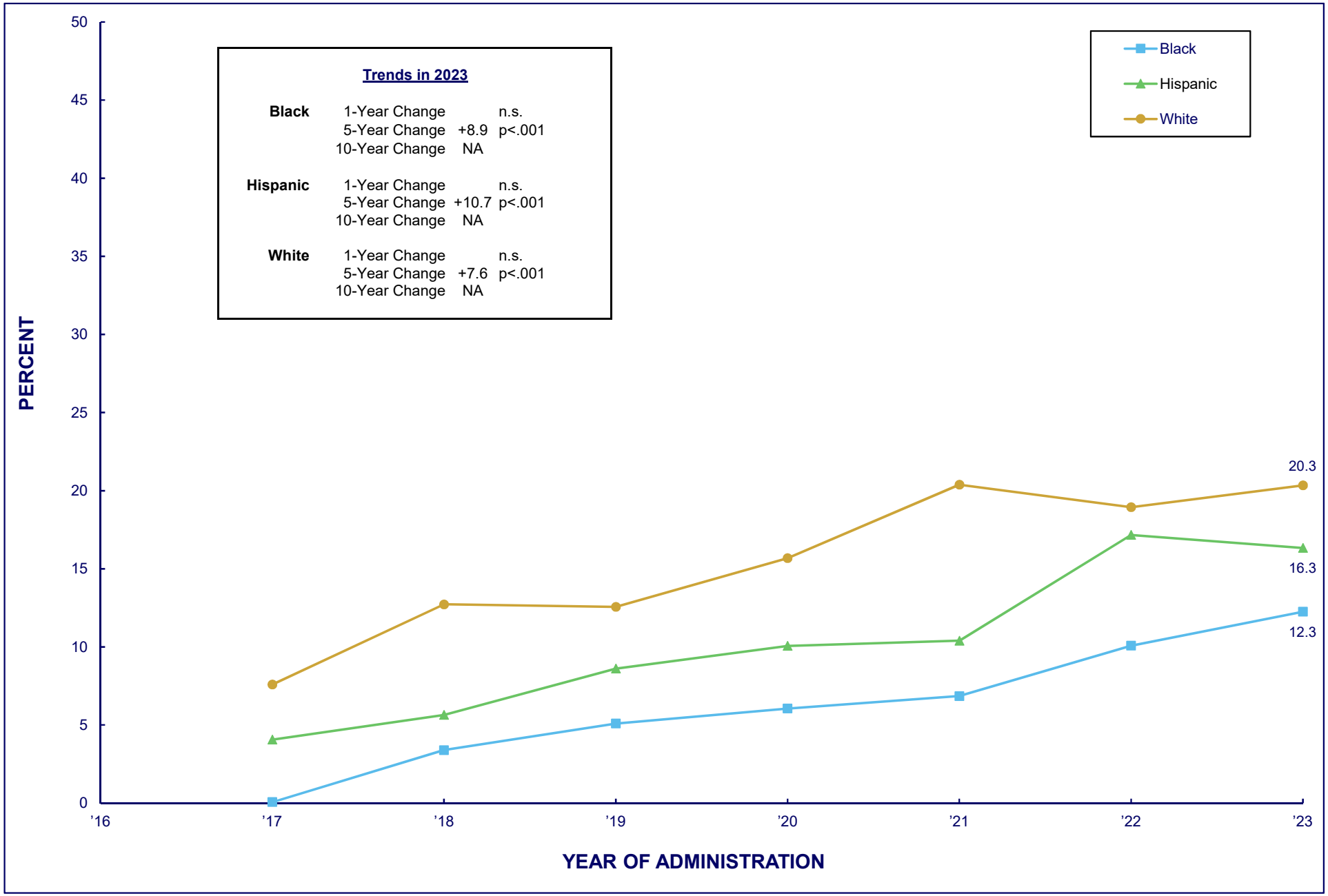


TABLE/FIGURE 137

VAPING NICOTINE

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

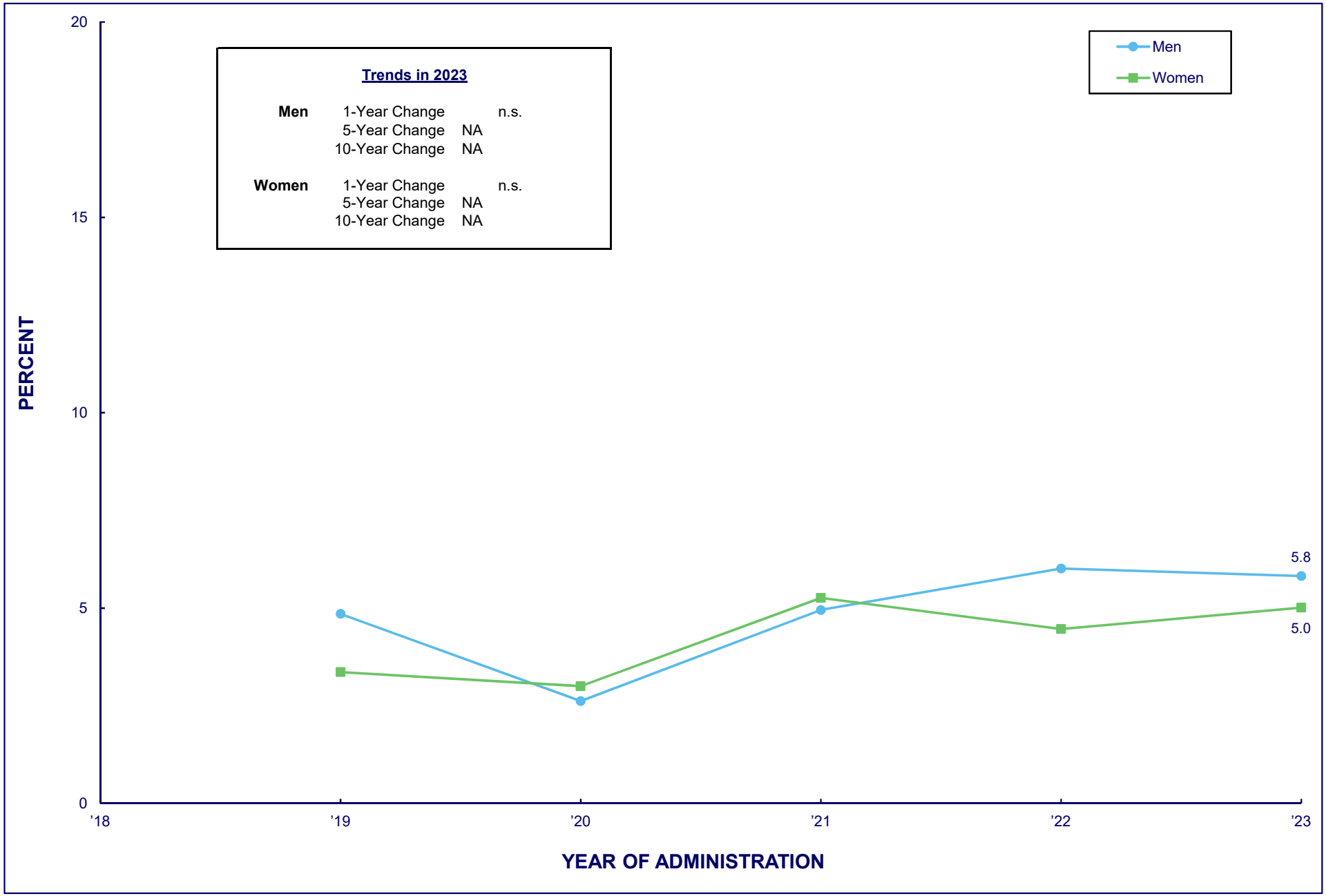
