

# Chapter 3

## Adult Substance Use Prevalence and Trends

### Executive Summary

The most prevalent substances used by adults ages 35 to 50 in 2021 were:

	Past 12 months	Past 30 days
<b>Alcohol</b>	84.8%	71.4%
<b>Marijuana</b>	24.9%	15.8%
<b>Cigarettes</b>	14.5%	10.4%
<b>Other Drugs<sup>1</sup></b>	11.2%	5.5 %

In addition, binge drinking (having 5+ drinks in a row in the past 2 weeks) was reported by 24.5%, and daily marijuana use (20+ occasions in the past 30 days) was reported by 5.9% of adults ages 35 to 50 in 2021.

There were **notable significant changes from 2020 to 2021** among adults ages 35 to 50:

- Marijuana use in the past 12 months and past 30 days increased significantly from 2020 to 2021 among adults ages 35 to 50, reaching the highest levels recorded by the survey (since 2008).
- Nicotine vaping among adults ages 35 to 50 remained low, but there was a significant increase in use in the past 30 days from 2020 (1.1%)

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<sup>1</sup> An index of non-medical use of any drugs other than marijuana includes hallucinogens (including LSD), cocaine, amphetamines, sedatives (barbiturates), tranquilizers, and narcotics (including heroin).

to 2021 (1.9%). This remained lower than the level of 3.8% in 2019 when it was first assessed at these ages.

- There was a 1 year change in daily drinking in 2021 which returned it to pre-pandemic levels (down from 12.0% in 2020 to 9.2% in 2021).

**Longer-term trends** among adults ages 35 to 50 in the past 10 years include:

- Marijuana use in the past 12 months and past 30 days have approximately doubled in the past 10 years (from 12.6% and 7.4% in 2011 to 24.9% and 15.8% in 2021, respectively), with the majority of the increase in the past 5 years.
- Alcohol use in the past 30 days and binge drinking in the past 2 weeks have also increased in the past 10 years (from 68.9% in 2011 to 71.4% in 2021 and from 21.7% in 2011 to 24.5% in 2021, respectively).
- In the past decade, cigarette smoking continued to decrease for smoking in the past 12 months (20.4% in 2011 to 14.5% in 2021) and past 30 days (16.5% in 2011 to 10.4% in 2021).
- Over the past 10 years, we have seen significant increases in amphetamine use (from 1.1% in 2011 to 2.7% in 2021) and decreases in sedative use (from 2.7% in 2011 to 2.0% in 2021).
- Over the past 5 years, there has been an increase in the use of hallucinogens (from 0.8% in 2016 to 2.5% in 2021).
- There has been a decrease in use of narcotics other than heroin over the past 5 years (from 5.1% in 2016 to 3.4% in 2021).

## Introduction

MTF has been following individuals from age 18 throughout adulthood since 1976. These surveys currently include follow-ups through age 60. In this chapter, we present the most recent prevalence estimates of substance use among adults ages 35 to 50 combined and for separate age groups from 35 to 60 (ages 55 and 60 are not included in the combined adult estimates because of differences in developmental stage and measurement), and we

describe recent historical trends comparing these estimates to 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 35 to 50 are combined, and the significance of trend estimates across 1, 5, and 10 years is provided. In the tables, estimates from adolescents at age 18 (presented [elsewhere](#)) and young adults ages 19 to 30 (discussed in the previous chapter) are provided for comparison.

### Adjusted Lifetime Prevalence Estimates

Having 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 Figures 39 through 47.

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 2 earlier data collections; therefore, adjusted lifetime prevalence estimates are calculated only for ages 21 and older.

We believe that the truth lies somewhere between both 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.<sup>2</sup>

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<sup>2</sup> 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. Accessed at [https://archives.drugabuse.gov/sites/default/files/monograph167\\_0.pdf](https://archives.drugabuse.gov/sites/default/files/monograph167_0.pdf)

## Most Common Substances: Prevalence

The prevalence estimates (this section) and trends (the following section) are first presented for the most commonly used substances including marijuana, alcohol, cigarettes, vaping, and any drug other than marijuana. Estimates for other specific substances are presented in the final section of the chapter.

### Marijuana

The legal status of marijuana at the state level, as well as how it is talked about in the literature and society at large, is changing. The term “marijuana” is increasingly being replaced with the term “cannabis.” However, in our surveys and this publication, we predominantly continue to use the term marijuana (as does NIDA<sup>3</sup>). We continue to update our surveys about modes of use; the estimates here include use of marijuana in any form.

**Lifetime.** Among adults, lifetime prevalence was lowest for those 45 and 50 (at 70.6% and 71.0%, respectively). These respondents graduated from high school in 1994 and 1989, when marijuana and other drugs were at or near historic lows across the past four decades, suggesting a cohort effect. The highest lifetime prevalence levels were for those ages 55 (77.9%) and 60 (76.9%), who were in high school during years of peak marijuana use (Figure 39).

