

Cannabis Public Health Surveillance:

2023 Cannabis Health Statistics Report

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Purpose

This report is a product of the Epidemiology Unit of the Connecticut Department of Public Health (DPH) Community, Family Health, and Prevention Section (CFHPS). Its purpose is to provide cannabis data and statistics on adverse health events, demographic risk factors, and trends related to cannabis consumption in Connecticut, per legislative mandate. In 2021, the state passed legislation that legalizes and regulates the adult use of cannabis in Connecticut (Connecticut General Assembly, 2021). As part of that legislation, State of Connecticut Public Act 21-1 (June Special Session), Section 146 states:

(a) There is established, within the Department of Public Health, a program to collect and abstract timely public health information on cannabis associated illness and adverse events, nonfatal and fatal injuries and cannabis use poisoning data, from state and national data sources. Such program shall include, but need not be limited to, the following: (1) Serving as a data coordinator, analysis and reporting source of cannabis data and statistics that include, but are not limited to, illness, adverse events, injury, pregnancy outcomes, childhood poisoning, adult and youth use, cannabis-related emergency room visits and urgent care episodic mental health visits; (2) performing epidemiologic analysis on demographic, health and mortality data to identify risk factors and changes in trends; (3) working with the Departments of Consumer Protection and Mental Health and Addiction Services and any other entity that the Commissioner of Public Health deems necessary to disseminate public health alerts; and (4) sharing state-wide data to inform policy makers and citizens on the impact of cannabis legalization by posting public health prevention information and cannabis use associated morbidity and mortality statistics to the Department of Public Health's Internet web site.

(b) The Department of Public Health shall, not later than April 1, 2023, and annually thereafter, report in accordance with the provisions of section 11-4a of the general statutes, to the joint standing committees of the General Assembly with cognizance relating to public health, human services, and appropriations and the budgets of state agencies about the public health information on cannabis collected by the department under subsection (a) of this section.

This report has three components: 1) an executive summary with a brief overview of the most important findings, 2) a main section containing a written description of the main findings as well as key statistics tables and figures, and 3) a collection of separate, supplemental documents that present detailed statistics and a comprehensive description of the applied methodology.

The supplemental documents referenced throughout this report and located on the DPH Cannabis Health Statistics website are as follows:

- Suppl. 1: Behavioral Risk Factor Surveillance System Supplemental Tables, 2023
- Suppl. 2: Connecticut School Health Survey Supplemental Tables, 2023
- Suppl. 3: National Survey on Drug Use and Health Supplemental Tables, 2023
- Suppl. 4: Connecticut Inpatient and Emergency Department Visit Supplemental Tables, 2023
- Suppl. 5: Treatment Episode Data Set (Admissions) Supplemental Tables, 2023

Terms

- Cannabis
 - Public Act 21-1 defines the term “cannabis” as being equivalent with the term “marijuana” (Connecticut General Assembly, 2021). For this report, “cannabis” is used to maintain consistency and avoid confusion.
- Self-Reported Cannabis Use History
 - Different surveys rely on different terminology to define windows of time for cannabis use history. Analyses of Behavioral Risk Factor Surveillance System (BRFSS) and Youth Risk Behavior Surveillance System (YRBSS) data typically present cannabis use within the past 30 days as “current use”. Analyses of National Survey on Drug Use and Health (NSDUH) data typically specify a time frame (e.g., “use in the past month”, “use in the past year”). To avoid confusion when comparing prevalence estimates across data sources, a defined window of time is presented for all prevalence estimates (e.g. lifetime, past year, past month) regardless of the data source.
- Uncertainty
 - When analyzing the data for this report, the CFHPS Epidemiology Unit did not perform statistical tests that produce p-values. Instead, measures of statistical “uncertainty” such as standard errors and related values such as 95% confidence intervals (CI) and coefficients of variation (CV, also known as relative standard errors) were examined to evaluate differences between estimates. Because continuous p-values were not calculated it was determined that using the term “statistically significant” should be avoided. Instead, it was decided that group differences should be described using other language, often invoking statistical characteristics like 95% CI overlap and CV to illustrate degrees of uncertainty. It should be noted, however, that all group differences highlighted in the main body of the report, unless otherwise specified, did not have overlapping 95% CIs and thus a statistical test of group differences based on the same statistical assumptions used to generate the confidence intervals would result in a p-value < 0.05 (i.e., “statistically significant”) (Greenland, et al., 2016).
- Limited Validity
 - In this report, the term “limited validity” is used to describe rates/estimates based on very small numbers. This does not mean the responses to survey questions or individual adverse health event cases themselves are not valid; it simply reflects a high degree of statistical uncertainty about a rate/estimate.

Executive Summary

Key Takeaways

- Adult cannabis use has increased over time
- Adolescent cannabis use has been relatively stable over time, but fewer young people are beginning to use it at a very young age
- Adult heavy drinkers, binge drinkers, or those with poor mental health were among the most likely to use cannabis
- Adolescents who had depression, ate fewer meals with family, or had worse academic achievement were generally more likely to use cannabis than their peers
- Adults may be changing their methods for consuming cannabis – smoking, once very dominant, has become less popular, while other methods such as consuming edible products seem to be growing in popularity
- Around 4% of pregnant women used cannabis in 2019
- Young adults perceived cannabis use as less dangerous, initiated use at a high rate, used cannabis more than any other age group, and had among the highest rates of cannabis-related adverse health outcomes of any age group
- Non-Hispanic Black/African Americans had very high rates of cannabis-related adverse health events including emergency department visits, hospitalizations, and substance use treatment admissions
- Cannabis-related emergency department visit and hospitalization rates increased dramatically over time among very young children and older adults
- Cannabis use became less common as a primary reason for substance use treatment over time

Use and Risk Behaviors

Survey Data

Cannabis Use Among Adults: Behavioral Risk Factor Surveillance System (BRFSS)

The Behavioral Risk Factor Surveillance System (BRFSS) enables researchers to examine relationships between a wide range of health risk behaviors and demographic characteristics among adults aged 18 years or older, but only a few were investigated for this report (Centers for Disease Control and Prevention, 2021). DPH staff will continue to develop additional research questions to inform the public and state and local policy makers about predictors of cannabis use among Connecticut adults. Included below are data trends on cannabis use overall and by age, sex, race/ethnicity, veteran status, income, housing insecurity, food insecurity, educational attainment, sexual orientation, mental health status, having a disability, heavy drinking behavior, and binge drinking behavior. Detailed statistics, including confidence intervals and coefficients of variation, are provided in the supplemental document titled “Behavioral Risk Factor Surveillance System Supplemental Tables”, which can be found on the Cannabis Health Statistics page on the DPH website (*Suppl. 1*).

Trends in Past Month Cannabis Use Among Connecticut Adults

In 2017, 9.4% of Connecticut adults (aged 18+ years) used cannabis in the past month (*Table 1*). There were notable differences in cannabis use by age and sex, with middle-aged (35-54 years) and older adults (55+ years) using less than younger adults (18-34 years) and women less than men. Other predictors of past month cannabis use included housing insecurity, poor mental health status, heavy drinking, and binge drinking. Additional demographic characteristics, such as sexual orientation, and food insecurity had sizeable differences in point estimates of past month cannabis use, but their relatively wide confidence intervals and/or limited validity suggest the results are not certain enough to draw firm conclusions (*Suppl. 1*).

In 2021, 12.1% of Connecticut adults used cannabis in the past month (*Table 2*). All the demographic differences in 2017 past month use reported above were also apparent in 2021. However, 2021 survey data provided more statistically valid estimates of cannabis use by race/ethnicity, veteran status, food insecurity, and sexual orientation than the 2017 questionnaire (*Table 2 & Suppl. 1*).

Point estimates of past month cannabis use prevalence were higher in 2021 than 2017 among the general adult population and for nearly all demographic groups investigated aside from the Non-Hispanic Other race/ethnicity category, though some of these differences should be interpreted with caution due to substantial overlap in confidence intervals between years and/or limited validity (*Tables 1 & 2, Suppl. 1*). Over this time period, there were notable increases among all adults, middle-aged and older respondents, those with incomes less than \$25,000, those with more than a high school education, those with disabilities, those without heavy drinking behavior, and those without binge drinking behavior (*Suppl. 1*).

In both 2017 and 2021, heavy drinkers or binge drinkers, those with poor mental health, younger respondents, and those who were housing insecure were among the top demographic groups most likely to use cannabis in the past month (*Tables 1 & 2*). Older respondents, those who were not binge drinkers, females, and those who did not have poor mental health were consistently among the demographic groups least likely to use cannabis in the past month.

Trends in Consumption Among Connecticut Adult Cannabis Users

Cannabis smoking prevalence decreased from 2017 to 2021, but it remained the predominant primary method of cannabis consumption (*Table 3 & Suppl. 1*). Meanwhile, consuming edible products seemed to gain in popularity; 17.4% of cannabis users claimed it was their primary method of use in 2021, up from approximately 5% in 2017, though it must be noted that the 2017 estimate had limited validity and thus this difference is quite uncertain. The prevalence of self-reported reasons for cannabis use also shifted notably from 2017 to 2021. Although the proportion of cannabis users who used it for medical purposes alone did not change meaningfully, the proportion of cannabis users who used it for non-medical purposes-only dropped precipitously (64.0% to 37.7%). Additionally, the share of users who used it for both medical and non-medical purposes nearly tripled (14.8% to 42.1%) (*Table 4 & Suppl. 1*). Please see the limitations subsection below for a note on limitations related to this question.

Limitations

These results should be interpreted with some caution, particularly when comparing 2017 and 2021. Cannabis-related questions on the 2017 questionnaire were collected using a post-survey; BRFSS respondents were asked to remain on the telephone for a bit longer to answer additional questions in exchange for a gift card. This affected response rates for certain questions and may have introduced further selection bias. Additionally, the reason for cannabis use question text differed substantially between 2017 and 2021, and this wording difference may account for the change in prevalence estimated from one year to the next (*Suppl. 1: Appendix 1 & 2*). 2021 was also an extraordinary year for data collection and for society in general because of the impact of the coronavirus disease 2019 (COVID-19) pandemic. Lastly, all data were self-reported and thus subject to reporting bias; changing perceptions around the social acceptability of cannabis use may or may not have affected responses to cannabis-related survey questions. For a more comprehensive description of more general BRFSS limitations, see “Cannabis Public Health Surveillance: State of the Surveillance System Report” (King, Poulin, & Peng, 2022).

Cannabis Use Among High School Students: Connecticut School Health Survey (CSHS)

The Connecticut School Health Survey (CSHS) is Connecticut’s questionnaire administered as part of the national Youth Risk Behavior Surveillance System (YRBSS) (Connecticut Department of Public Health, 2022a). It enables researchers to examine relationships between a wide range of health risk behaviors and demographic characteristics among Connecticut high school students, but only a few were investigated for this report. DPH staff will continue to develop additional research questions to inform the public and state and local policy makers about predictors of cannabis use among Connecticut youth. This section includes data on trends in cannabis use over time overall and by sex, race/ethnicity, school grade, academic achievement, past year depression symptoms, average weekly days when students ate at least one meal with their families, and students’ perceived access to help when they experienced difficult emotions. More detailed statistics are provided in the supplemental document titled “Connecticut School Health Survey Supplemental Tables”, which can be found on the Cannabis Health Statistics page on the DPH website (*Suppl. 2*).

Trends in Cannabis Use Among High School Students Over Time

The trend in lifetime cannabis use from 2005 to 2019 among high school students was relatively stable (*Table 5 & Figure 1*). Prevalence estimates rose and fell slightly over time, with a peak in 2013 (42.1%)

and a low point in 2017 (34.5%). Although there was a drop in prevalence after 2013, it is not clear whether this reflects a real shift in adolescent behavior or whether these ostensible differences are a result of random error, given their statistical measures of uncertainty (*Suppl. 2*). Similar trends were seen in past month cannabis use (*Table 6 & Figure 3*). While lifetime and past month cannabis use remained relatively stable from 2005 to 2019, early initiation of cannabis use (before 13 years of age) decreased from 8.5% in 2005 to 3.8% in 2019 (*Table 7*).

2021 data was markedly different from previous years, with the prevalence of lifetime use estimated at 20.6% and past month use at 11.1% (*Tables 5 & 6*). These prevalence estimates were most likely affected both by differences in the data collection process and by changes in social context related to the COVID-19 pandemic (see limitations).

Trends in Synthetic Cannabis Use Among High School Students Over Time

Data collection related to synthetic cannabis use began in 2015. From 2015 to 2019 there were no substantive changes in the lifetime use of synthetic cannabinoids among Connecticut high school students, with prevalence hovering at around 6%. In 2021, this dropped to 3.1% (*Table 8*).

Disparities in Cannabis Use Among High School Students

There was little evidence of consistent differences in lifetime or past month cannabis use by sex; confidence intervals for each estimate overlapped in nearly every year for both behaviors (*Figures 1 & 3*). From 2005 to 2013, males had higher point estimates of lifetime and past month use, but these differences were essentially null by 2015 and females had higher point estimates in more recent years (*Tables 5 & 6*). In most years, males tended to begin using cannabis before the age of 13 at a somewhat higher rate than females, but these estimates often had overlapping confidence intervals and/or high coefficients of variation suggesting limited validity, and caution should be taken in drawing conclusions from these results (*Table 7 & Suppl. 2*). There was little to no consistent relationship between race/ethnicity and past month or lifetime cannabis use and, in general, the prevalence of both increased from 9th to 12th grade (*Figures 1 & 3*).

