The State of the State: Substance Use in Connecticut

A presentation to the
State Epidemiological Outcomes Workgroup (SEOW)
March 20, 2024

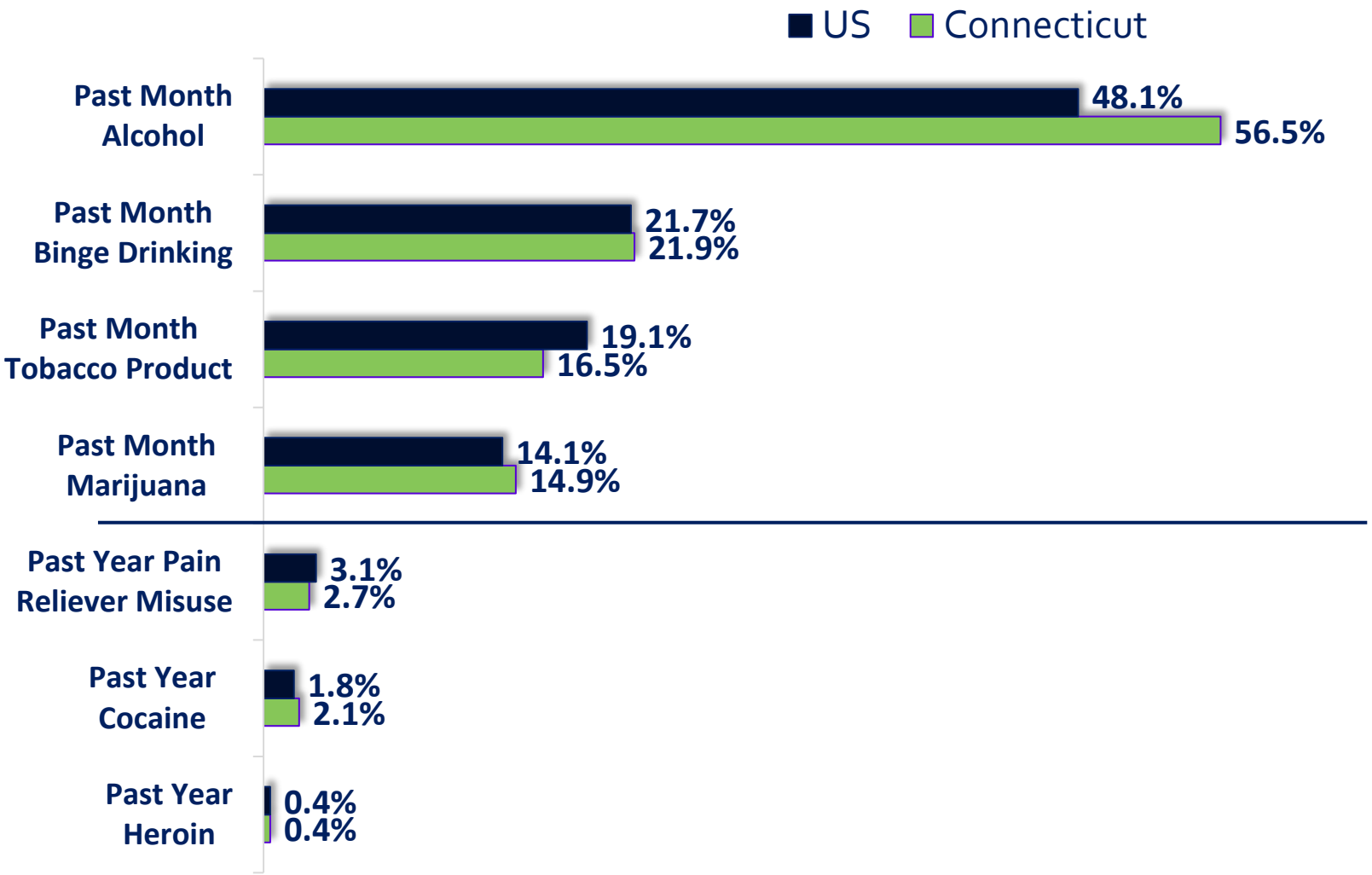
DMHAS Center for Prevention Evaluation and Statistics (CPES)
at UConn Health

Objectives

- Describe the state of substance use and misuse in Connecticut in terms of:
  - prevalence of use and misuse;
  - perceptions and consequences related to use and misuse;
- Explore trends in substance use/misuse and consequences over time;
- Illuminate substance use- and misuse-related concerns, risk groups, and priorities.

Substance Use

Percent of Persons (Ages 12+) Reporting Use by Substance, 2021-2022



Reported past month alcohol use was most prevalent among respondents **aged 26 and older** (61.2%).