**12 month.** Prevalence of marijuana use in the past 12 months for those ages 35 to 50 combined was 24.9% in 2021 (Figure 1) and declined with age from 31.0% at ages 35 to 14.7% at age 60 (Table 3).

**30 day.** Marijuana use in the past 30 days was reported by 15.8% of adults ages 35 to 50 in 2021 (Figure 2) and ranged from 19.2% at age 35 to 9.5% at age 55 (Table 4).

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<sup>3</sup> National Institute on Drug Abuse. [Cannabis \(Marijuana\)](#).

**Daily.** Current daily marijuana use (defined as using on 20 or more occasions in the past 30 days) for ages 35 to 50 was 5.9% in 2021 (Figure 3), ranging from 9.3% at age 35 to 3.6% at age 50 (Table 5).

**Vaping marijuana** (Figure 4) was not common among adults. Among those ages 35 to 50, only 2.9% had vaped marijuana in the past 12 months (Figure 4) and 0.9% had vaped marijuana in the past 30 days (Figure 5).

## Alcohol

**Lifetime.** The vast majority of adults reported lifetime alcohol use, with 97.4–99.0% of those ages 35 to 60 ever drinking (Figure 40).

**12 month.** Alcohol use in the past 12 months was also very high, with 84.8% of those ages 35 to 50 reporting it in 2021 (Figure 6). Across age, past 12-month alcohol use declined from 88.6% of those at age 35 to 79.3% of those at age 60 (Table 7).

**30 day.** 71.4% of adults ages 35 to 50 used alcohol in the past 30 days in 2021 (Figure 7), ranging from 73.1–73.3% of those at ages 35 and 40 to 65.8% of those at age 60 (Table 8).

**Daily.** Current daily drinking (defined as 20 or more occasions in the past 30 days) was 9.2% for those ages 35 to 50 in 2021 (Figure 8). Unlike other measures of alcohol use, daily drinking increased across age stratum, from 9.4% at age 35 to 14.2% at age 60 (Table 9).

**Binge drinking** (i.e., having 5+ drinks in a row in the past 2 weeks) was reported by 24.5% of those ages 35 to 50 in 2021 (Figure 9). Its prevalence ranged from 24.8–26.3% at ages 35–40, 21.5–23.8% at ages 45–55, and 16.9% at age 60 (Table 10).

## Cigarettes

**12 month.** Among adults ages 35 to 50, 14.5% smoked cigarettes in the past 12 months (Figure 12), with prevalence decreasing across age from 15.6% at age 35 to 13.1% at age 60 (Table 11).

**30 day.** 1 out of 10 adults ages 35 to 50 smoked cigarettes in the past 30 days in 2021 (Figure 13), fairly level across age from 11.6% at age 35 to 9.7% at age 60 (Table 12).

**Daily.** Daily smoking in the past 30 days was reported by 7.5% of those ages 35 to 50 (Figure 14), with an inconsistent variability across specific age from 7.1–9.5% from 35 to 60. (Table 13). Smoking a half pack or more per day was reported by 5.1% of those ages 35 to 50 (Figure 15), but highest among those ages 55–60 (6.7–7.5%). Of all daily smokers at age 60, about 74% were smoking half pack a day or more.

### Vaping Nicotine

Vaping nicotine was not common among adults. Among those ages 35 to 50, 2.9% vaped nicotine in the past 12 months (Figure 16) and 1.9% had vaped nicotine in the past 30 days (Figure 17).

### Any Drug Other Than Marijuana

An index of non-medical use of any drugs other than marijuana includes hallucinogens (including LSD), cocaine, amphetamines, sedatives (barbiturates), tranquilizers, and narcotics (including heroin). This is reported for ages 35 to 50 only, because some drugs are no longer measured after age 50.

**Lifetime.** Lifetime prevalence of using any drug other than marijuana ranged from 42% at age 35 to 55% at age 45 (Figure 41).

**12 month.** 11.2% of adults ages 35 to 50 reported using any drug in the index other than marijuana in the past 12 months (Figure 18), ranging from 14.2% at age 35 to 8.9% at age 50 (Table 16).

### Most Common Substances: Trends

In this section we focus on recent trends over the past 1 year, past 5 years, and past 10 years in substance use among middle adults ages 35 to 50 combined (shown in Figures 1 through 38). Data are given for each year in which they are available for that full age band. We present 1 year trends (i.e.,

the percentage point change between 2020 and 2021), 5 year trends (i.e., the percentage point change between 2016 and 2021), and 10 year trends (i.e., the percentage point change between 2011 and 2021) and whether these trends were statistically significant. Data on ages 55 and 60 have been available for only 9 and 4 years, respectively, so they are not yet included in the adult trend analysis (although their estimates are presented in the given tables).