MONITORING THE FUTURE



TABLE/FIGURE 138

VAPING NICOTINE

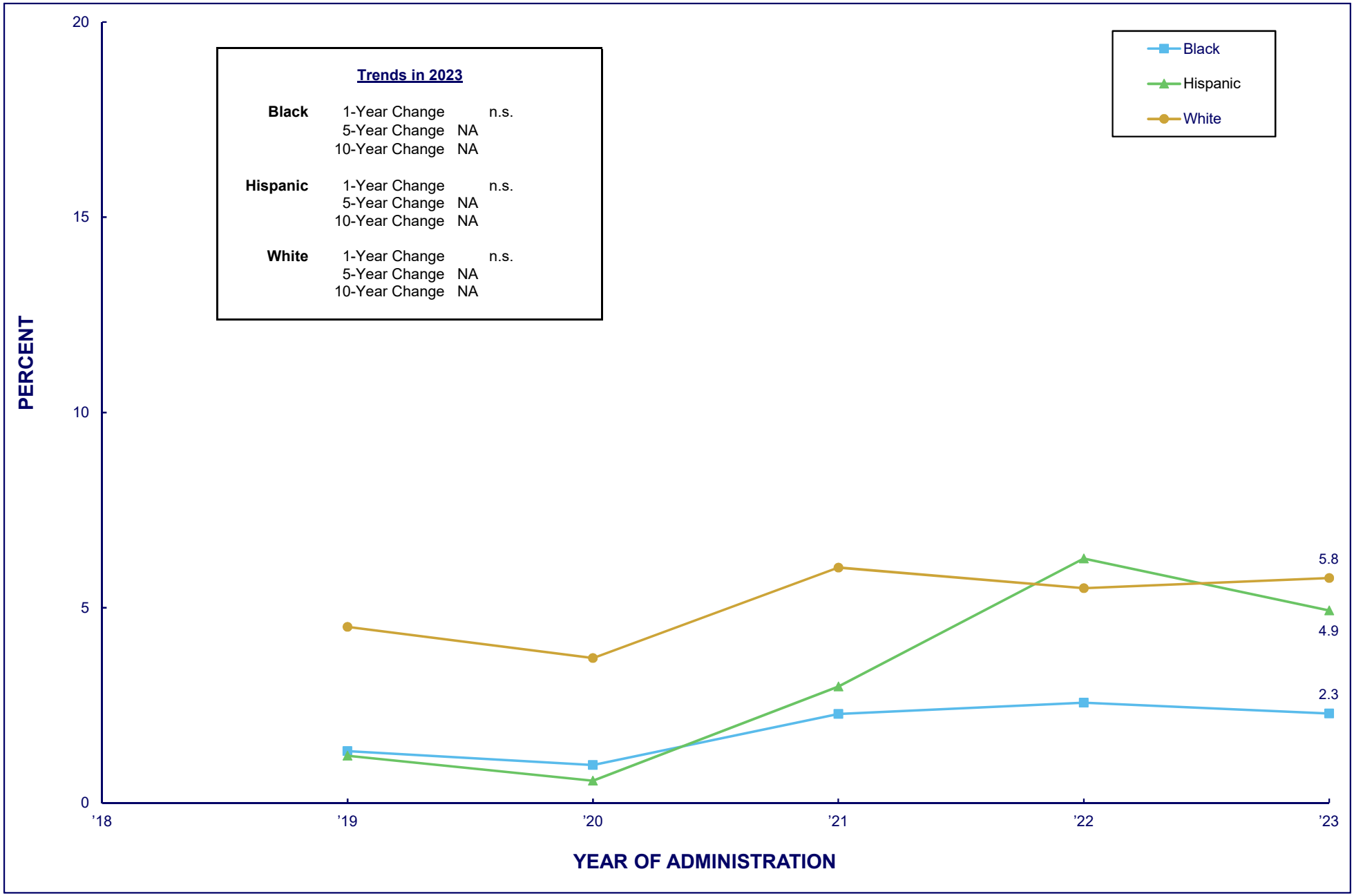
Trends in 30-Day Prevalence among Respondents of Modal Ages 35 through 50, by Sex