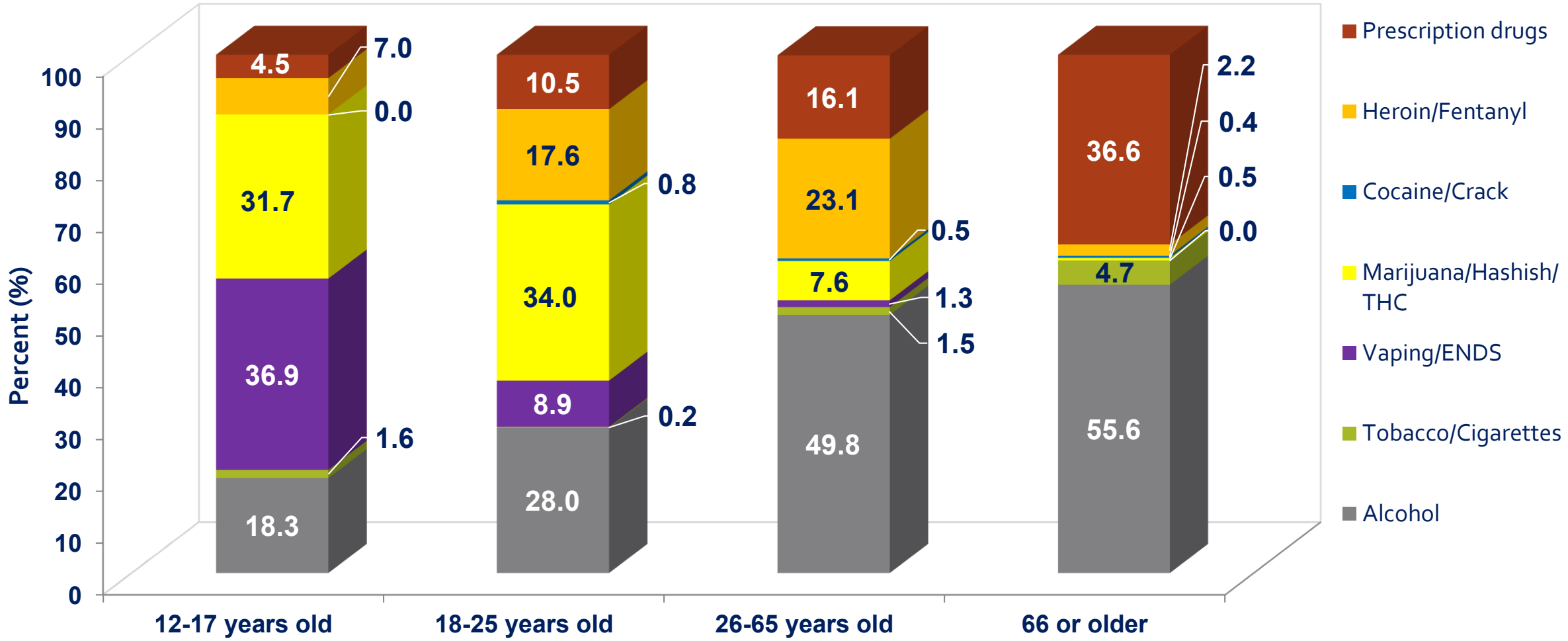
Reported past month marijuana/cannabis use was most prevalent in young adults **18-25** (30.0%).

Note: Tobacco products include cigarettes, smokeless tobacco (i.e., snuff, dip, chewing tobacco, or snus), cigars, or pipe tobacco.
Heroin data was only reported by adults (ages 18+).
Substance use by substance varies in reporting time (i.e., past month vs past year use).

Source: NSDUH, 2022

Substances of Greatest Concern in CT Communities

Problem Substances of Greatest Community Concern for Age Groups according to Key Informants in CT, 2022