### Marijuana

Among those ages 35 to 50 combined, the prevalence of marijuana use in the past 12 months has nearly doubled in the past 10 years (from 12.6% in 2011 to 24.9% in 2021); the majority of this increase has been in the past 5 years (from 14.9% in 2016). There was also a significant 1 year increase from 2020 (22.7%) to 2021 (Figure 1). A similar pattern was seen for marijuana use in the past 30 days, which was 7.4% in 2011, 8.9% in 2016, 13.7% in 2020, and 15.8% in 2021 (Figure 2). Daily marijuana use was level from 2020 to 2021, but there were significant trends over the past 5 years and 10 years (2.6% in 2011, 3.0% in 2016, 5.9% in 2021; Figure 3).

### Alcohol

Alcohol use among those ages 35 to 50 has been flat, with few significant trends in the past 10 years. Prevalence remains high, at 84.8% in the past 12 months, 71.4% in the past 30 days, 9.2% drinking daily (defined as 20 or more times in the past 30 days), and 24.5% reporting binge drinking (5+ drinks in a row) in the past 2 weeks (Figures 6 to 9). There are two notable exceptions to the overall stable trends. First, we observed a 1-year decrease from 2020 to 2021 in daily drinking (from 12.0% in 2020 to 9.2% in 2021; Figure 8); the prevalence returned to pre-pandemic levels in 2021. Second, there has been a gradual upward trend over the past 10 years in alcohol use in the past 30 days (from 68.9% in 2011 to 71.4% in 2021; Figure 7) and binge drinking in the past 2 weeks (from 21.7% in 2011 to 24.5% in 2021; Figure 9).

## Cigarettes

Cigarette use has been steadily declining among those ages 35 to 50. Smoking in the past 12 months and past 30 days decreased over the past 5 and 10 years; however, the additional drop from 2020 to 2021 did not reach statistical significance in either case. Prevalence of adults ages 35 to 50 smoking half a pack or more per day has trended downward in the past 1, 5, and 10 years, to 5.1% in 2021. In 2020 during the early months of the COVID-19 pandemic, half pack a day smoking had increased to 7.0% but has now returned to match the low of 5.0% in 2019.

## Vaping Nicotine

Nicotine vaping among those ages 35 to 50 remained low, although there was a significant 1 year increase in 30 day use, from 1.1% in 2020 to 1.9% in 2021. This remained lower than the level of 3.8% in 2019, which was the first year the questions were included at these ages (Figure 17).

## Any Drug Other Than Marijuana

The index for the non-medical use of any drug other than marijuana includes hallucinogens (including LSD), cocaine, amphetamines, sedatives (barbiturates), tranquilizers, and narcotics (including heroin). Among those ages 35 to 50 it has remained stable over the past 10 years. In 2021, 11.2% reported using drugs other than marijuana in the past 12 months (Figure 18).

MTF includes specific questions about many individual substances. Below are prevalence levels and trends for use in the past 12 months among adults ages 35 to 50 for hallucinogens, narcotics (opioids), sedatives/tranquilizers, stimulants, and tobacco in other forms. Additional data are also available.<sup>4</sup>

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<sup>4</sup> Monitoring the Future: Restricted-Use Panel Data, United States, 1976-2019 (ICPSR 37072)  
<https://www.icpsr.umich.edu/web/NAHDAP/studies/37072>



## Hallucinogens

Hallucinogen use in the past 12 months was reported by 2.5% of adults ages 35 to 50 in 2021 (Figure 20), and increased significantly over the past 5 years (from 0.8% in 2016) and 10 years (from 0.7% in 2011). Use ranged from 4.5% at age 35 to 0.7% at age 50 (Table 17).

## Narcotics (Opioids)

**Heroin** use among adults ages 35 to 50 was 0.2% in 2021, with no significant change over the past 10 years (Figure 24).

Use of **narcotics other than heroin** was reported by 3.4% in 2021, with a decrease over the past 5 years (from 5.1% in 2016) and 10 years (from 4.7% in 2011; Figure 25). Use of heroin (Table 21) and narcotics other than heroin (Table 22) varied inconsistently by age.

## Sedatives & Tranquilizers

**Sedative** use in the past 12 months was reported by 2.0% of those ages 35 to 50 in 2021 (Figure 28), which was a decrease over the past 10 years from 2.7% in 2011. Use was between 1.5 and 2.5% at each age (Table 23).

**Tranquilizer** use in the past 12 months was reported by 4.1% of those ages 35 to 50, with no significant changes in the past 10 years (Figure 29). Use ranged from 2.9–4.8% age all ages from 35 to 60 (Table 24).

## Stimulants

**Amphetamine** use was reported by 2.7% of adults ages 35 to 50 in 2021 (Figure 30), ranging from 3.8% at age 35 to 0.6% at ages 55 and 60 (Table 25). There was a positive 10 year trend (up from 1.1% in 2011), but no significant 1 or 5 year trends.

**Cocaine** use was reported by 2.5% of adults ages 35 to 50 in 2021 (Figure 33), with no significant changes in the past 10 years. By age stratum, there was a range of 4.2% at age 35 descending to 0.8% at age 60 (Table 26).

## Recommended Citation

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. University of Michigan Institute for Social Research: Ann Arbor, MI. doi:10.7826/ISR-UM.06.585140.002.07.0001.2022



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