Lifetime and past month cannabis use tended to increase as academic achievement worsened: students who received mostly A's in the past year had the lowest prevalence and with progressively poorer grades cannabis use was typically higher (*Tables 5 & 6*). This relationship was less consistent between students with mostly C's and those with mostly D's or F's and more consistent for lifetime cannabis use than past month cannabis use (*Figures 2 & 4, Suppl. 2*). Some estimates of past month cannabis use by academic achievement had limited validity, particularly among students with the poorest academic achievement, and should be interpreted with caution (*Suppl. 2*).

Mental health and family support indicators seemed to be linked with cannabis use behavior among Connecticut adolescents (*Tables 5 & 6, Figures 2 & 4*). For example: students who had symptoms of depression that interfered with daily activities in the past year also generally had higher lifetime and past month cannabis use than their peers (*Tables 5 & 6, Figures 2 & 4, Suppl. 2*). Additionally, those who ate a meal with their family at least three days per week typically had notably lower lifetime and past month cannabis use than those who ate meals with their families less often. Students who received the help they need when they experienced difficult emotions had lower prevalence of past month and lifetime cannabis use than their less-supported peers, but these group differences were often uncertain, with considerable overlap in 95% confidence intervals around estimates in some years (*Tables 5 & 6, Suppl. 2*).

Disparities in Synthetic Cannabis Use Among High School Students

Group differences and trends in synthetic cannabis use were not explored in detail for this report due to the limited validity of the prevalence estimates (*Table 8 & Suppl. 2*).

Limitations

These CSHS data have multiple limitations, some of which are detailed thoroughly in the previously published report titled “Cannabis Public Health Surveillance: State of the Surveillance System Report” (King, Poulin, & Peng, 2022). Additionally, the CSHS is typically administered in the spring of each school year, but in 2021 data collection was delayed due to the COVID-19 pandemic and was instead administered in the fall. The timing of the survey’s administration may have impacted prevalence estimates and may make comparisons with previous years’ surveys uncertain. Intermittent school closures for in-person learning, more parents working from home, and limited social interactions most likely influenced cannabis use behaviors among youth. Lastly, all data were self-reported and thus subject to reporting bias; changing perceptions around the social acceptability of cannabis use may or may not have affected responses to cannabis-related survey questions.

Cannabis Use Among Pregnant Women: Pregnancy Risk Assessment Monitoring System (PRAMS)

DPH administers an annual survey of recently pregnant Connecticut women as part of the national Pregnancy Risk Assessment Monitoring System (PRAMS) (Connecticut Department of Public Health, 2022b). For more information about this data source, please refer to the document titled “Cannabis Public Health Surveillance: State of the Surveillance System Report” on the Cannabis Health Statistics page of the DPH website (King, Poulin, & Peng, 2022). In 2019, a substance use question was included on the questionnaire; based on this question, the estimated prevalence of cannabis use among Connecticut pregnant women was 3.9%, which would equate to approximately 1,200 pregnant women who used cannabis in that year. PRAMS has multiple limitations, including that all data are self-reported and thus subject to reporting bias. For a more comprehensive description of PRAMS limitations, see “Cannabis Public Health Surveillance: State of the Surveillance System Report” (King, Poulin, & Peng, 2022).

Cannabis Use Among Adolescents and Adults: National Survey on Drug Use and Health (NSDUH)

Every year, the Substance Abuse and Mental Health Services Administration (SAMHSA) administers the National Survey on Drug Use and Health (NSDUH) to non-institutionalized individuals aged 12 years and older across the United States. NSDUH provides national and state-level estimates on substance use, mental health issues, and related outcomes (Substance Abuse and Mental Health Services Administration, 2021). For a detailed review of this data source, please see the document titled “Cannabis Public Health Surveillance: State of the Surveillance System Report” on the Cannabis Health Statistics page of the DPH website (King, Poulin, & Peng, 2022). More detailed statistics are provided in the supplemental document titled “National Survey on Drug Use and Health Supplemental Tables”, which can be found on the Cannabis Health Statistics page of the DPH website (*Suppl. 3*). 2020 NSDUH estimates should be interpreted with caution. Please see the limitations subsection below for a detailed explanation.

Past Year Cannabis Use

Among all individuals aged 12 years and older in Connecticut, past year cannabis use remained relatively stable from 2010 to 2014, then trended upward from 2015 to 2020 (*Table 9 & Figure 5*). This moderate increase over time seems to have been driven primarily by adults 18+, though confidence intervals around annual estimates for each age group are quite wide indicating relatively high uncertainty (*Suppl. 3*). Younger adults were the most likely of any age group to use cannabis in the past year at every time point, with prevalence typically at least two-times that of the next-highest-prevalence group (*Table 9 & Figure 5*).

As of 2020, the prevalence of cannabis use in the past year was 20.5% in Connecticut and 17.7% in the US among all individuals surveyed (*Suppl. 3*). 45.4% of Connecticut's younger adults used cannabis in the past year in 2020, which is much greater than in the nation as a whole (35.0%).

Past Month Cannabis Use

Trends in past month cannabis use among those aged 12 years and older in Connecticut were relatively similar to those described above for past year use, increasing from 7.7% in 2010 to 13.5% in 2020 (*Table 10 & Figure 6*). Younger adults had the highest usage over time compared to all other age categories. By 2020, 10.1% of adolescents (aged 12-17 years), 30.6% of younger adults, and 11.2% of adults aged 26+ years used cannabis in the past month (*Table 10 & Figure 6*).

Point estimates of past month cannabis use were generally higher in Connecticut than the nation as a whole, but the width of Connecticut estimates' confidence intervals, particularly for specific age groups, make conclusions about these apparent group differences less certain. In 2020, the prevalence of past month cannabis use was 13.5% in Connecticut and 11.7% nationwide (*Suppl. 3*).

First Use of Cannabis in the Past Year

2010-2020 trends in the annual prevalence of cannabis use initiation in Connecticut remained relatively stable (*Table 11*). Over this period, adults aged 26+ years had the lowest annual initiation estimates of any other age category, while younger adults generally had the highest. Adults aged 26+ years were the only group that saw a notable, relatively large, and sustained increase in the prevalence of initiation over the decade. In 2020, 2.8% of all respondents used cannabis for the first time within the past year in Connecticut compared to 2.3% across the United States (*Suppl. 3*).

Perceptions of Great Risk from Smoking Cannabis Once a Month

Data on perceived risk prior to 2015 were not included in this report because changes to the survey in that year made comparisons with past years unreliable (Substance Abuse and Mental Health Services Administration, 2017). Among all individuals aged 12 years and older, perceptions of great risk from smoking cannabis once a month decreased from 23.8% in 2016 to 18.2% in 2020, though minimal overlap of confidence intervals around estimates for each year makes this difference somewhat uncertain (*Table 12, Suppl. 3*). In 2020, adults aged 26+ years had the largest prevalence (19.7%) and younger adults had the lowest prevalence (9.2%) of perceived great risk.

Limitations

In March of 2020, in-person data collection for the NSDUH was suspended due to safety concerns related to COVID-19. Later that year, data collection resumed, mostly via a web-based method. In the final stages of completing this report, the authors became aware that SAMHSA had removed pooled 2019-2020 NSDUH state prevalence estimates from their website, stating they may be misleading

because of differences in responses between survey administration modes. Because this change was identified late in January 2023 after the completion of a lengthy editing and review process, it was determined that no changes would be made to the data presented in this report. However, in light of these facts, we recommend readers interpret pooled 2019-2020 NSDUH estimates with caution (Substance Abuse and Mental Health Services Administration, 2023). Additionally, all data were self-reported and thus subject to reporting bias; changing perceptions around the social acceptability of cannabis use may or may not have affected responses to cannabis-related survey questions. For more general limitations, please refer to the document titled “Cannabis Public Health Surveillance: State of the Surveillance System Report” on the Cannabis Health Statistics page of the DPH website (King, Poulin, & Peng, 2022).

Morbidity

Healthcare Administrative Data

Emergency Department and Inpatient Hospital Discharges: Connecticut Inpatient and Emergency Department Visit Dataset (CIEDVD)

When a person goes to an emergency department (ED) or is admitted to a hospital, healthcare workers use a specialized coding system to document the reason or reasons for the visit. The current coding system, called the International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), includes codes for documenting cannabis-related diagnoses (Centers for Disease Control and Prevention, 2015; Council of State and Territorial Epidemiologists, 2021). By searching for these codes in data submitted to DPH by Connecticut hospitals, it is possible to calculate the percentage of all healthcare visits where cannabis use was noted in the visit record. A cannabis-related diagnosis code could be documented in the record because cannabis use precipitated an adverse health event, as a result of routine screening, or because cannabis use was discussed during the visit for some other reason. Though this methodology is limited, it is recommended by the Council for State and Territorial Epidemiologists and is the best process for tracking cannabis-related healthcare burden known to CFHPS Epidemiology Unit staff (Council of State and Territorial Epidemiologists, 2021).

In the sections below, healthcare visits were separated into two categories: ED visits, where a patient arrived at the ED but was not admitted to the hospital, and inpatient hospitalizations. Visits involving newborns were excluded from this analysis because they are different in character and require distinct methodological considerations. CFHPS Epidemiology Unit staff intend to explore cannabis-related health outcomes among newborns in the near future and publish the results in a separate report. For a thorough description of the data source used to generate these statistics, please refer to the Connecticut Inpatient and Emergency Department Visit section of the document titled “Cannabis Public Health Surveillance: State of the Surveillance System Report” (King, Poulin, & Peng, 2022). For more comprehensive statistics including case counts, total sample sizes, standard errors, and 95% confidence intervals for each rate as well as detailed information about the methods used, please refer to the supplemental document titled “Connecticut Inpatient and Emergency Department Visit Supplemental Tables” (*Suppl. 4*). Both documents can be found on the Cannabis Health Statistics page of the DPH website.

Emergency Department Visits

From 2016 to 2017 there was a 13.5% increase in overall cannabis-related ED visits from 618.1 to 701.7 per 100,000 ED visits for all reasons (*Table 13 & Figure 7*). From 2017 to 2018 the rate increased by about 44% and was relatively stable at that level through 2019. Since then, the rate has dropped considerably and by 2021 it was only slightly higher than in 2017. In 2021, cannabis-related ED visits by Connecticut residents resulted in \$39,257,911 in total charges billed (*Suppl. 4*).

The trends in the rate of cannabis-related ED visits for males and for females were similar to the overall trend, with a small increase from 2016 to 2017, a larger increase from 2017 to 2018, a plateau through 2019, and a subsequent decrease through 2021 (*Table 13 & Figure 7*). Whereas the rate among males returned to near-2016 levels by 2021, the rate among females in 2021 remained approximately 50% higher than in 2016. Males had higher rates than females in all years, but this difference shrank considerably over time: 139% higher in 2016, 127% in 2017, 95% in 2018, 92% in 2019, 84% in 2020, and 65% in 2021.

The number of cannabis-related ED visits among those categorized as Non-Hispanic American Indian/Alaska Native was less than 25 for all years, so any within-group changes over time or differences with other race/ethnicity categories were deemed too statistically uncertain to merit a detailed summary in this report (*Table 13 & Suppl. 4*). All other race/ethnicity groups had a sufficient number of cases for further examination.

The rate of cannabis-related ED visits was consistently highest among those categorized as Non-Hispanic Black and lowest among those categorized as Non-Hispanic Asian (*Table 13 & Figure 7*). Differences between the Non-Hispanic White, Non-Hispanic Other, and Hispanic populations were small. From 2017 to 2018, the Non-Hispanic Black rate more than doubled from 894.1 to 1,958.4 per 100,000 (*Table 13*). This rate then decreased more gradually to 1,108.6 per 100,000 in 2021, about 44% higher than in 2016. Among Hispanics, the rate increased by approximately 91% from 2016 to 2018, then grew slightly until 2020 and subsequently dropped below 2018 levels by 2021. The Non-Hispanic White population saw a very gradual increase from 2016 to 2019, then rates began to decrease, and by 2021 they hit a low point of 615.8 per 100,000. Non-Hispanic Asians saw a 42% increase from 2017 to 2018, then the rate remained relatively stable through 2021 (*Table 13 & Figure 7*). It should be noted that among the Non-Hispanic Asian race/ethnicity group, statistical measures such as standard errors and 95% confidence intervals were typically quite large, indicating a high level of uncertainty about the results (*Suppl. 4*).

Disparities by age evident in this data were not unexpected, with the lowest rates among the youngest age group (0 to 9 years old) and the highest among older adolescents (15 to 19 years old) and younger adults (20 to 24 years old) (*Table 13 & Figure 8*). From age 25 years onward, rates consistently decreased as age increased. The trend in cannabis-related ED visits over time for most age groups largely reflected the overall trend (*Table 13 & Figure 8*). Some notable exceptions included rates for those aged 0 to 9 years, 10 to 14 years, and 65 years or older. Although the rate of cannabis-related ED visits amongst those aged 0-9 only represents a small fraction of all ED visits, the rate of ED visits in 2021 was five times that of 2018. In 2018 there were only 11 annual visits. This number doubled to 22 in 2020 and nearly doubled again to 40 in 2021 (*Suppl. 4*). Those aged 10 to 14 years also saw meaningful change from 2016 to 2020: the rate of cannabis-related ED visits more than tripled from 111.3 per 100,000 to 368.3 per 100,000 (*Table 13*). There was a small drop in 2021, but the confidence intervals around the 2020 and 2021 rates overlap substantially, indicating uncertainty about the extent of the

decrease (*Suppl. 4*). Adults aged 65 years or older saw a more than doubling of rates over this time period (2016 rate suppressed for this age group).