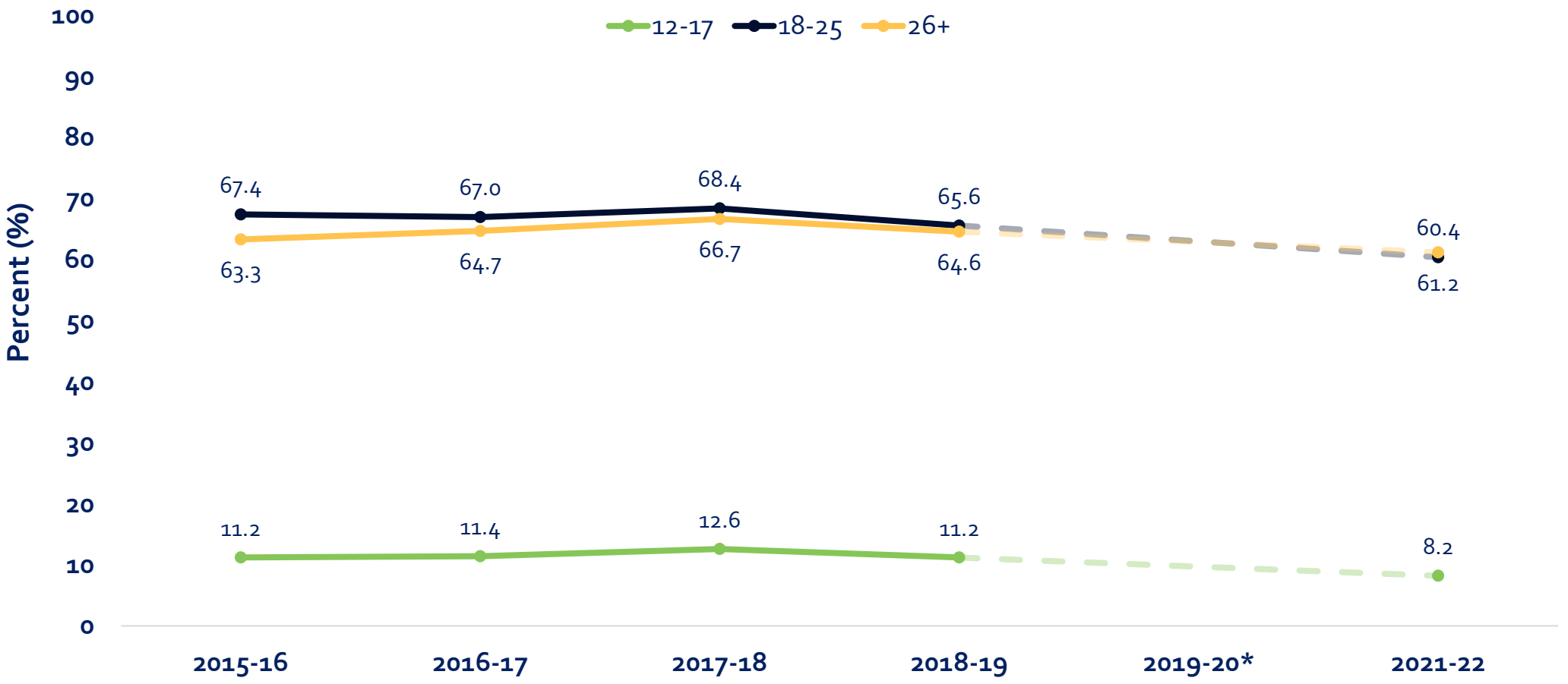


Source: Community Readiness Survey 2022

Alcohol

Alcohol Use

Past Month Alcohol Use by Age Group in CT, 2015-2022



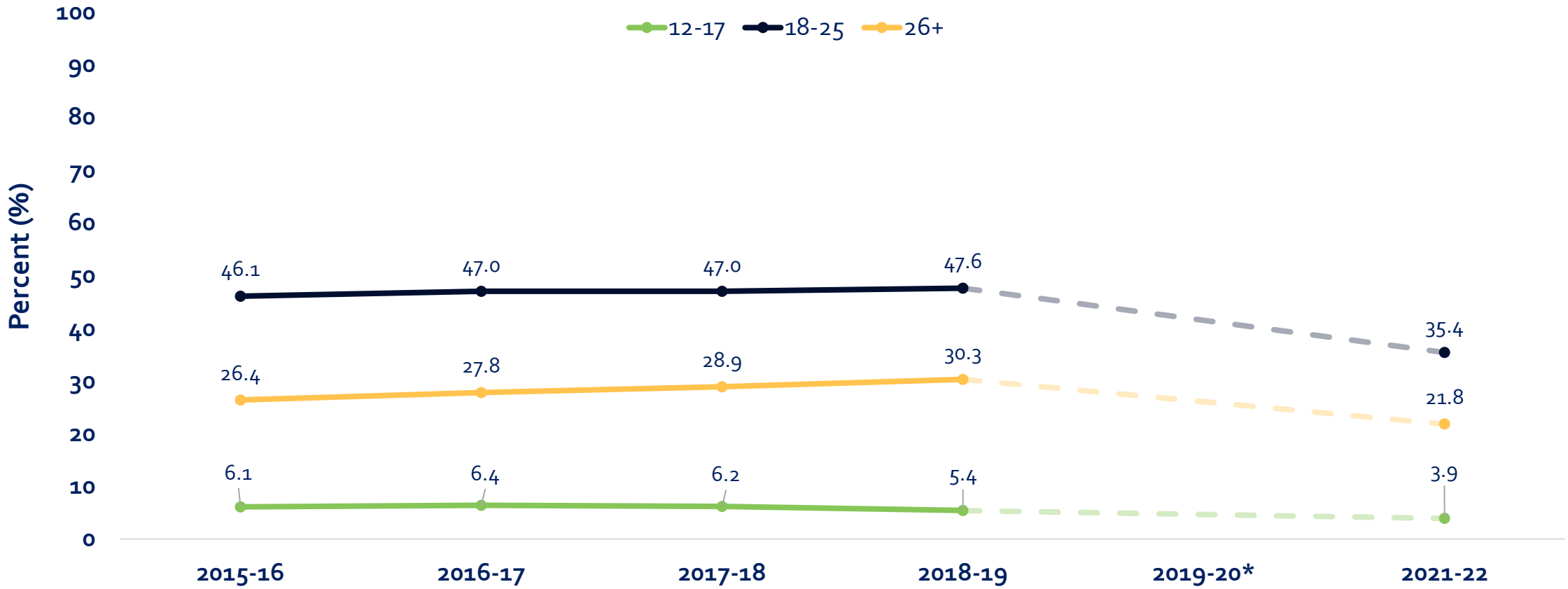
Note: The 2015 NSDUH underwent significant redesigns. In 2015 the threshold for binge drinking changed for women from 5 or more alcoholic drinks to 4 or more alcoholic drinks on the same occasion.