TABLE/FIGURE 139

VAPING NICOTINE

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

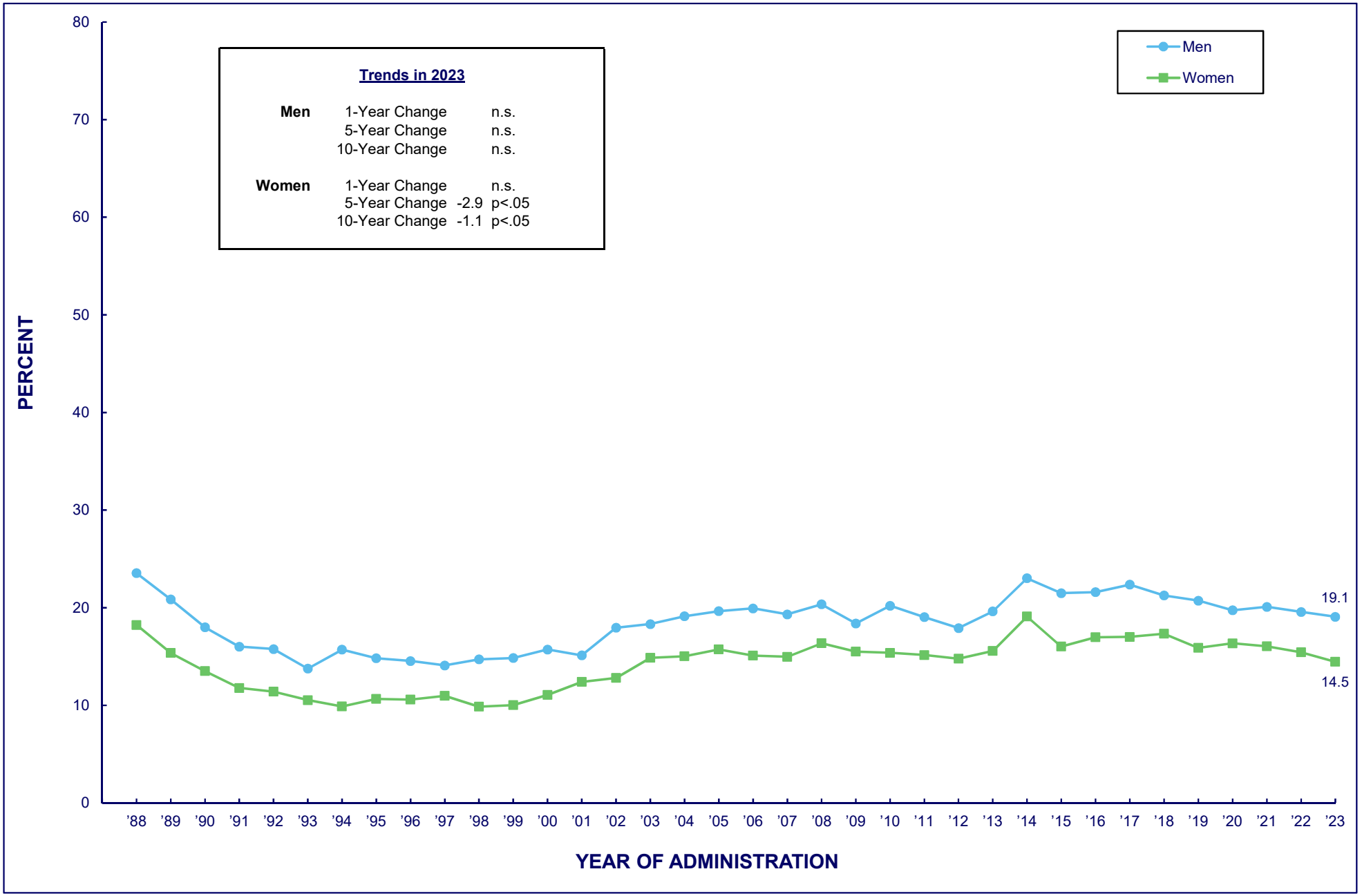


TABLE/FIGURE 140

ANY DRUG OTHER THAN CANNABIS

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

MONITORING THE FUTURE

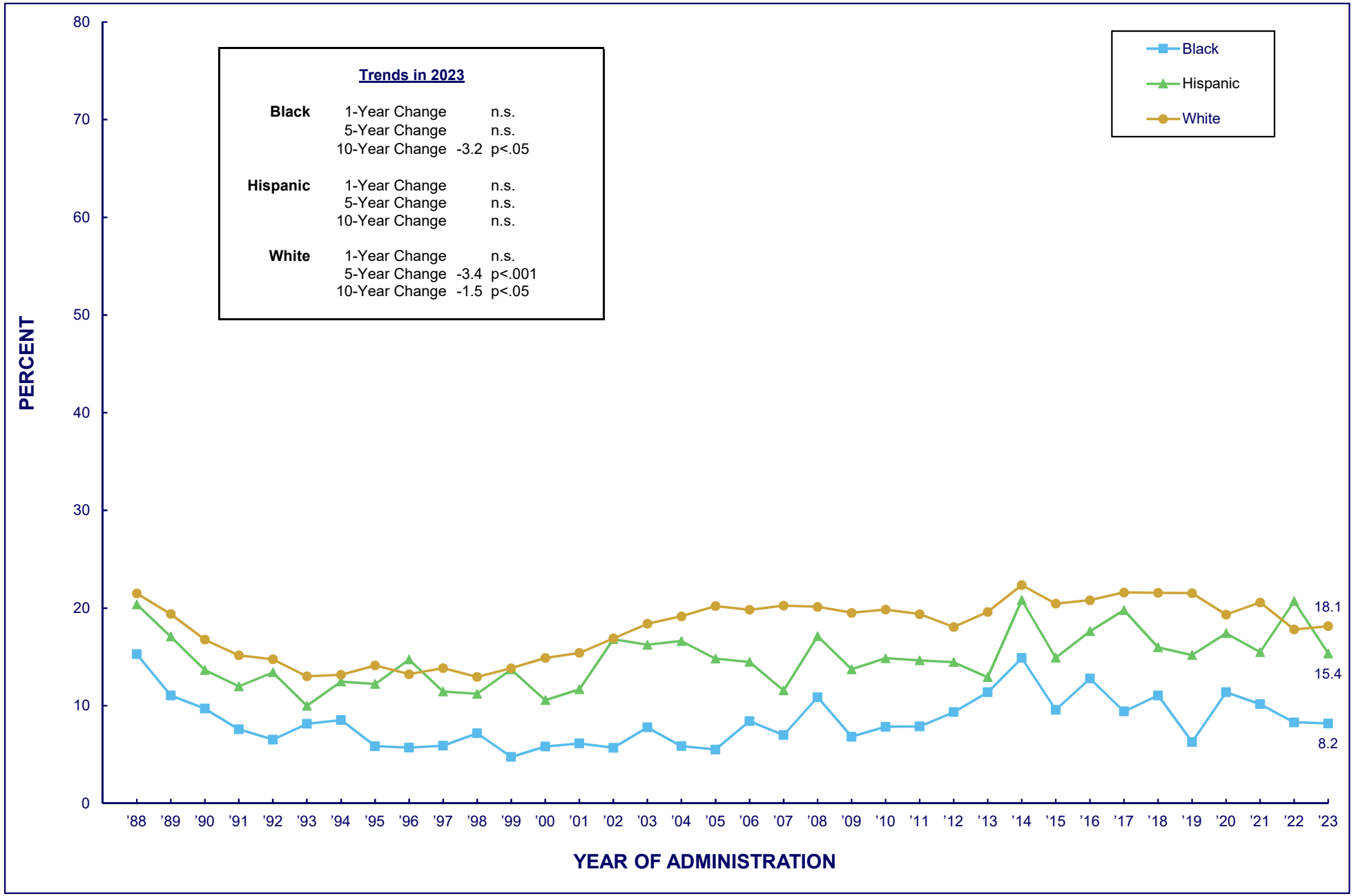


TABLE/FIGURE 141

ANY DRUG OTHER THAN CANNABIS

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

MONITORING THE FUTURE

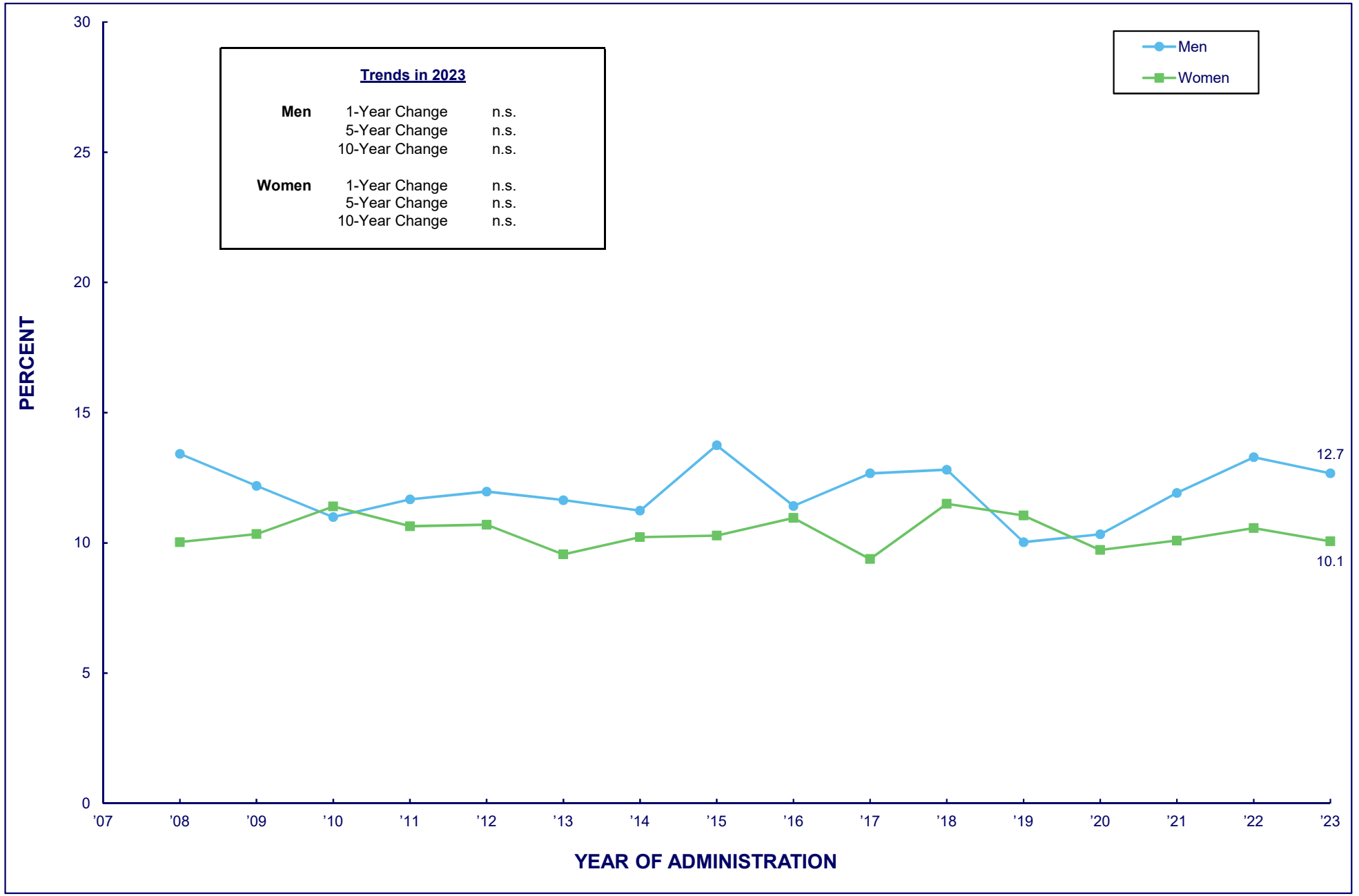


TABLE/FIGURE 142

ANY DRUG OTHER THAN CANNABIS

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

MONITORING THE FUTURE

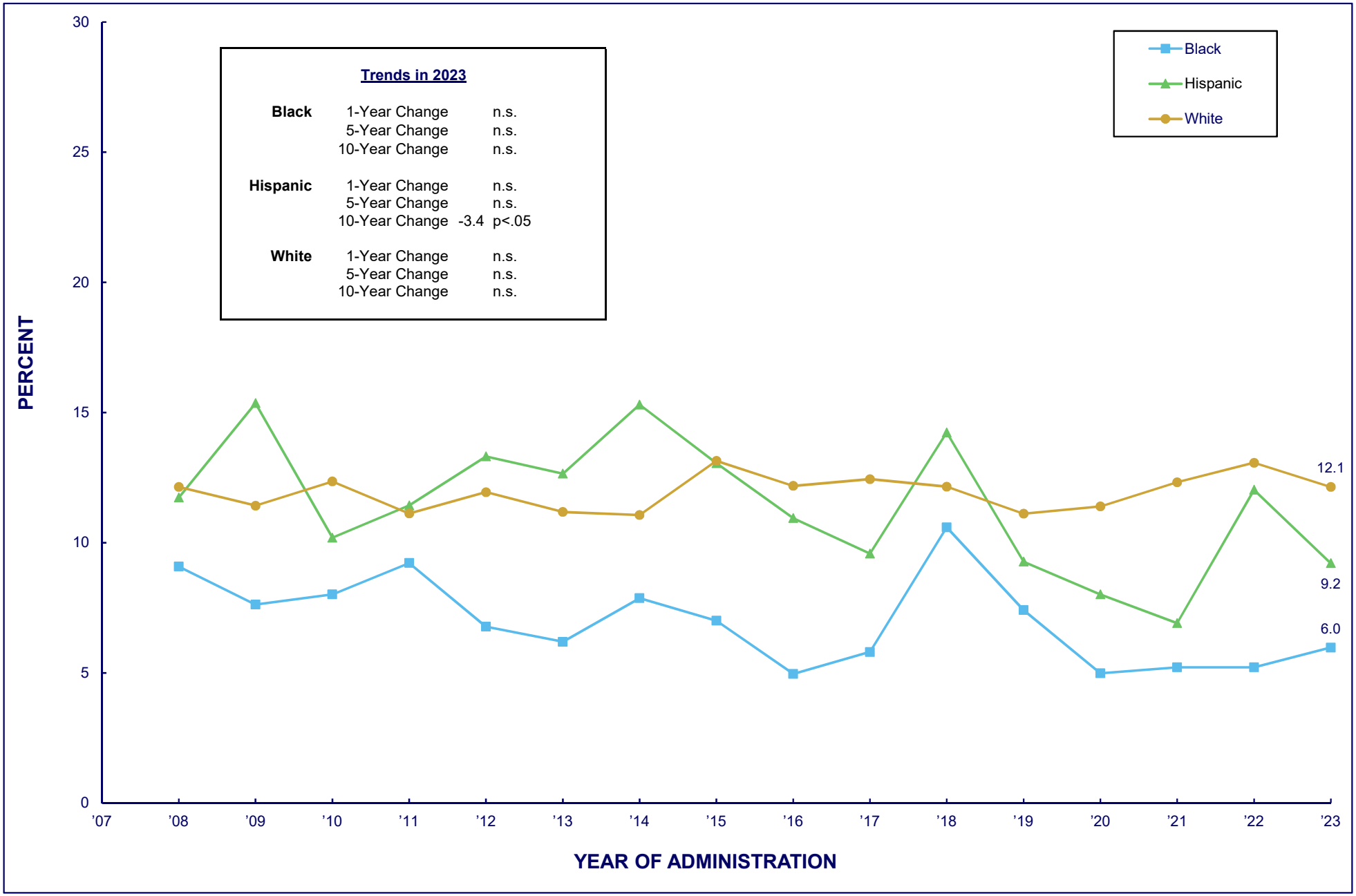


TABLE/FIGURE 143

ANY DRUG OTHER THAN CANNABIS