Inpatient Hospitalizations

The rate of cannabis-related inpatient hospitalizations increased gradually from 2,081.9 per 100,000 inpatient hospitalizations in 2016 to 3,033.9 per 100,000 in 2021 (a change of approximately 46%) (*Table 14 & Figure 9*). The rate of cannabis-related inpatient hospitalizations increased fairly consistently over time for both males and females. While males had higher rates than females in all years, this difference decreased over time; 127% higher in 2016, 113% higher in 2017, 96% higher in 2018, 90% higher in 2019, 83% higher in 2020, and 78% higher in 2021. In 2021, cannabis-related inpatient hospitalizations by Connecticut residents resulted in \$412,057,361 in total charges billed (*Suppl. 4*).

The cannabis-related inpatient hospitalization rate among Non-Hispanic American Indians/Alaska Natives was suppressed in 2016 and uncertain in 2017 and 2021 (*Table 14*). The volatility of this trend and the low validity of most years' cannabis-related inpatient hospitalization rates for this group made it inadvisable to draw firm conclusions about the within-group trends over time or differences with other race/ethnicity groups (*Table 14 & Suppl. 4*). Excluding rates for those categorized as Non-Hispanic American Indian/Alaska Native, disparities between race/ethnicity groups were fairly constant from 2016 to 2021; those classified as Non-Hispanic Black consistently had the highest rate of cannabis-related inpatient hospitalizations, followed by Hispanic, Non-Hispanic Other, Non-Hispanic White, and finally Non-Hispanic Asian (*Table 14 & Figure 9*). Over this period of time, those categorized as Non-Hispanic Black, Hispanic, non-Hispanic Other, and Non-Hispanic White saw notable increases in the cannabis-related inpatient hospitalization rate. The rate increase was steady for the Non-Hispanic White and Non-Hispanic Other groups, but less so for Hispanic and Non-Hispanic Black. The trend over time among Non-Hispanic Asians was relatively flat (*Figure 9 & Suppl. 4*).

As with the rates for cannabis-related ED visits, cannabis-related inpatient hospitalization disparities by age were not unexpected (*Table 14 & Figure 10*). Rates among the youngest (0 to 9 years old) were lowest until 2019, when they exceeded the rate of those aged 65+. Older adolescents (15 to 19 years) and younger adults (20 to 24 years) had the highest rates of cannabis-related inpatient hospitalization. From there, hospitalization rates tended to decrease as age increased, though this trend was inconsistent among middle age groups (ages 30 to 34, 35 to 39, and 40 to 44 years) (*Table 14 & Suppl. 4*).

From 2016 to 2021, most age groups experienced a moderate increase in the cannabis-related inpatient hospitalization rate ranging from around 27% higher among those aged between 15 and 19 years to around 69% higher among those aged 50 to 54 years and 55 to 60 years (*Table 14 & Figure 10*). Substantial changes occurred among other age groups, specifically young children and older adults. There were 0 cases of cannabis-related inpatient hospitalization identified among those aged 0 to 9 years in 2016 but there were 42 cases in 2021 (*Suppl. 4*). Over this same period, cannabis-related inpatient hospitalization rates increased by 85% among those aged 10 to 14 years, 125% among those aged 60 to 64 years, and 218% among those aged 65+ years (*Table 14*).

Substance Use Treatment Admissions: Treatment Episode Data Set (TEDS)

The Treatment Episode Data Set (TEDS) is published annually by the Substance Abuse and Mental Health Services Administration (SAMHSA) (Substance Abuse and Mental Health Services Administration, 2022). Its public use files include data on admissions and discharges from substance use treatment facilities, as well as demographics and various characteristics of substance use. Included in this section are trends in crude admission rates by age, sex, and race/ethnicity from the years 2016 to 2020 in the state of Connecticut. Further state-level and national descriptive statistics including counts and 95% confidence intervals are provided in a supplement titled “Treatment Episode Data Set (Admissions) Supplemental Tables”, which can be found on the DPH website (*Suppl. 5*).

In 2016, cannabis was listed as the primary reason for treatment for 11.3% of Connecticut substance use treatment admissions, but by 2020 this proportion had dropped to 8.3% (*Table 15*). This trend did not seem to be Connecticut-specific; national data showed a similar reduction over time (*Figure 11 & Suppl. 5*). Differences in the rate of substance use treatment by sex and race/ethnicity were fairly consistent over the same period (*Table 15 & Figure 11*). The percentage of treatment admissions for cannabis use among males was notably higher than among females every year from 2016 to 2020 aside from 2018 when there was a very slight overlap in 95% confidence intervals between the two groups (*Suppl. 5*). Those categorized as Non-Hispanic Black had the highest rate of any race/ethnicity group over time (19.6% in 2020), while those categorized as Non-Hispanic White generally had the lowest (3.1% in 2020) (*Table 15, Figure 11, & Suppl. 5*). Cannabis accounted for a smaller proportion of substance use treatment admissions in Connecticut than in the rest of the nation (*Table 15*).

Conclusion

This report relied on a variety of data sources to describe cannabis use and related health outcomes in Connecticut. Analysis of these data brought several important trends to light.

The prevalence of adult cannabis use is on an upward trajectory: both NSDUH and BRFSS data indicated increased prevalence of cannabis use over time among those 18 years of age and older. This does not seem to be occurring among youth; trends in adolescent use obtained from both NSDUH and CSHS data were relatively flat (not including CSHS data collected in 2021, an outlier year). Though adults are using cannabis at a higher rate over time and inpatient hospitalizations related to cannabis use are increasing steadily, cannabis accounted for a smaller percentage of substance use treatment admissions in 2020 than in 2016.

Multiple data sources highlighted populations that were at elevated risk of cannabis-related adverse health events. The Non-Hispanic Black population typically had higher rates of cannabis-related ED visits, inpatient hospitalizations, and substance use treatment admissions than other race/ethnicity groups. Younger adults generally reported a lower perception of great risk from using cannabis, tended to initiate cannabis use at a higher rate, and used cannabis more than other age groups. They also had among the highest rates of cannabis-related adverse health events of any age group. Among adults, poor mental health and risky drinking behavior were tightly correlated with cannabis use and adolescents who ate meals with family less often, had poorer academic achievement, or had symptoms of depression typically had higher estimates of cannabis use prevalence than their peers.

The way people use cannabis seems to be changing over time; smoking is becoming less popular, while other methods, particularly consuming edibles, are on the rise. Edibles are particularly concerning from a public health standpoint because of their attractiveness and accessibility to very young children. From 2016 to 2021, the rate of cannabis-related hospital and ED visits among children aged 0-9 years grew substantially; though the actual number of adverse events in 2021 was still quite small, this trend should be monitored closely.

Next Steps

Due to restrictions on time or access to data, some topics of interest to Connecticut residents were not addressed in this first legislative report. Future high priority research questions for the CFHPS Epidemiology Unit include: the prevalence of cannabis hyperemesis syndrome, the prevalence of cannabis-related injuries (including motor vehicle and intentional self-harm injuries), the association between cannabis use by pregnant mothers and birth outcomes such as low birth weight, the prevalence of daily or near-daily cannabis use among Connecticut adults and teens, the number of cannabis-related mental health visits to urgent care centers, and trends in cannabis-related calls to the Connecticut Poison Control Center.

The number of data sources and types of information available to DPH for cannabis public health surveillance will grow in the coming years, expanding the possibilities for investigating cannabis use behaviors and health outcomes among young children, adolescents, adults, and pregnant women in Connecticut. Per legislative mandate, DPH staff will continue to provide cannabis data and statistics on adverse health events, demographic risk factors, and trends related to cannabis consumption in Connecticut in the form of annual cannabis health statistics reports, data briefs, and other mediums.

Suggestions for additional research questions or potential sources of data are welcome. To send a comment, suggestion, or question, please complete the form linked on the Cannabis Health Statistics page of the DPH website.

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Tables

Table 1: Past Month Cannabis Use Among Connecticut Adults, 2017

Demographics		Percentage	N
Total		9.4	263,800
Age	18-34 years	19.4	150,900
	35-54 years	8.1	73,000
	55+ years	3.4	37,700
Sex	Female	6.7	96,800
	Male	12.3	166,600
Race/Ethnicity	Hispanic	5.0†	14,700
	NH Black	10.0†	28,900
	NH White	10.2	196,900
	NH Other	10.0†	20,300
Veteran Status	Yes	*	*
	No	*	*
Income	\$25K+	9.9	186,500
	< \$25K	8.6^	38,500
Housing Insecurity	Yes	12.9^	43,400
	No	7.9	177,400
Food Insecurity	Yes	15.0†	26,600
	No	9.1	235,800
Education	> HS	8.7	150,800
	HS or Less	10.4	112,800
Sexual Orientation	LGBT/Other	20.0†	28,300
	Straight	9.1	234,800
Poor Mental Health	Yes	19.7	59,000
	No	8.1	201,700
Disability	Yes	10.4	70,700
	No	8.9	186,900
Heavy Drinking	Yes	26.9	40,500
	No	8.3	217,400
Binge Drinking	Yes	29.3	127,600
	No	5.7	132,200

Data Source: Connecticut Behavioral Risk Factor Surveillance System

N = Weighted Count, NH = Non-Hispanic, HS = High School

Ns from demographic subgroups may not sum to the overall total: those without responses to demographic questions are not presented separately here.

Estimates with coefficients of variation (CV) greater than 15% and less than or equal to 20% may be of limited validity and are thus flagged (^); with CV greater than 20% but less than or equal 30% are rounded to the nearest 5%, flagged (†); estimates with CV greater than 30% or sample sizes less than 30 are suppressed entirely (*), as are accompanying estimates for all dichotomous variables.

Table 2: Past Month Cannabis Use Among Connecticut Adults, 2021

Demographics		Percentage	N
Total		12.1	284,500
Age	18-34 years	22.9	143,800
	35-54 years	12.3	83,400
	55+ years	5.7	56,000
Sex	Female	9.1	112,900
	Male	15.4	171,600
Race/Ethnicity	Hispanic	10.9	37,800
	NH Black	15.5	34,900
	NH White	12.4	194,200
	NH Other	6.8^	10,200
Veteran Status	Yes	8.7^	16,300
	No	12.4	266,700
Income	\$25K+	12.4	198,500
	< \$25K	17.1	39,100
Housing Insecurity	Yes	27.3	38,500
	No	10.9	112,800
Food Insecurity	Yes	30.5^	27,400
	No	11.6	126,000
Education	> HS	11.5	173,000
	HS or Less	13.1	110,200
Sexual Orientation	LGBT/Other	26.1	48,300
	Straight	11.1	232,300
Poor Mental Health	Yes	27.0	79,300
	No	9.8	198,100
Disability	Yes	16.0	92,300
	No	10.9	191,400
Heavy Drinking	Yes	35.8	43,800
	No	10.8	234,600
Binge Drinking	Yes	34.1	105,400
	No	8.6	171,600

Data Source: Connecticut Behavioral Risk Factor Surveillance System

N = Weighted Count, NH = Non-Hispanic, HS = High School

Ns from demographic subgroups may not sum to the overall total: those without responses to demographic questions are not presented separately here.

Estimates with coefficients of variation (CV) greater than 15% and less than or equal to 20% may be of limited validity and are thus flagged (^); with CV greater than 20% but less than or equal 30% are rounded to the nearest 5%, flagged (†); estimates with CV greater than 30% or sample sizes less than 30 are suppressed entirely (*), as are accompanying estimates for all dichotomous variables.

Table 3: Primary Method of Cannabis Consumption Among Connecticut Adults, 2017-2021

Method	Year	Percentage	N
Smoke	2017	80.0	211,100
	2021	67.8	192,100
Eat	2017	5.0 [†]	16,100
	2021	17.4	49,200
Drink	2017	*	*
	2021	*	*
Vape	2017	10.0 [†]	24,100
	2021	9.8	27,700
Dab	2017	*	*
	2021	*	*
Other	2017	*	*
	2021	*	*

Data Source: Connecticut Behavioral Risk Factor Surveillance System

N = Weighted Count

Ns from demographic subgroups may not sum to the overall total: those without responses to demographic questions are not presented separately here.

Estimates with coefficients of variation (CV) greater than 15% and less than or equal to 20% may be of limited validity and are thus flagged (^); with CV greater than 20% but less than or equal 30% are rounded to the nearest 5%, flagged (†); estimates with CV greater than 30% or sample sizes less than 30 are suppressed entirely (*), as are accompanying estimates for all dichotomous variables.

Table 4: Reason for Cannabis Consumption Among Connecticut Adults, 2017-2021

Reason	Year	Percentage	N
Medical	2017	21.2	55,700
	2021	20.2	57,000
Non-Medical	2017	64.0	167,900
	2021	37.7	106,500
Both	2017	14.8 [^]	38,800
	2021	42.1	118,900

Data Source: Connecticut Behavioral Risk Factor Surveillance System

N = Weighted Count

Ns from demographic subgroups may not sum to the overall total: those without responses to demographic questions are not presented separately here.