*State estimates for these years are no longer available due to methodological concerns with combining 2019 and 2020 data.

Source: NSDUH 2015-2022

Heavy Episodic ("Binge") Drinking

Past Month Binge Drinking by Age Group in CT, 2015-2022



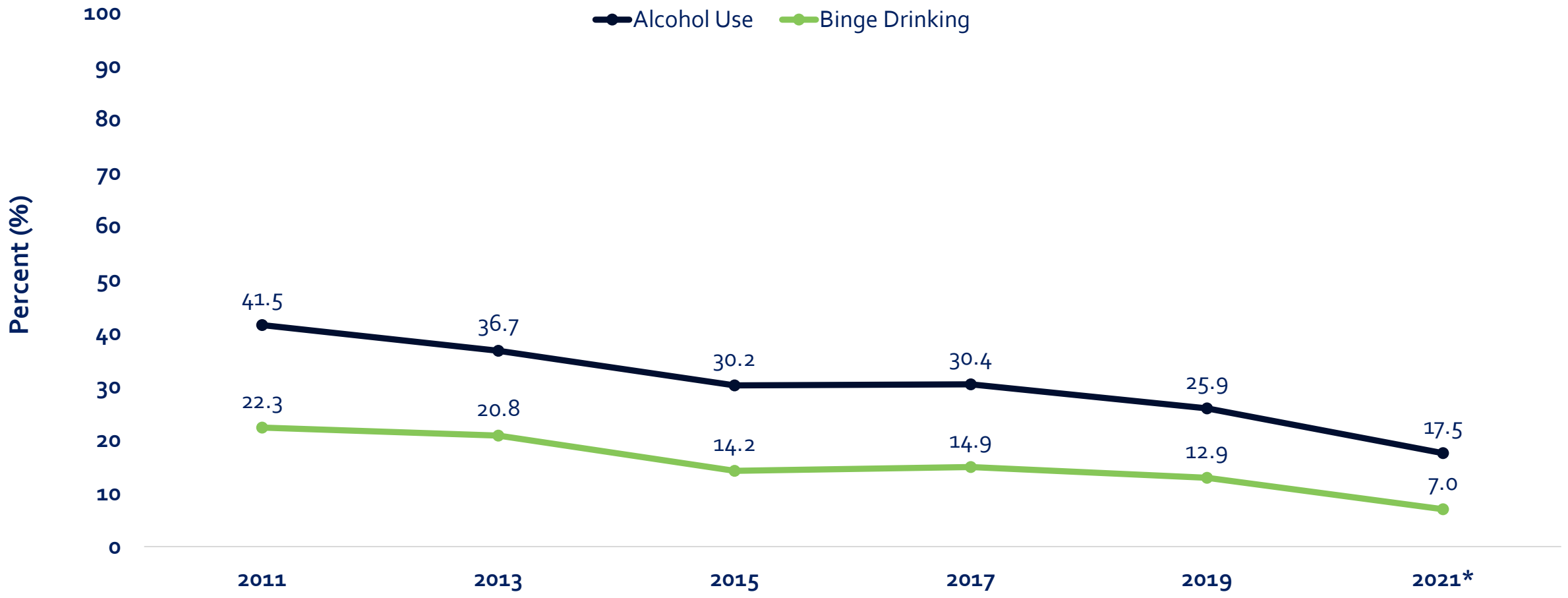
Note: The 2015 NSDUH underwent significant redesigns. In 2015 the threshold for binge drinking changed for women from 5 or more alcoholic drinks to 4 or more alcoholic drinks on the same occasion.

*State estimates for these years are no longer available due to methodological concerns with combining 2019 and 2020 data.

Source: NSDUH

Alcohol Use & Binge Drinking Among High School Students

Percent of High School Students Reporting Past 30-Day Alcohol Use and Binge Drinking in CT, 2011-2021