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

MONITORING THE FUTURE

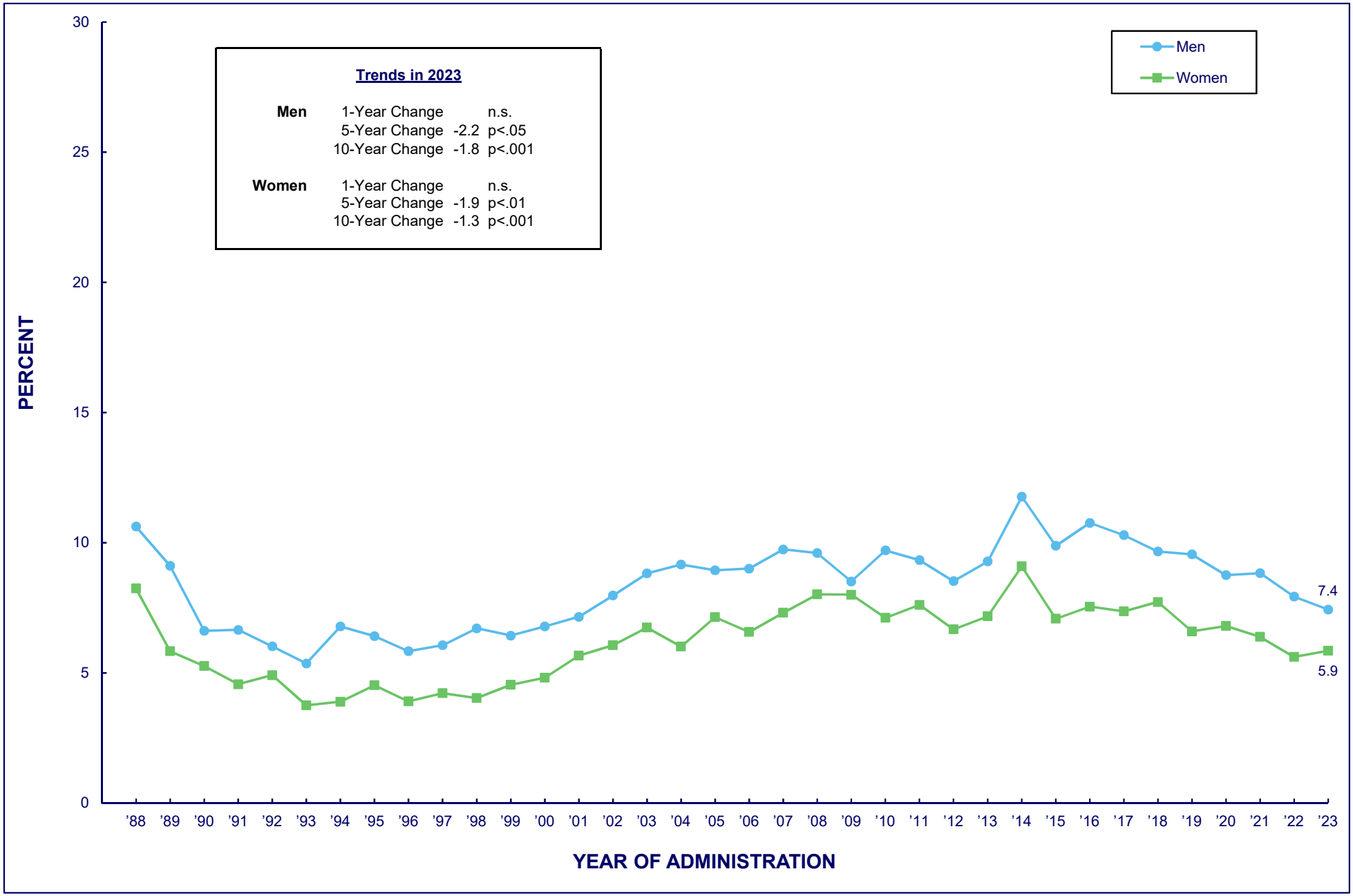


TABLE/FIGURE 144

ANY DRUG OTHER THAN CANNABIS

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

MONITORING THE FUTURE

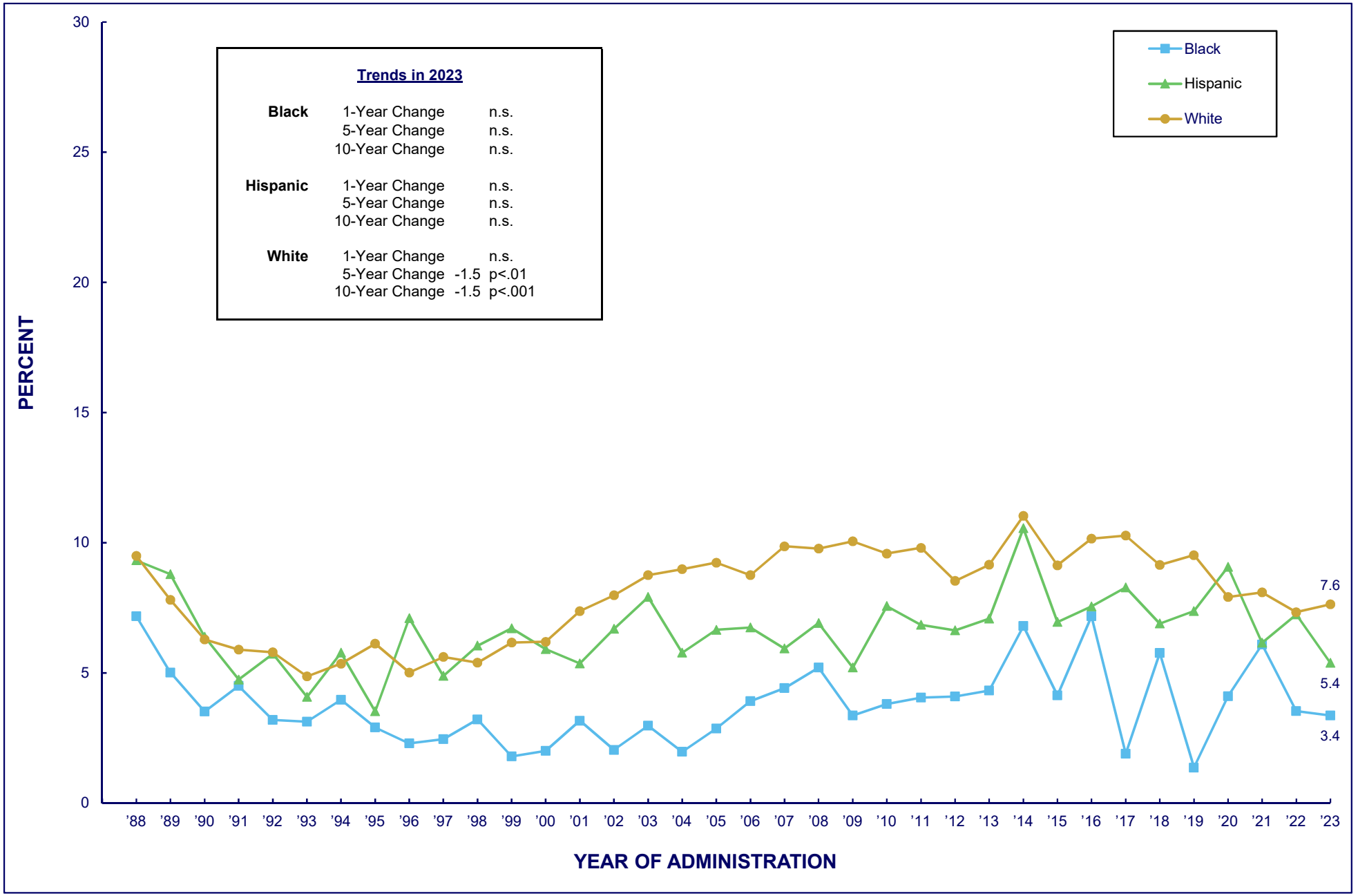


TABLE/FIGURE 145

ANY DRUG OTHER THAN CANNABIS

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

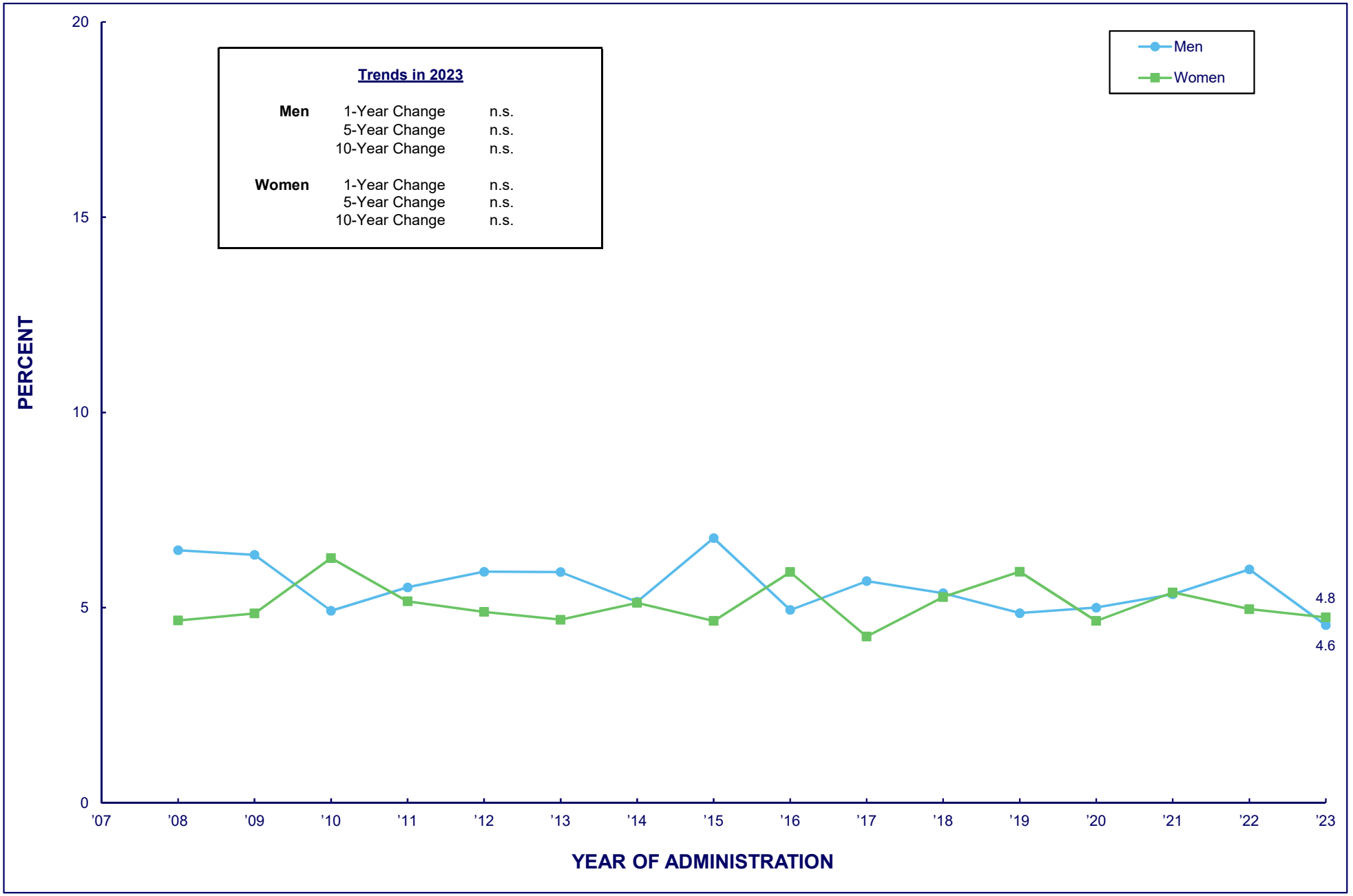
MONITORING THE FUTURE



TABLE/FIGURE 146

ANY DRUG OTHER THAN CANNABIS

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

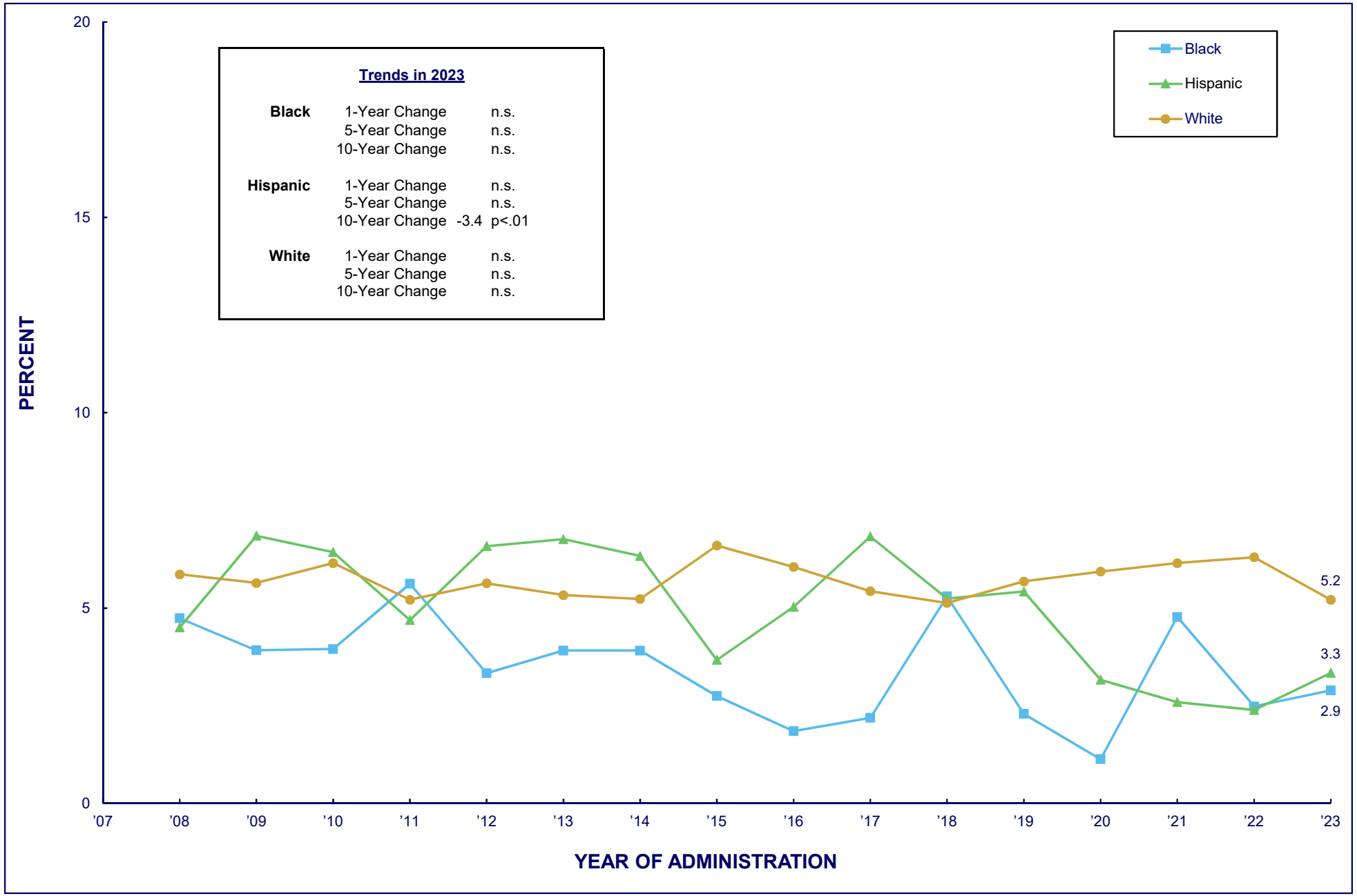


TABLE/FIGURE 147

ANY DRUG OTHER THAN CANNABIS

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