Estimates with coefficients of variation (CV) greater than 15% and less than or equal to 20% may be of limited validity and are thus flagged (^); with CV greater than 20% but less than or equal 30% are rounded to the nearest 5%, flagged (^); estimates with CV greater than 30% or sample sizes less than 30 are suppressed entirely (*), as are accompanying estimates for all dichotomous variables.

Table 5: Lifetime Cannabis Use (%) Among Connecticut High School Students, 2005-2021

Demographics		2005	2007	2009	2011	2013	2015	2017	2019	2021
Total		39.8	38.6	37.6	39.6	42.1	35.4	34.5	35.9	20.6
Sex	Female	37.2	37.2	33.7	35.7	38.0	35.2	34.7	37.9	23.4
	Male	42.2	39.9	41.3	43.7	46.1	35.3	34.3	33.9	18.0
Race/Ethnicity	Hispanic	41.0	37.0	36.6	40.1	43.9	39.6	37.7	38.6	24.6
	NH Black	44.8	32.6	36.9	38.7	43.2	36.6	33.1	33.2^	23.0
	NH White	38.8	40.1	38.5	39.5	41.4	34.5	34.1	36.8	19.1
	NH Other	39.6	33.4^	29.0	38.9	36.6	28.9	30.3	28.3	15.0†
Grade	9th	27.3	23.0	25.0	24.5	25.0	21.4	19.3	20.8	8.7^
	10th	33.7	27.8	32.3	36.7	38.9	31.9	31.3	31.4	16.4^
	11th	50.4	50.2	43.1	46.6	48.6	39.2	38.5	42.7	26.2
	12th	50.0	55.8	51.6	52.9	57.4	49.7	50.0	50.2	33.9
Usual Grades in School	A's	26.9	24.0	23.8	25.2	25.0	24.7	25.8	27.4	15.0
	B's	37.8	36.2	36.8	39.0	42.6	36.5	36.3	39.9	21.5
	C's	47.5	53.2	53.7	52.8	56.4	52.6	47.8	46.7	31.6
	D's or F's	65.6	67.6	60.1	72.8	68.5	52.9	48.6	56.0	51.0
Depression	Yes	48.0	50.1	47.6	47.0	51.0	48.2	45.2	53.3	35.0
	No	36.6	35.0	33.8	37.3	38.1	30.4	30.0	28.0	13.0
3+ Weekly Family Meals	Yes	33.7	32.1	33.5	35.1	37.2	30.0	28.5	33.4	16.4
	No	47.9	50.2	45.0	47.5	48.9	46.7	45.5	40.9	28.5
Emotional Support	Yes	38.5	34.3	32.1	31.3	41.4	30.7	33.7	32.8	18.5^
	No	42.6	42.9	42.6	44.9	46.7	41.4	38.6	42.1	26.1

Data Source: Connecticut School Health Survey

NH = Non-Hispanic

Estimates with coefficients of variation (CV) greater than 15% and less than or equal to 20% may be of limited validity and are thus flagged (^); with CV greater than 20% but less than or equal 30% are rounded to the nearest 5%, flagged (†); estimates with CV greater than 30% or sample sizes less than 30 are suppressed entirely (*), as are accompanying estimates for all dichotomous variables.

Table 6: Past Month Cannabis Use (%) Among Connecticut High School Students, 2005-2021

Demographics		2005	2007	2009	2011	2013	2015	2017	2019	2021
Total		23.1	23.2	21.8	24.1	26.0	20.4	20.4	21.7	11.1
Sex	Female	20.0	22.0	18.2	21.0	22.6	20.9	21.6	22.9	14.1
	Male	25.9	24.4	25.3	27.3	29.4	19.7	19.3	20.5	8.2
Race/Ethnicity	Hispanic	19.1	20.7	19.8	23.2	27.3	21.7	22.1	24.3	13.9
	NH Black	23.6	15.7^	20.5	20.3^	25.4^	20.0†	15.0†	15.5^	15.0†
	NH White	23.8	25.1	23.1	25.1	25.6	20.2	21.4	22.4	9.9
	NH Other	22.5^	23.1^	15.0†	24.1^	23.2	15.0†	15.0†	20.6^	*
Grade	9th	15.0	15.4	15.7	15.0	17.7	12.4	11.2	12.1	4.7
	10th	20.8	15.7	18.6	22.8	24.8	16.8	19.0	18.9	10.0†
	11th	27.6	28.8	24.9	29.4	26.4	22.9	21.9	25.6	14.9
	12th	30.1	33.6	29.3	30.6	36.0	29.3	30.3	31.0	16.0^
Usual Grades in School	A's	15.4	10.5	12.2^	14.4	13.1^	12.2	15.5	16.6	8.5^
	B's	20.4	20.6	20.6	22.1	25.6	21.2	20.0	22.7	9.5^
	C's	29.1	37.0	35.0	33.8	36.3	33.7	31.7	27.6	15.0†
	D's or F's	40.1^	52.1	35.0^	53.9	52.7	29.2^	25.0†	42.8	33.1^
Depression	Yes	28.1	34.5	27.6	31.4	33.6	28.1	27.9	34.2	19.0
	No	21.1	19.8	19.4	21.8	22.7	17.3	17.5	15.9	6.7
3+ Weekly Family Meals	Yes	19.7	18.7	20.1	20.9	22.5	16.6	16.8	19.9	7.6
	No	27.2	31.5	24.6	29.6	30.9	28.7	27.5	25.7	17.3
Emotional Support	Yes	20.5	18.7	17.7	15.9	25.1	15.9	20.0	20.9	10.0†
	No	25.6	27.1	25.2	29.2	27.8	25.1	23.5	25.5	14.4

Data Source: Connecticut School Health Survey

NH = Non-Hispanic

Estimates with coefficients of variation (CV) greater than 15% and less than or equal to 20% may be of limited validity and are thus flagged (^); with CV greater than 20% but less than or equal 30% are rounded to the nearest 5%, flagged (†); estimates with CV greater than 30% or sample sizes less than 30 are suppressed entirely (*), as are accompanying estimates for all dichotomous variables.

Table 7: Cannabis Use Before Age 13 Among Connecticut High School Students, 2005-2021

Demographics		2005	2007	2009	2011	2013	2015	2017	2019	2021
Total		8.5	8.5	5.8	6.3	7.0	5.8	4.4	3.8^	2.4
Sex	Female	5.1^	6.9	3.5^	4.4^	3.8^	5.0†	2.6	2.2^	5.0†
	Male	11.7	9.9	7.9	8.3	10.0	8.2	5.9^	5.3^	2.1
Race/Ethnicity	Hispanic	11.4^	12.8	7.6^	8.4^	8.7^	8.0^	6.3^	8.0^	5.0†
	NH Black	15.2	8.3^	10.0†	5.0†	10.0†	*	*	*	*
	NH White	6.5	7.4^	4.8^	5.6^	5.1	4.7^	3.4^	<5†	*
	NH Other	15.0†	*	10.0†	10.0†	10.0†	*	*	*	*
Grade	9th	8.6^	10.7^	6.7^	5.9^	10.0†	5.7^	5.0†	5.0†	4.0^
	10th	6.3	5.1^	4.8^	5.0†	7.5^	5.0†	5.0†	5.0†	*
	11th	9.0^	10.0†	5.0†	7.8^	6.8^	5.0†	4.8	*	<5†
	12th	10.0†	5.0†	5.0†	5.0†	5.0†	5.5^	5.0†	5.0†	*
Usual Grades in School	A's	5.0†	5.0†	*	<5†	*	5.0†	5.0†	*	*
	B's	6.3	5.6	5.0†	4.5^	4.5^	5.0†	3.1^	2.8^	*
	C's	11.0	13.2^	10.4	10.9	10.7^	14.3^	8.6^	*	*
	D's or F's	15.0†	31.5^	15.0†	20.0†	25.7	20.0†	*	15.0†	15.0†
Depression	Yes	13.1	13.1^	9.2^	9.3	9.5^	8.9^	5.6^	6.5	*
	No	6.2	6.5	4.6	5.2^	5.2	4.2	3.4	<5†	*
3+ Weekly Family Meals	Yes	6.9	6.4	3.7	3.6	4.2^	5.0†	2.6^	2.7^	<5†
	No	10.0	12.0	9.3	11.2^	10.4^	11.6	7.5	5.6^	3.2^
Emotional Support	Yes	6.3^	5.0†	5.0†	*	5.0†	5.0†	5.5^	5.0†	*
	No	10.3	10.4^	6.0	*	7.8	6.9^	4.0^	4.0^	*

Data Source: Connecticut School Health Survey

NH = Non-Hispanic

Estimates with coefficients of variation (CV) greater than 15% and less than or equal to 20% may be of limited validity and are thus flagged (^); with CV greater than 20% but less than or equal 30% are rounded to the nearest 5%, flagged (†); estimates with CV greater than 30% or sample sizes less than 30 are suppressed entirely (*), as are accompanying estimates for all dichotomous variables.

Table 8: Lifetime Synthetic Cannabis Use Among Connecticut High School Students, 2015-2021

Demographics		2015	2017	2019	2021
Total		6.7	5.9	6.5	3.1^
Sex	Female	5.0^	4.8^	6.4	3.7^
	Male	7.9	6.9^	6.7	5.0†
Race/Ethnicity	Hispanic	8.8^	7.6^	8.2^	4.2^
	NH Black	*	*	5.0†	*
	NH White	5.5	5.0	6.1^	5.0†
	NH Other	10.0†	5.0†	*	*
Grade	9th	5.0†	4.0^	5.0†	<5†
	10th	5.4^	5.0†	7.0^	*
	11th	7.5^	5.5^	5.0†	5.0†
	12th	7.1^	9.3^	7.3^	*
Usual Grades in School	A's	5.0†	5.0†	5.5^	*
	B's	6.3^	4.3^	4.3^	5.0†
	C's	15.4^	11.4	*	5.0†
	D's or F's	*	15.0†	20.0†	15.0†
Depression	Yes	11.2	8.3	9.9	6.0^
	No	4.5	4.0^	4.7^	<5†
3+ Weekly Family Meals	Yes	4.4	3.5	5.3	<5†
	No	12.1	9.5	7.5^	4.7^
Emotional Support	Yes	5.0†	8.0^	5.0†	*
	No	8.2	6.0	7.7	*

Data Source: Connecticut School Health Survey

NH = Non-Hispanic

Estimates with coefficients of variation (CV) greater than 15% and less than or equal to 20% may be of limited validity and are thus flagged (^); with CV greater than 20% but less than or equal 30% are rounded to the nearest 5%, flagged (†); estimates with CV greater than 30% or sample sizes less than 30 are suppressed entirely (*), as are accompanying estimates for all dichotomous variables.

Table 9: Past Year Cannabis Use (%) Among Adolescents and Adults in Connecticut, 2010-2020

Age	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
12+	13.8	13.4	13.6	14.0	14.0	15.7	15.1	16.2	18.5	19.1	20.5
12-17	16.8	16.3	16.2	16.0	15.7	15.6	14.1	14.7	16.1	14.1	14.0
18+	13.5	13.1	13.4	13.8	13.8	15.7	15.2	16.4	18.7	19.5	21.1
18-25	39.0	36.9	39.0	39.4	38.8	42.1	43.5	45.2	46.4	43.9	45.4
26+	9.3	9.2	9.4	9.7	9.8	11.4	10.6	11.7	14.2	15.6	17.3

Data Source: National Survey on Drug Use and Health

Table 10: Past Month Cannabis Use (%) Among Adolescents and Adults in Connecticut, 2010-2020

Age	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
12+	7.7	7.3	8.4	9.0	8.5	9.6	9.4	10.6	12.1	12.3	13.5
12-17	8.9	8.6	8.7	8.6	7.9	8.3	8.0	7.9	8.4	7.5	10.1
18+	7.6	7.1	8.4	9.0	8.6	9.7	9.5	10.9	12.4	12.8	13.8
18-25	23.6	21.9	23.7	24.4	22.4	25.0	26.9	30.4	30.1	27.2	30.6
26+	5.0	4.7	6.0	6.6	6.3	7.3	6.7	7.7	9.6	10.5	11.2

Data Source: National Survey on Drug Use and Health

Table 11: First Use of Cannabis (%) in the Past Year Among Adolescents and Adults in Connecticut, 2010-2020

Age	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
12+	2.3	2.0	2.2	2.3	2.3	2.4	2.3	2.7	3.2	3.1	2.8
12-17	7.2	6.6	6.6	7.4	7.1	6.6	5.8	6.7	8.1	6.6	6.3
18+	1.4	1.2	1.4	1.4	1.4	1.6	1.7	2.0	2.3	2.4	2.2
18-25	10.5	9.0	9.3	9.1	9.0	9.8	9.9	10.9	11.6	11.6	11.6
26+	0.2	0.2	0.2	0.2	0.3	0.4	0.5	0.7	0.8	1.0	0.8

Data Source: National Survey on Drug Use and Health

Table 12: Perception of Great Risk from Smoking Cannabis Once a Month (%) Among Adolescents and Adults in Connecticut, 2010-2020