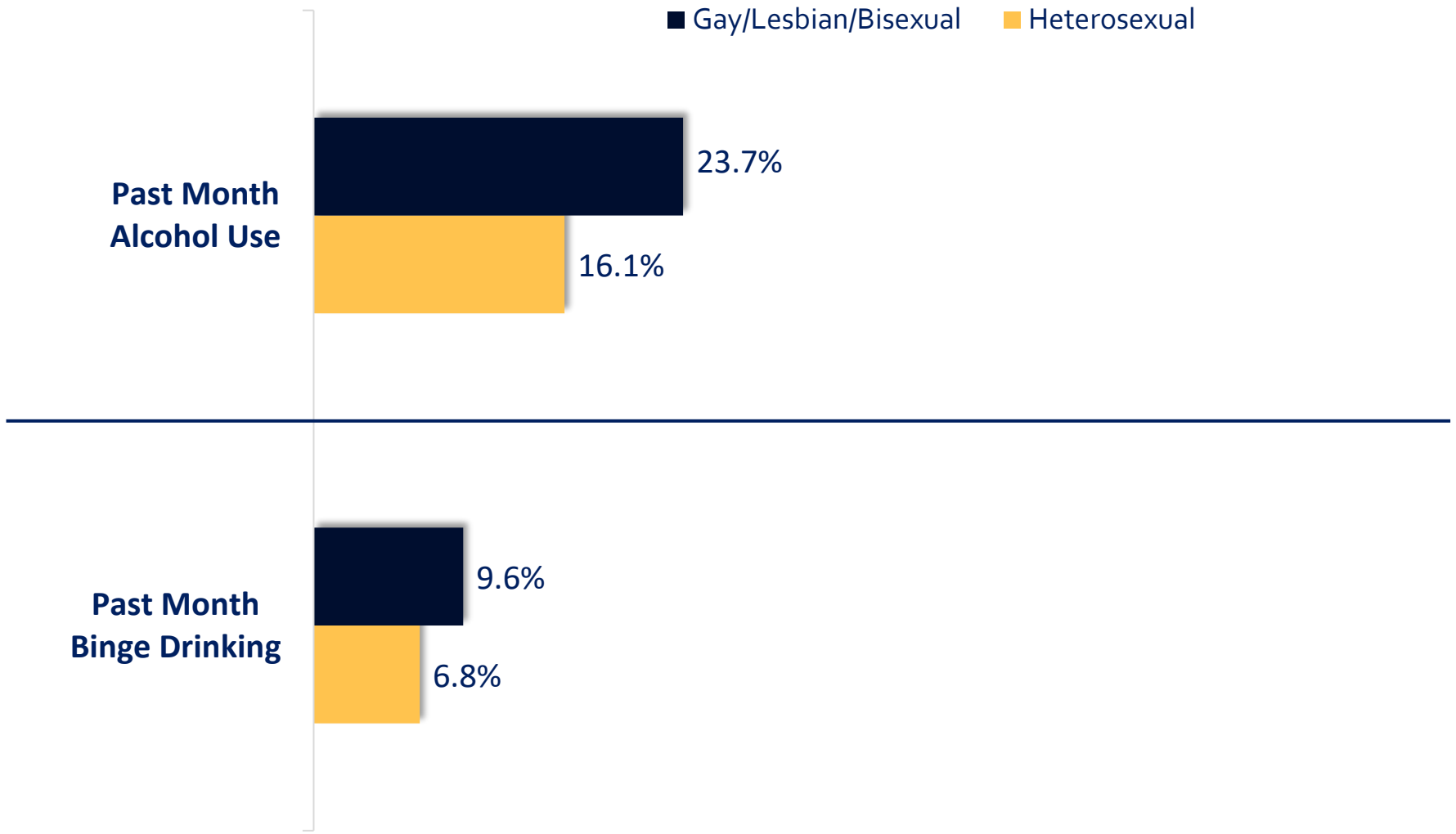


Note: ***Caution should be taken when comparing CSHS 2021 data to that of previous years due to differences in methodology in survey collection.**

Source: CSHS (CTYRBS) 2011-2021

Alcohol Use by Sexual Identity

Percent of High School Students Reporting Past 30-Day Alcohol Use and Binge Drinking in CT, 2021



Source: CSHS (CT YRBS) 2021

Key Takeaways: Alcohol

- Alcohol remains the substance of highest use prevalence in Connecticut compared to all other substances.
- Connecticut has experienced a steady decline in alcohol use among high school students over the past 10 years. However, the prevalence in the state has been and remains consistently higher than alcohol use nationally.
- Reported past month alcohol use was most prevalent among respondents aged 26 and older in 2022.
- Heavy episodic drinking is most prevalent among young adults 18-25, both in Connecticut and nationally.
- There was a higher reported prevalence of past month alcohol use and past month binge drinking in 2021 among Connecticut's high school students who identify as gay, lesbian, or bisexual (LGB).
- LGB students also reported higher prevalence of risk factors for substance use, making LGB youth a key risk population of focus.