MONITORING THE FUTURE



TABLE/FIGURE 148
Differences in Prevalence of Use for Various Types of Drugs Among Respondents Modal Ages 19 through 30, by Sex and Race/Ethnicity, 2023

	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:												
12-month	40.3	44.1	p<.05	42.9	38.7	n.s.	42.9	42.2	n.s.	38.7	42.2	n.s.
30-day	27.6	29.7	n.s.	31.2	24.7	n.s.	31.2	28.7	n.s.	24.7	28.7	n.s.
Alcohol:												
30-day	65.6	65.1	n.s.	57.3	59.2	n.s.	57.3	69.3	p<.001	59.2	69.3	p<.001
5+ drinks in row in two weeks	31.8	23.4	p<.001	20.0	26.2	n.s.	20.0	29.6	p<.01	26.2	29.6	n.s.
Cigarettes:												
30-day	11.4	6.4	p<.001	7.4	9.7	n.s.	7.4	9.3	n.s.	9.7	9.3	n.s.
Vaping Nicotine:												
30-day	22.1	15.4	p<.001	12.3	16.3	n.s.	12.3	20.3	p<.001	16.3	20.3	n.s.
Any Drug other than Cannabis:												
12-month	19.1	14.5	p<.01	8.2	15.4	p<.01	8.2	18.1	p<.001	15.4	18.1	n.s
30-day	7.4	5.9	n.s.	3.4	5.4	n.s.	3.4	7.6	p<.01	5.4	7.6	n.s.

MONITORING THE FUTURE

TABLE/FIGURE 149
Differences in Prevalence of Use for Various Types of Drugs Among Respondents Modal Ages 35 through 50, by Sex and Race/Ethnicity, 2023

	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:												
12-month	31.3	27.4	p<.05	23.5	29.3	n.s.	23.5	30.2	n.s.	29.3	30.2	n.s.
30-day	20.7	17.8	n.s.	15.5	17.9	n.s.	15.5	19.6	n.s.	17.9	19.6	n.s.
Alcohol:												
30-day	74.4	64.2	p<.001	60.1	76.8	p<.01	60.1	68.6	p<.05	76.8	68.6	p<.05