Age	2016	2017	2018	2019	2020
12+	23.8	22.0	20.3	19.2	18.2
12-17	24.7	22.4	20.6	19.0	16.8
18+	23.7	22.0	20.3	19.2	18.3
18-25	11.3	10.4	9.3	9.3	9.2
26+	25.7	23.9	22.1	20.8	19.7

Data Source: National Survey on Drug Use and Health

Table 13: Cannabis-Related ED Discharges per 100,000 ED Discharges, 2016-2021

Demographics		2016	2017	2018	2019	2020	2021
Total		618.1	701.7	1,012.4	1,037.3	930.1	738.8
Age	0-9 years	*	*	6.6^	*	24.3^	33.1
	10-14 years	111.3	159.6	216.2	295.9	368.3	315.8
	15-19 years	1,451.9	1,798.7	2,100.5	2,107.4	2,249.4	1,843.1
	20-24 years	1,501.4	1,826.1	2,282.6	2,422.3	2,321.2	1,834.9
	25-29 years	1,233.5	1,431.9	2,037.5	2,038.9	1,814.2	1,444.4
	30-34 years	1,127.7	1,196.4	1,849.5	1,831.7	1,521.8	1,271.3
	35-39 years	782.7	917.6	1,493.8	1,637.6	1,278.7	1,049.9
	40-44 years	627.8	706.6	1,326.9	1,335.3	953.2	773.7
	45-49 years	568.2	588.8	953.8	971.5	787.0	558.0
	50-54 years	455.9	488.2	884.6	855.2	657.0	535.0
	55-59 years	312.0	349.3	632.7	762.0	523.4	456.7
	60-64 years	268.4	276.8	510.7	502.7	335.5	298.0
	65+ years	*	*	117.7	*	103.4	113.3
Sex	Female	378.8	445.3	706.6	730.1	668.6	569.2
	Male	905.5	1,008.9	1,379.6	1,404.8	1,228.0	937.5
Race/Ethnicity	Hispanic	478.6	559.5	912.4	970.1	1,010.8	748.2
	NH AI/AN	737.2^	679.9^	977.6^	880.7^	929.3^	589.3^
	NH Asian	248.6	247.8	352.0	418.5	413.5	417.1
	NH Black	770.1	894.1	1,958.4	1,835.6	1,450.6	1,108.6
	NH White	646.8	723.2	793.5	839.3	728.0	615.8
	NH Other	554.4	666.6	809.4	901.5	980.2	824.7

Data Source: Connecticut Inpatient and Emergency Department Visit Dataset

NH = Non-Hispanic, AI/AN = American Indian/Alaska Native

^ = Rates based on counts less than 25 are statistically uncertain and should be interpreted with caution

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Table 14: Cannabis-Related Inpatient Discharges per 100,000 Inpatient Discharges, 2016-2021

Demographics		2016	2017	2018	2019	2020	2021
Total		2,081.9	2,477.5	2,616.5	2,636.8	3,014.9	3,033.9
Age	0-9 years	0.0	*	128.6^	254.2^	490.7	500.7
	10-14 years	1,841.5	2,306.2	2,124.7	2,074.2	2,984.1	3,412.8
	15-19 years	10,890.8	14,161.8	14,168.1	15,218.7	13,833.1	13,857.3
	20-24 years	10,794.9	11,913.5	12,864.4	13,114.2	14,378.8	14,452.4
	25-29 years	6,003.4	7,159.4	8,337.5	7,907.7	9,380.4	9,584.4
	30-34 years	3,912.2	4,837.8	4,986.7	5,190.2	5,832.7	5,638.0
	35-39 years	3,903.4	4,840.5	4,980.1	5,353.0	5,967.8	5,513.9
	40-44 years	3,851.3	4,610.8	5,416.8	5,617.8	5,942.5	6,196.0
	45-49 years	3,442.5	3,990.2	4,139.9	4,096.7	4,540.1	4,745.4
	50-54 years	2,210.3	2,724.6	3,046.9	3,116.9	3,498.6	3,731.7
	55-59 years	1,446.3	1,770.5	2,142.4	2,158.9	2,279.2	2,441.2
	60-64 years	763.4	1,136.7	1,180.9	1,360.2	1,398.9	1,715.8
	65+ years	94.2	*	202.8	213.2	272.1	299.6
Sex	Female	1,346.1	1,663.9	1,840.2	1,883.1	2,197.6	2,253.5
	Male	3,050.7	3,536.1	3,608.2	3,585.4	4,026.4	4,004.3
Race/Ethnicity	Hispanic	3,214.9	3,771.8	3,909.2	3,799.1	4,281.0	4,219.0
	NH AI/AN	*	3,619.9^	5,381.9	4,111.6	4,869.6	3,038.3^
	NH Asian	957.4	1,217.0	1,290.0	1,132.8	1,423.1	990.6
	NH Black	4,039.5	5,113.1	5,465.7	5,216.7	5,729.6	5,648.7
	NH White	1,563.6	1,802.2	1,891.9	1,964.8	2,239.8	2,290.6
	NH Other	2,076.4	2,899.1	3,058.9	3,114.4	3,341.1	3,548.7

Data Source: Connecticut Inpatient and Emergency Department Visit Dataset

NH = Non-Hispanic, AI/AN = American Indian/Alaska Native

^ = Rates based on counts less than 25 are statistically uncertain and should be interpreted with caution

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Table 15: Connecticut Substance Use Treatment Admissions with Cannabis Listed as Primary Substance per 100 Admissions, 2016-2020

Demographics		2016		2017		2018		2019		2020	
Location		CT	US	CT	US	CT	US	CT	US	CT	US
Total		11.3	13.7	11.3	12.5	10.8	12.2	9.8	11.2	8.3	9.8
Age	12-14 years	*	74.0	0.0	63.2	0.0	68.7	0.0	62.6	0.0	63.5
	15-17 years	65.5	75.0	0.0	71.6	0.0	76.7	*	73.6	0.0	70.8
	18-20 years	39.4	39.7	43.9	40.4	42.8	43.0	44.0	40.4	34.9	35.1
	21-24 years	25.5	21.5	27.0	21.6	27.6	23.0	27.2	22.2	23.8	20.3
	25-29 years	15.0	13.7	15.4	13.0	15.6	13.1	15.3	12.5	13.4	11.8
	30-34 years	11.0	10.5	10.9	9.6	9.9	9.4	9.3	8.9	8.6	8.1
	35-39 years	9.1	9.0	9.1	8.3	8.2	8.0	7.2	7.3	6.1	6.5
	40-44 years	6.8	7.1	7.1	6.6	6.7	6.5	6.8	6.2	5.6	5.6
	45-49 years	4.0	5.1	3.7	4.5	4.6	4.6	4.6	4.5	3.8	4.1
	50-54 years	2.9	4.0	3.2	3.5	4.0	3.6	3.1	3.3	3.2	3.2
	55-64 years	2.3	3.1	2.4	2.8	2.7	2.9	2.7	2.7	2.5	2.4
	65+ years	*	2.1	2.4^	2.0	3.2	2.0	*	2.1	2.4^	1.7
Sex	Female	10.0	11.4	10.6	10.5	10.4	10.5	9.1	9.6	7.5	8.9
	Male	11.9	14.9	11.6	13.6	11.0	13.1	10.1	12.1	8.7	10.4
Race/Ethnicity	Hispanic	17.4	18.0	17.3	17.0	15.3	16.2	14.3	15.1	11.3	12.9
	NH AI/AN	9.6^	11.5	11.3	9.1	12.9	8.2	10.3	6.5	8.6^	4.8
	NH Asian	14.1	13.9	14.6	12.4	13.9^	12.8	11.4^	11.5	6.4^	9.8
	NH Black	26.7	24.7	25.2	22.2	23.6	21.0	21.6	19.6	19.6	18.9
	NH White	5.5	9.7	5.5	8.8	5.0	8.6	4.2	7.9	3.1	7.0
	NH Other	9.3	14.7	7.7	13.9	6.6	16.3	5.2	14.7	4.9	12.9

Data Source: Connecticut Inpatient and Emergency Department Visit Dataset

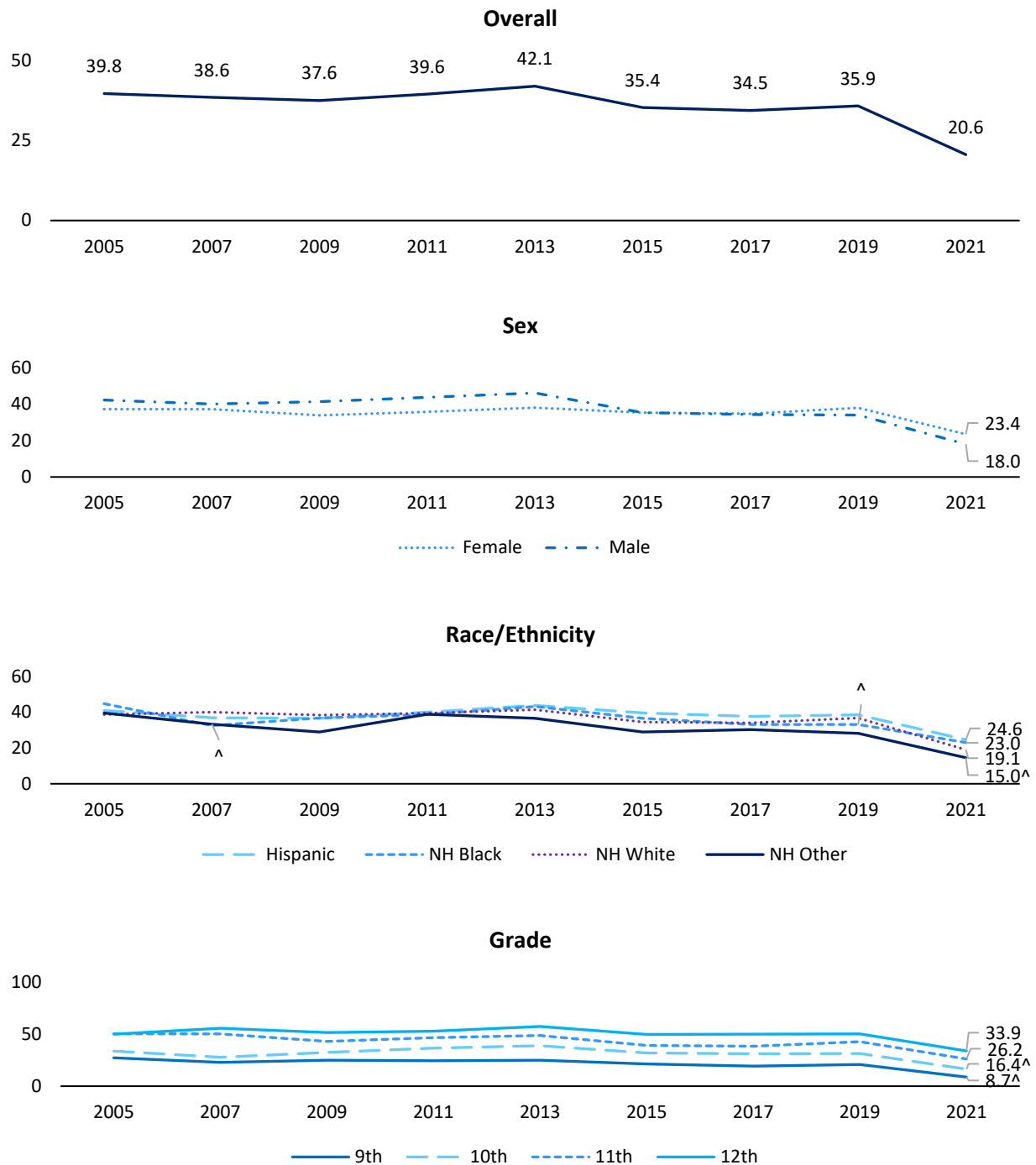
NH = Non-Hispanic, AI/AN = American Indian/Alaska Native