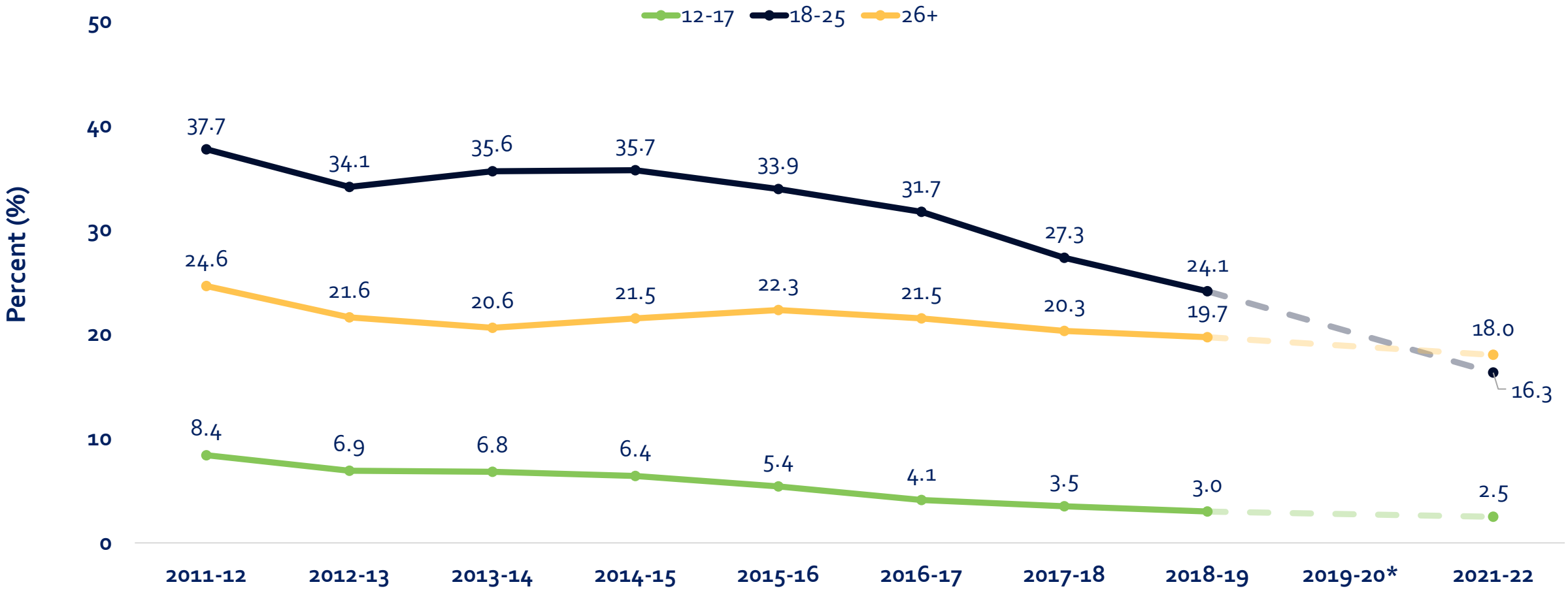
Tobacco and Electronic Vapor Products (EVPs)



Dave D, Dench D, Kenkel D, Mathios A, Wang H. News that Takes Your Breath Away: Risk Perceptions During an Outbreak of Vaping-related Lung Injuries. *J Risk Uncertain*. 2020;60(3):281-307. doi:10.1007/s11166-020-09329-2