5+ drinks in row in two weeks	36	18.8	p<.001	19.3	34.0	p<.02	19.3	27.3	p<.06	34.0	27.3	n.s.
Cigarettes:												
30-day	10.2	10.2	n.s.	7.6	7.4	n.s.	7.6	11.3	n.s.	7.4	11.3	n.s.
Vaping Nicotine:												
30-day	5.8	5.0	n.s.	2.3	4.9	n.s.	2.3	5.8	p<.05	4.9	5.8	n.s.
Any Drug other than Cannabis:												
12-month	12.7	10.1	p<.05	6.0	9.2	n.s.	6.0	12.1	p<.05	9.2	12.1	n.s.
30-day	4.6	4.8	n.s.	2.9	3.3	n.s.	2.9	5.2	n.s.	3.3	5.2	n.s.

MONITORING THE FUTURE

TABLE/FIGURE 150
Differences in Prevalence of Use for Various Types of Drugs Among Respondents Modal Ages 55 through 65, by Sex and Race/Ethnicity, 2023

	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:												
12-month	23.1	16.1	p<.001	11.9	18.9	n.s.	11.9	20.7	p<.001	18.9	20.7	n.s.
30-day	16.9	10.5	p<.001	7.6	11.1	n.s.	7.6	14.5	p<.001	11.1	14.5	n.s.
Alcohol:												
30-day	67.6	58.7	p<.001	47.4	70.7	p<.001	47.4	65.1	p<.001	70.7	65.1	n.s.
5+ drinks in row in two weeks	29.3	13.9	p<.001	16.2	27.8	n.s.	16.2	22.3	n.s.	27.8	22.3	n.s.
Cigarettes:												
30-day	11.4	8.8	p<.05	6.8	10.2	n.s.	6.8	9.9	n.s.	10.2	9.9	n.s.
Vaping Nicotine:												
30-day	2.5	2.5	n.s.	2.1	2.2	n.s.	2.1	2.7	n.s.	2.2	2.7	n.s.
Any Drug other than Cannabis:												
12-month	8.6	6.4	n.s.	2.9	6.1	n.s.	2.9	8.7	p<.05	6.1	8.7	n.s.
30-day	2.7	2.8	n.s.	0.7	3.5	n.s.	0.7	3.1	p<.05	3.5	3.1	n.s.

MONITORING THE FUTURE