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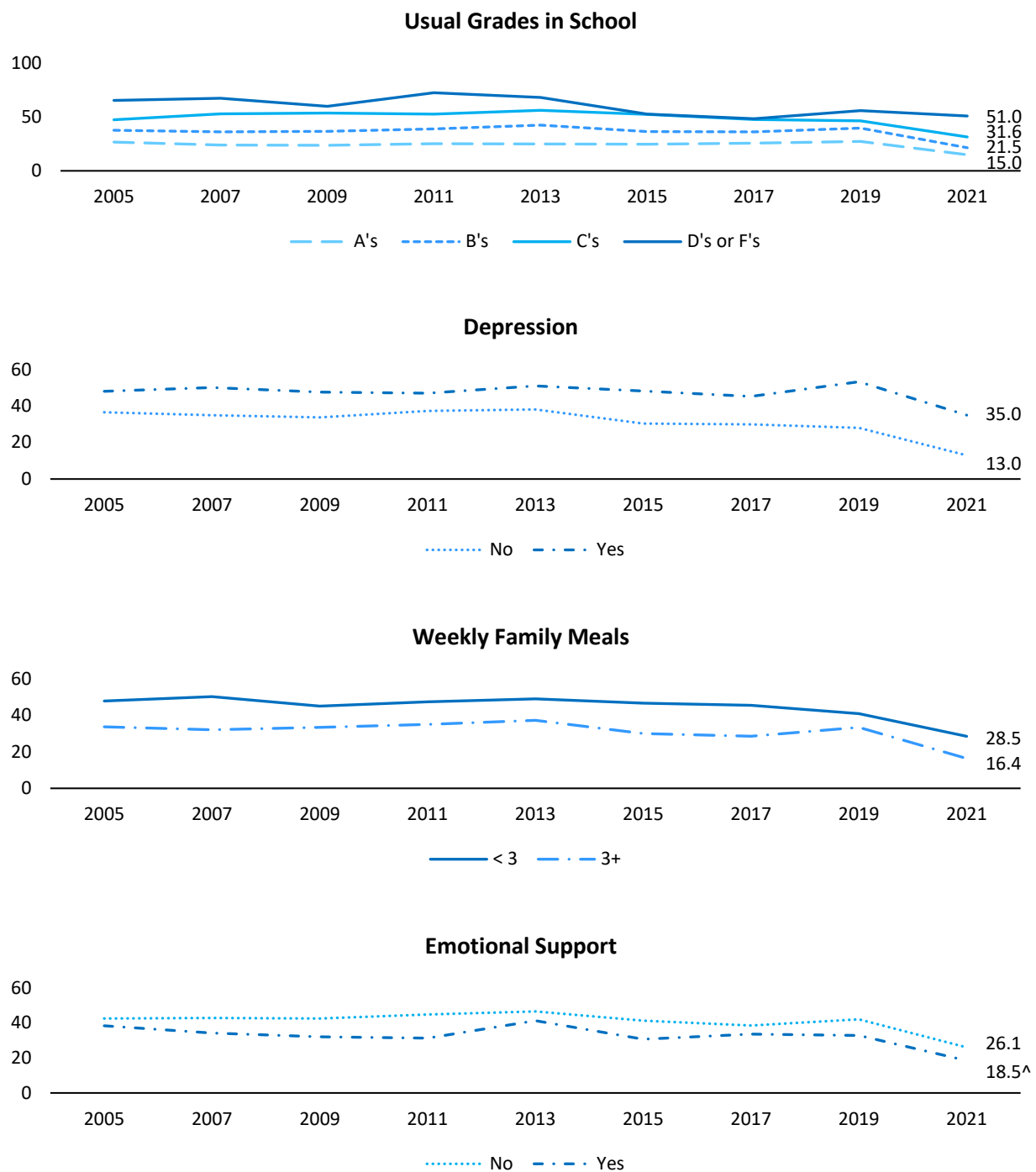
Figures

Figure 1: Lifetime Cannabis Use (%) Among Connecticut High School Students, 2005-2021; Overall, by Sex, by Race/Ethnicity, and by Grade



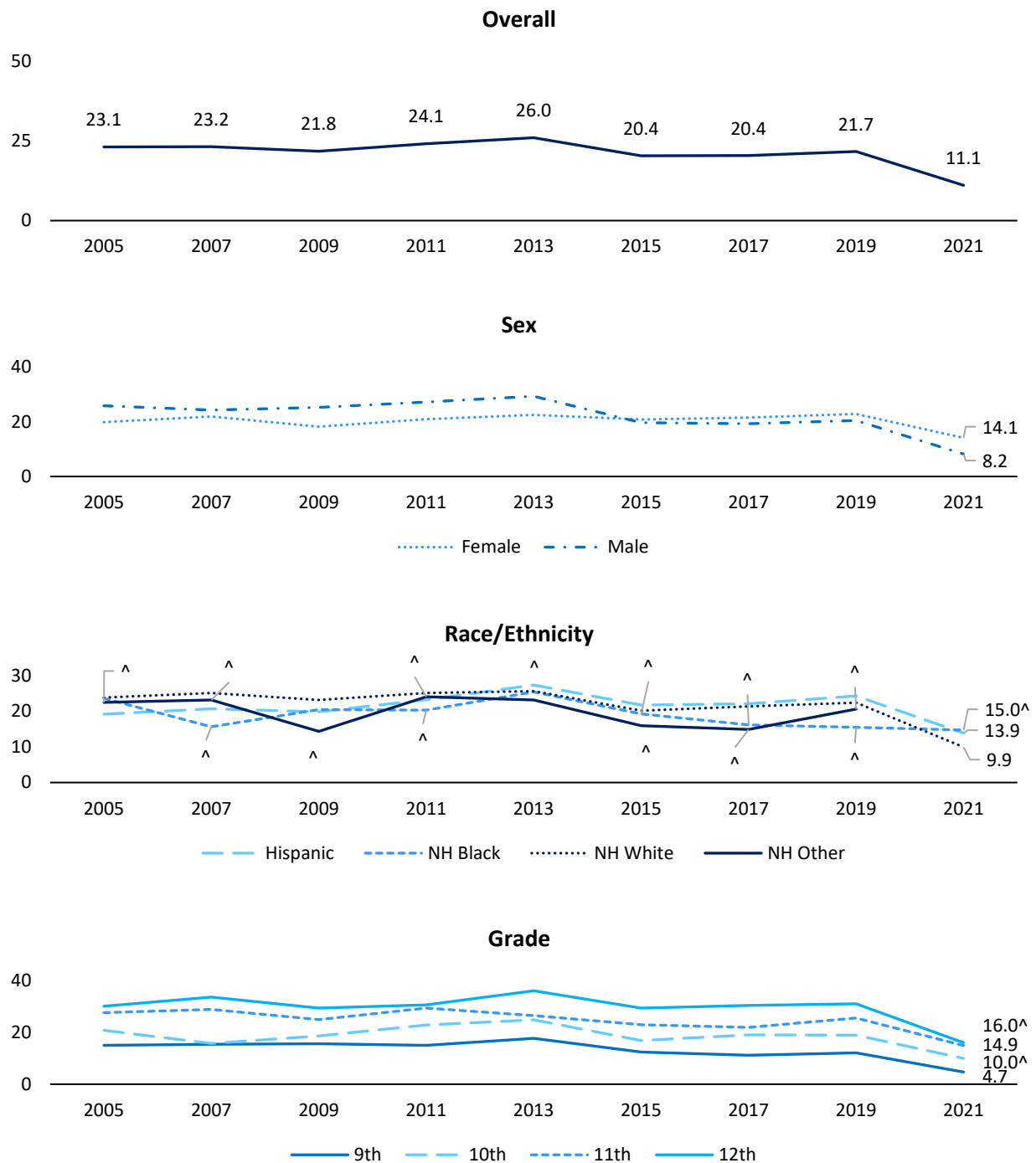
Data Source: Connecticut School Health Survey; [^] = Estimates may be of limited validity

Figure 2: Lifetime Cannabis Use (%) Among Connecticut High School Students, 2005-2021; by Academic Achievement, by Depression Symptoms, by Weekly Family Meals, and by Emotional Support



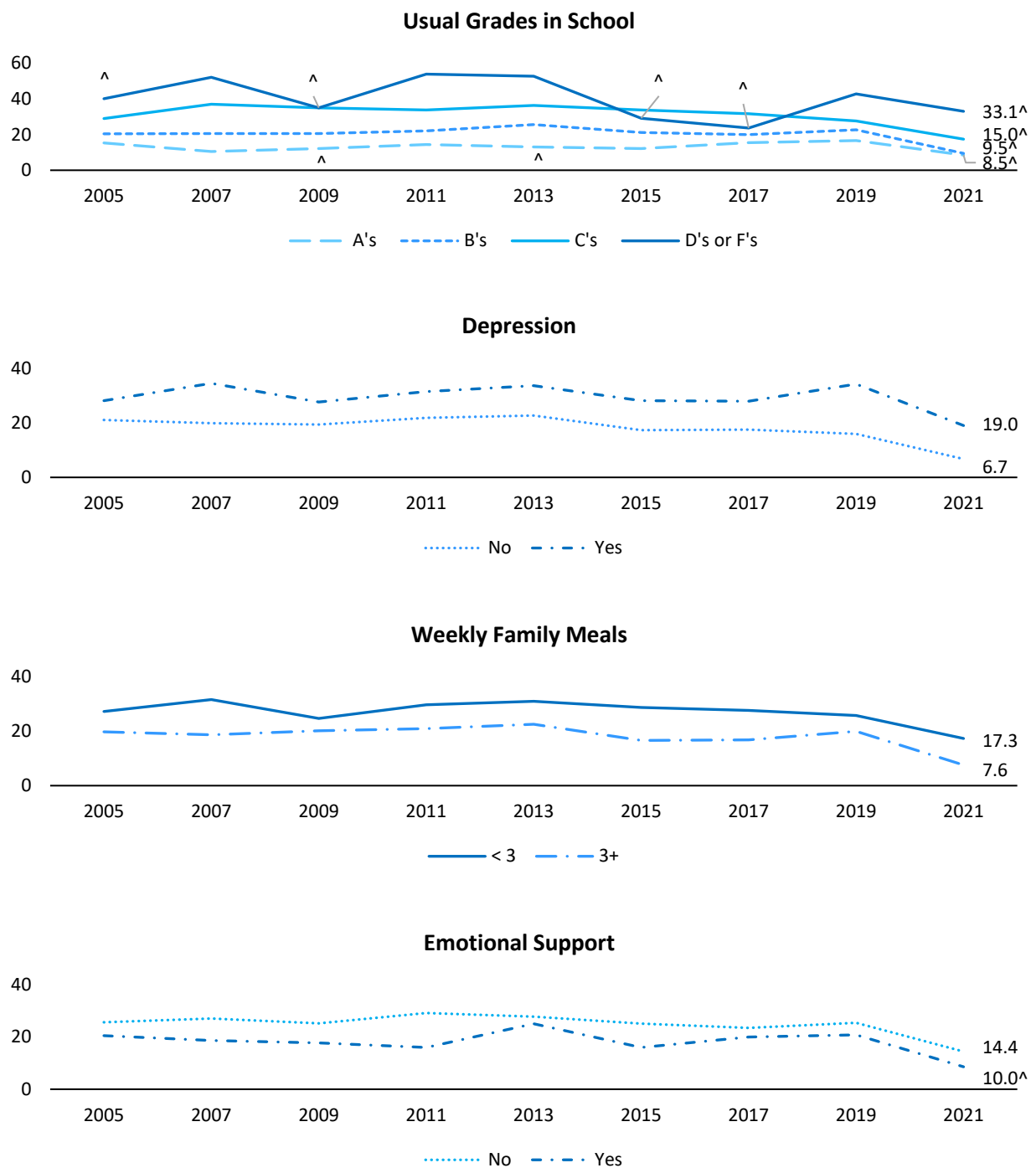
Data Source: Connecticut School Health Survey; ^ = Estimates may be of limited validity

Figure 3: Past Month Cannabis Use (%) Among Connecticut High School Students, 2005-2021; Overall, by Sex, by Race/Ethnicity, and by Grade



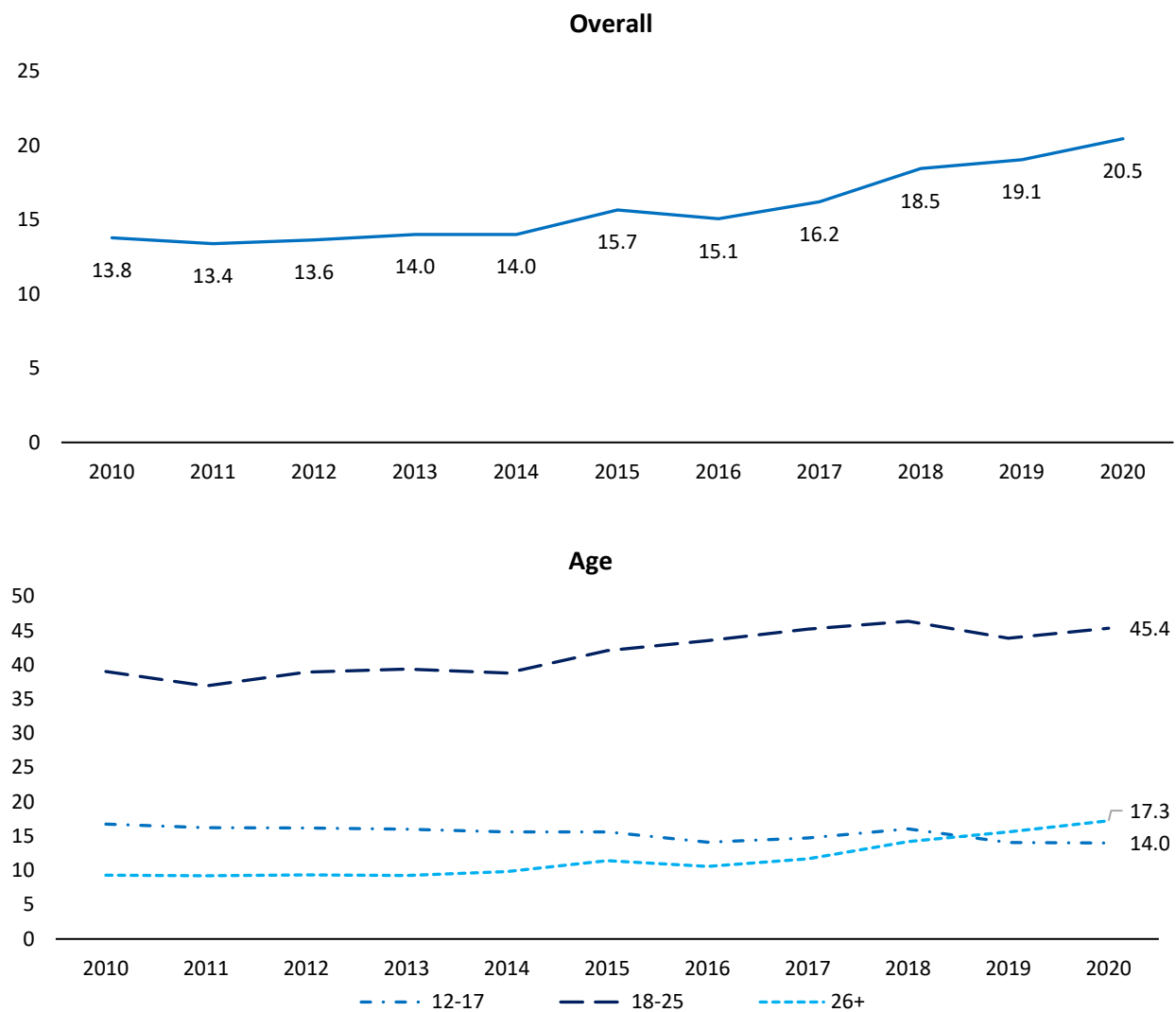
Data Source: Connecticut School Health Survey; ^ = Estimates may be of limited validity