Tobacco Product Use

Past Month Tobacco Product Use by Age Group in CT, 2011-2022

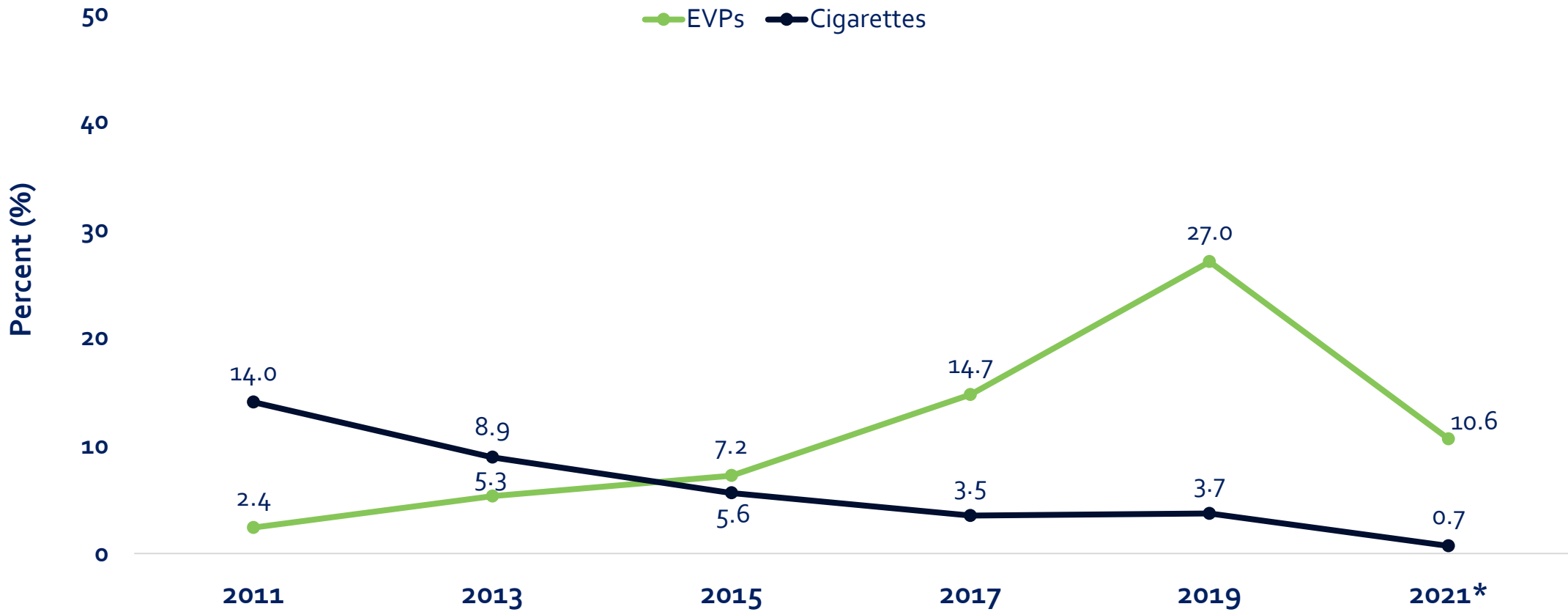


Note: Tobacco product use includes cigarettes, smokeless tobacco (i.e., snuff, dip, chewing tobacco, or snus), cigars, or pipe tobacco.
*State estimates for these years are no longer available due to methodological concerns with combining 2019 and 2020 data.

Source: NSDUH

Tobacco Product Use Among High School Students

Percent of High School Students Reporting Past 30-Day Use of Electronic Vapor Products (EVPs) vs. Cigarettes in CT, 2011-2021



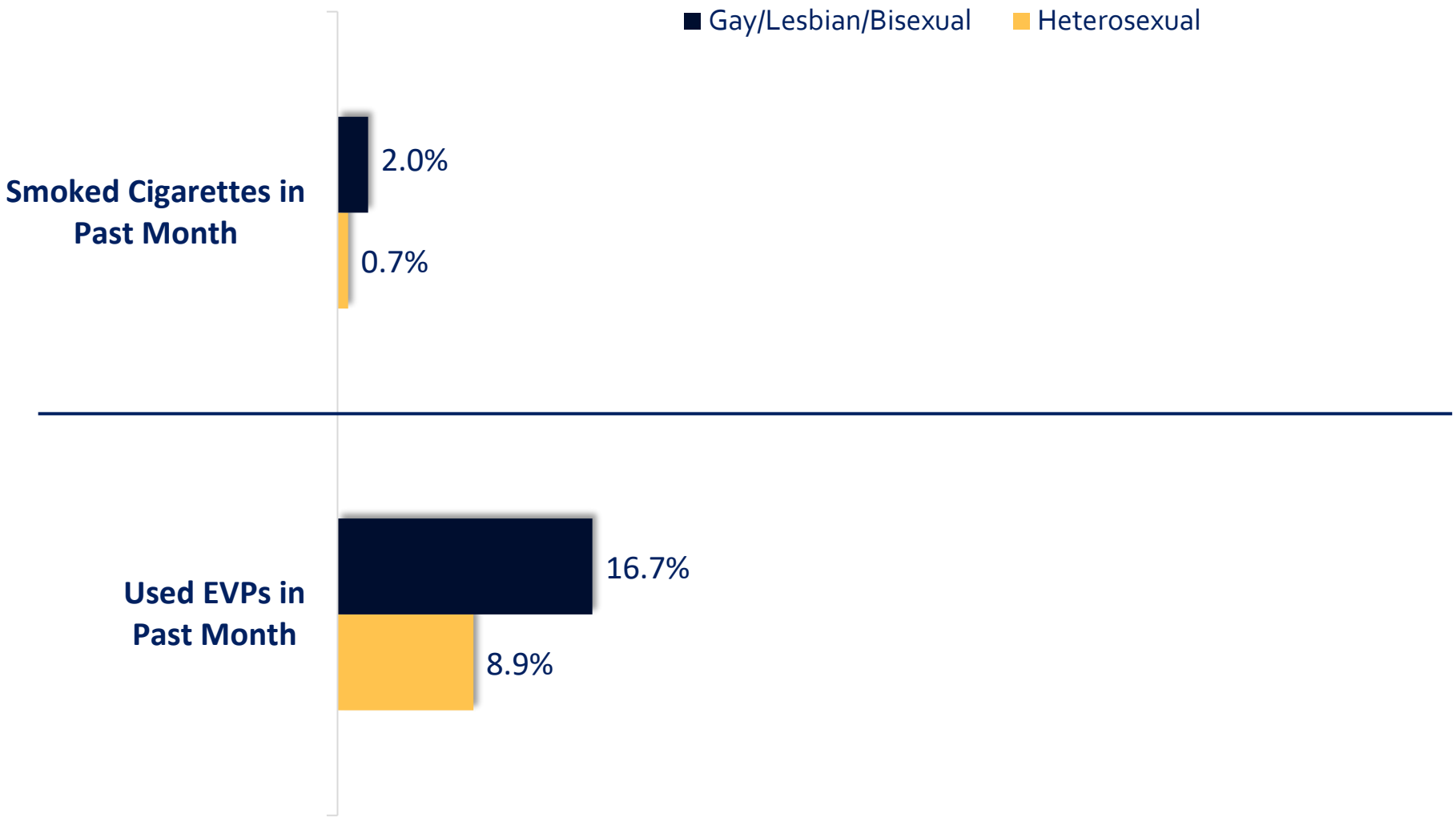
Note: The language around electronic vapor products has changed over the years. In 2017 and earlier, the survey asked about current "e-cigarette" use rather than vapor products.