Figure 4: Past Month Cannabis Use (%) Among Connecticut High School Students, 2005-2021; by Academic Achievement, by Depression Symptoms, by Weekly Family Meals, and by Emotional Support



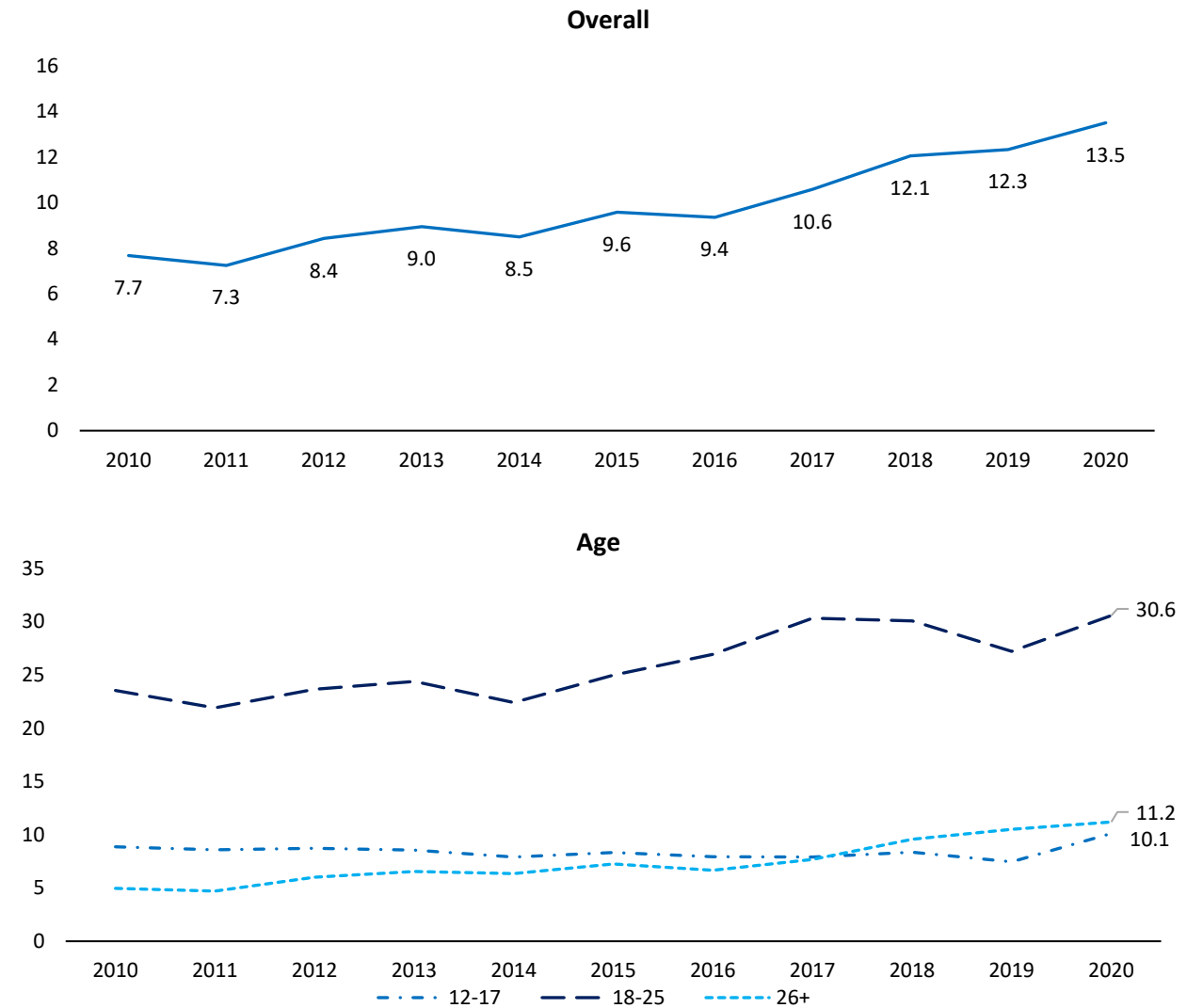
Data Source: Connecticut School Health Survey; ^ = Estimates may be of limited validity

Figure 5: Past Year Cannabis Use (%) Among Connecticut Adolescents and Adults, 2010-2021;
Overall and by Age



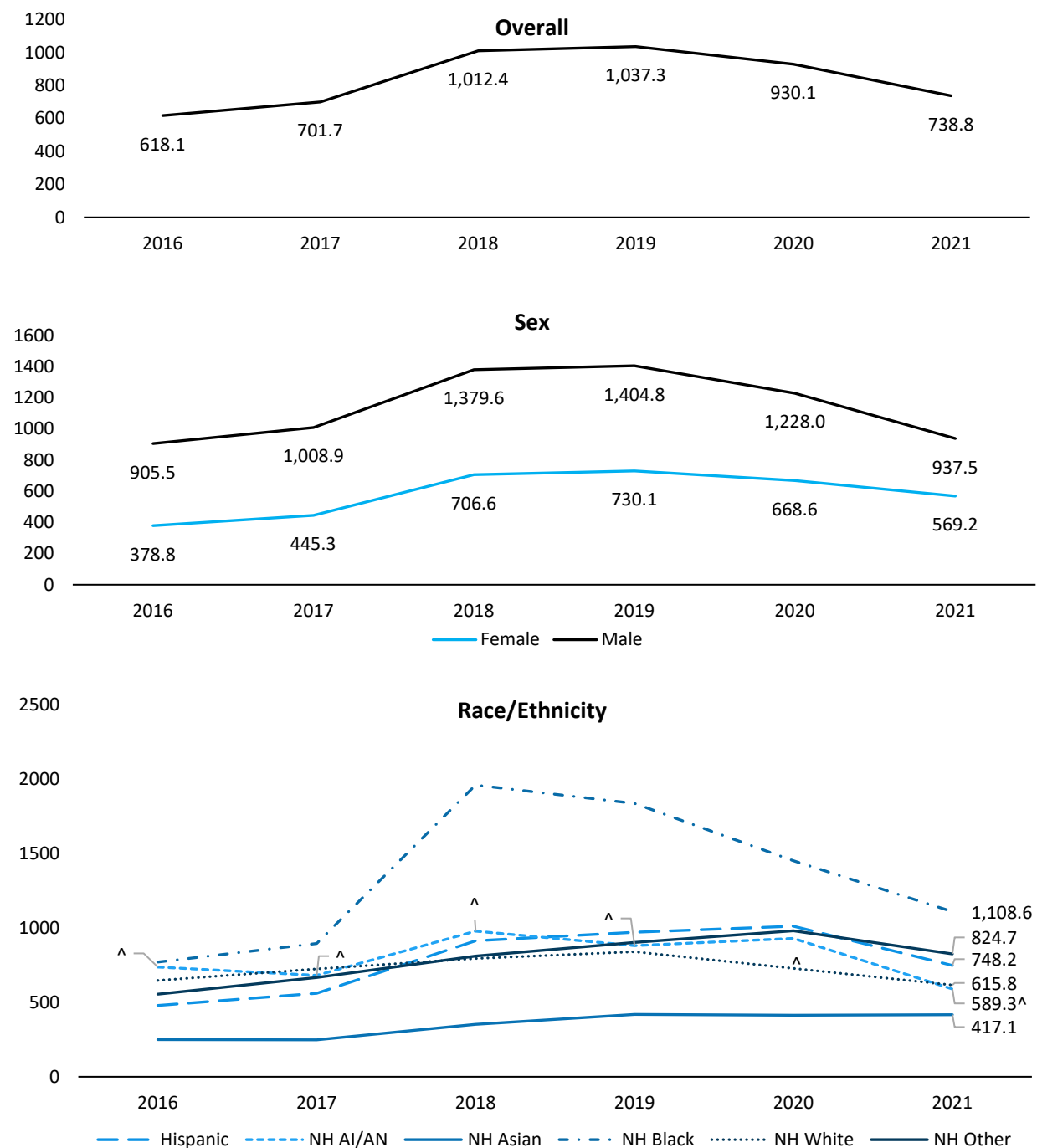
Data Source: National Survey on Drug Use and Health

Figure 6: Past Month Cannabis Use (%) Among Connecticut Adolescents and Adults, 2010-2021; Overall and by Age



Data Source: National Survey on Drug Use and Health

Figure 7: Cannabis-Related ED Discharges per 100,000 ED Discharges in Connecticut 2016-2021; Overall, by Sex, and by Race/Ethnicity

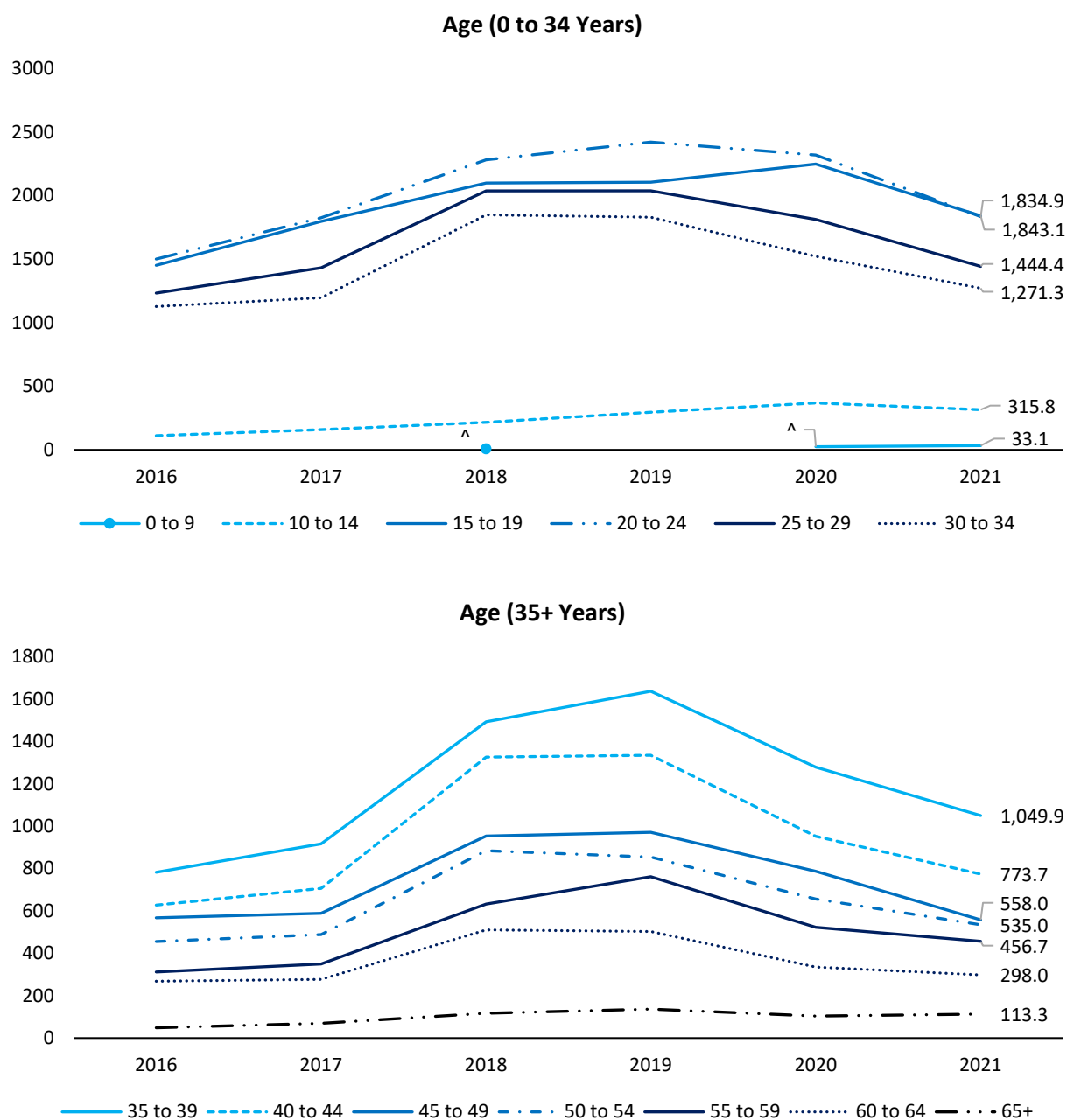


Data Source: Connecticut Inpatient and Emergency Department Visit Dataset

NH = Non-Hispanic, AI/AN = American Indian/Alaska Native

^ = Rates based on counts less than 25 are statistically uncertain and should be interpreted with caution

Figure 8: Cannabis-Related ED Discharges per 100,000 ED Discharges in Connecticut 2016-2021;
by Age

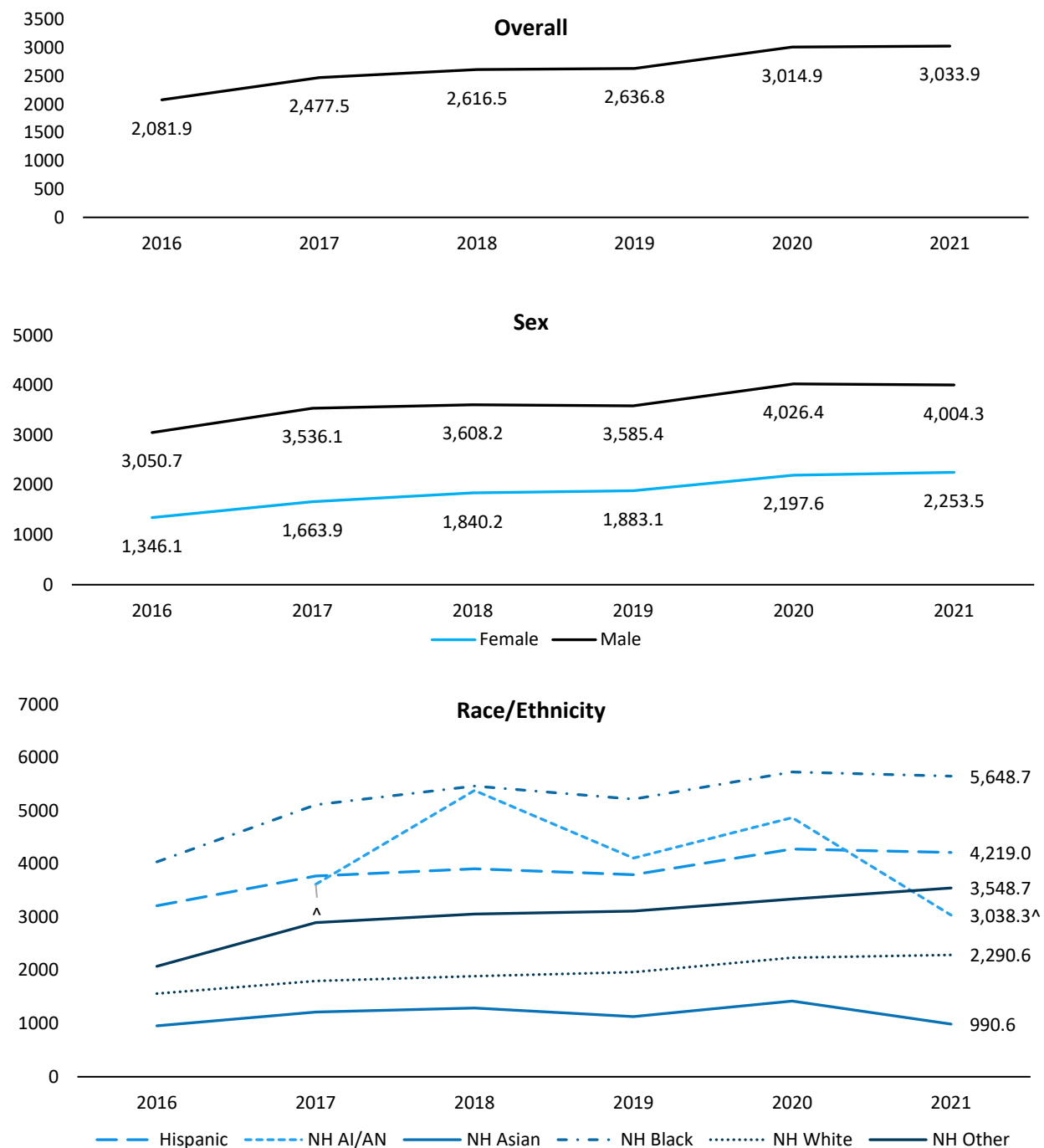


Data Source: Connecticut Inpatient and Emergency Department Visit Dataset

^ = Rates based on counts less than 25 are statistically uncertain and should be interpreted with caution

Rates suppressed where necessary for groups with < 11 events

Figure 9: Cannabis-Related Inpatient Discharges per 100,000 Inpatient Discharges in Connecticut 2016-2021; Overall, by Sex, and by Race/Ethnicity



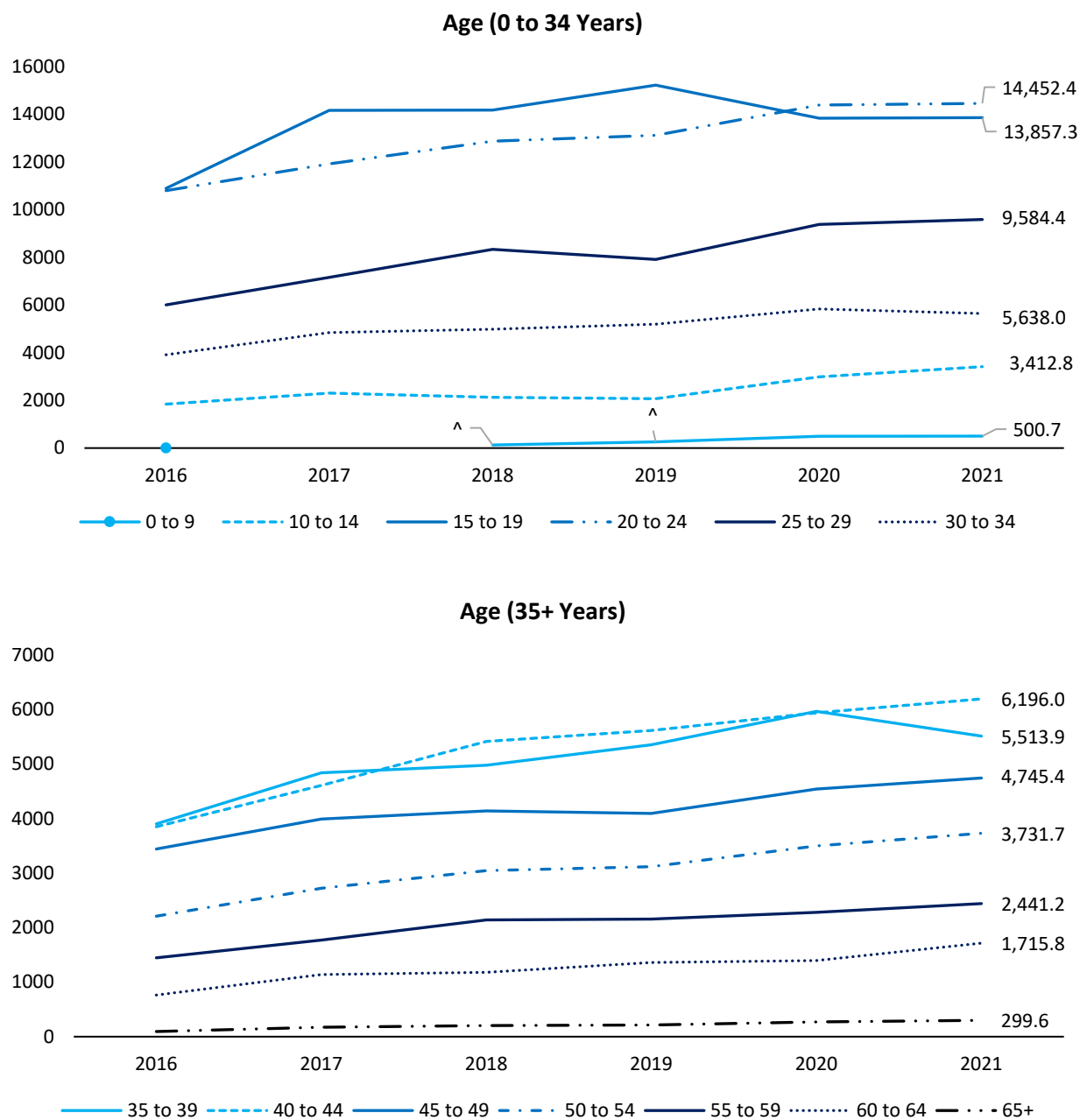
Data Source: Connecticut Inpatient and Emergency Department Visit Dataset

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Rates suppressed where necessary for groups with < 11 events

Figure 10: Cannabis-Related Inpatient Discharges per 100,000 Inpatient Discharges in Connecticut, 2016-2021; by Age

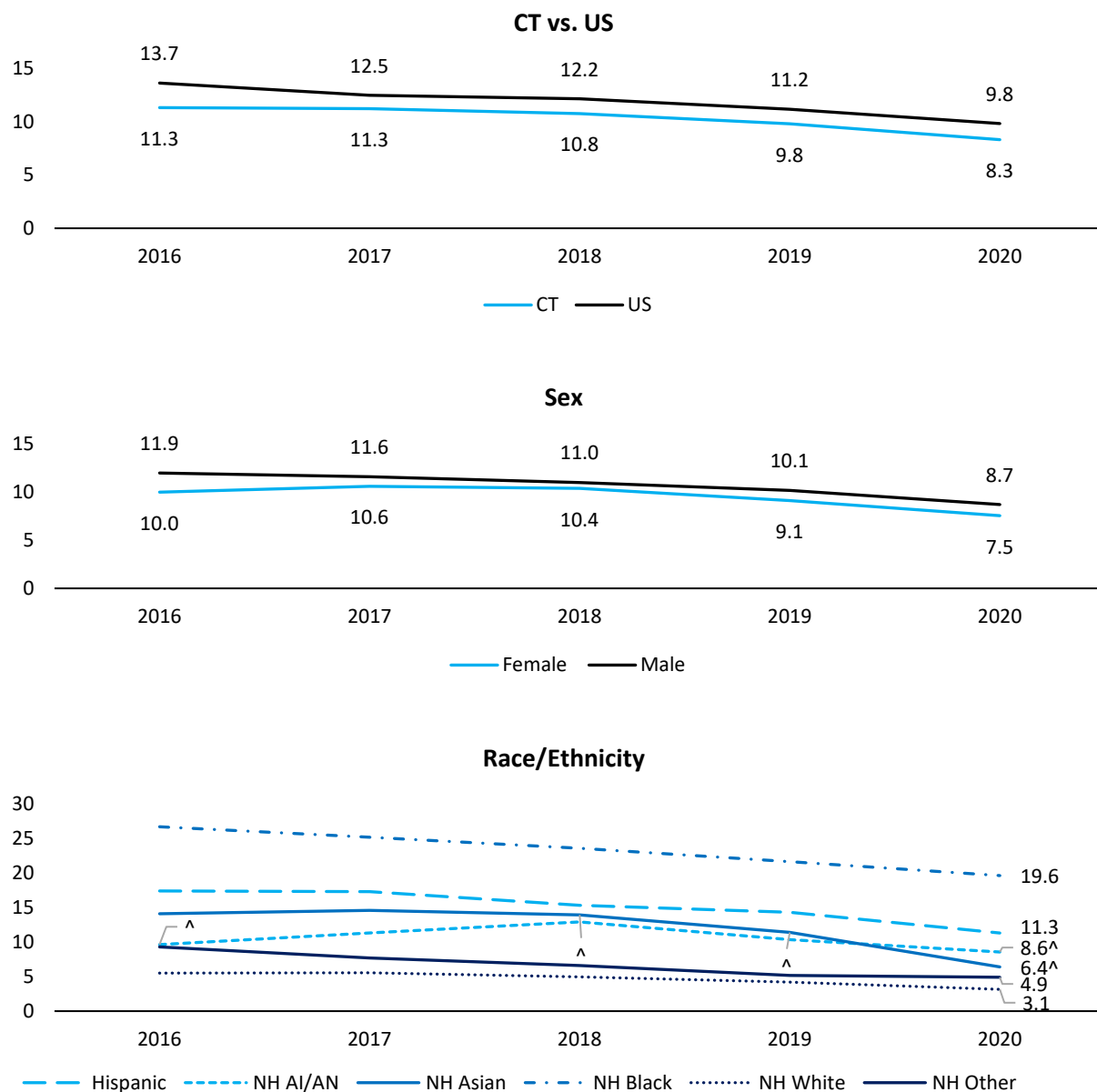


Data Source: Connecticut Inpatient and Emergency Department Visit Dataset

^ = Rates based on counts less than 25 are statistically uncertain and should be interpreted with caution

Rates suppressed where necessary for groups with < 11 events

Figure 11: Connecticut Substance Use Treatment Admissions with Cannabis Listed as the Primary Substance per 100 Admissions 2016-2020; State of CT versus National, by Sex (CT), by Race/Ethnicity (CT)



Data Source: Connecticut Inpatient and Emergency Department Visit Dataset

NH = Non-Hispanic, AI/AN = American Indian/Alaska Native

^ = Rates based on counts less than 25 are statistically uncertain and should be interpreted with caution