***Caution should be taken when comparing CSHS 2021 data to that of previous years due to differences in methodology in survey collection.**

Source: CSHS (CTYRBS)

Tobacco Product Use by Sexual Identity

Percent of High School Students Reporting Past 30-Day Use of Electronic Vapor Products (EVPs) vs. Cigarettes in CT, 2021

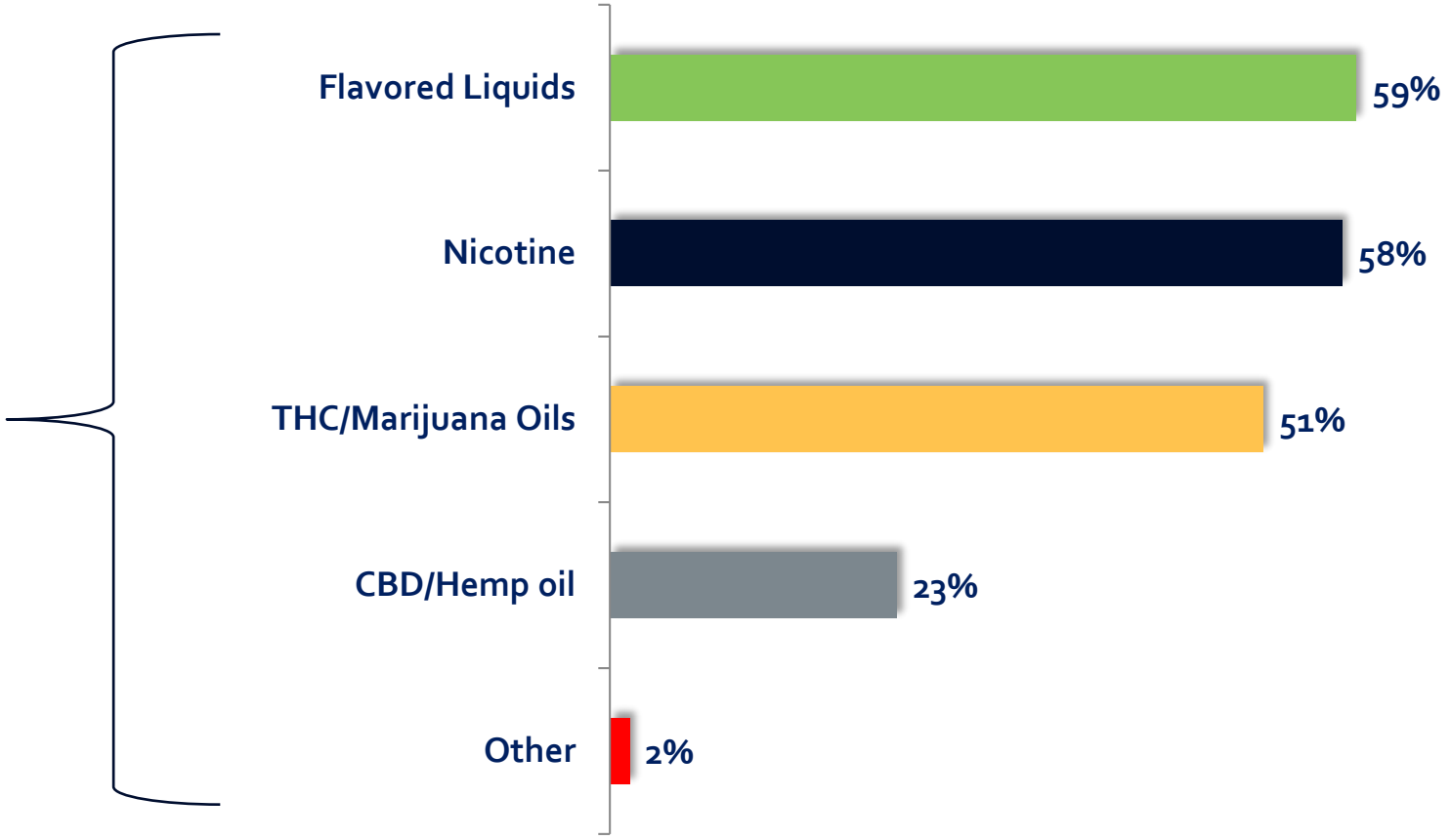


Source: CSHS (CT YRBS) 2021

Substances Used in Vaping Devices

Substances Used in Vaping Devices by E-Cigarette Users Aged 18-25 in CT, 2020 (n=452)

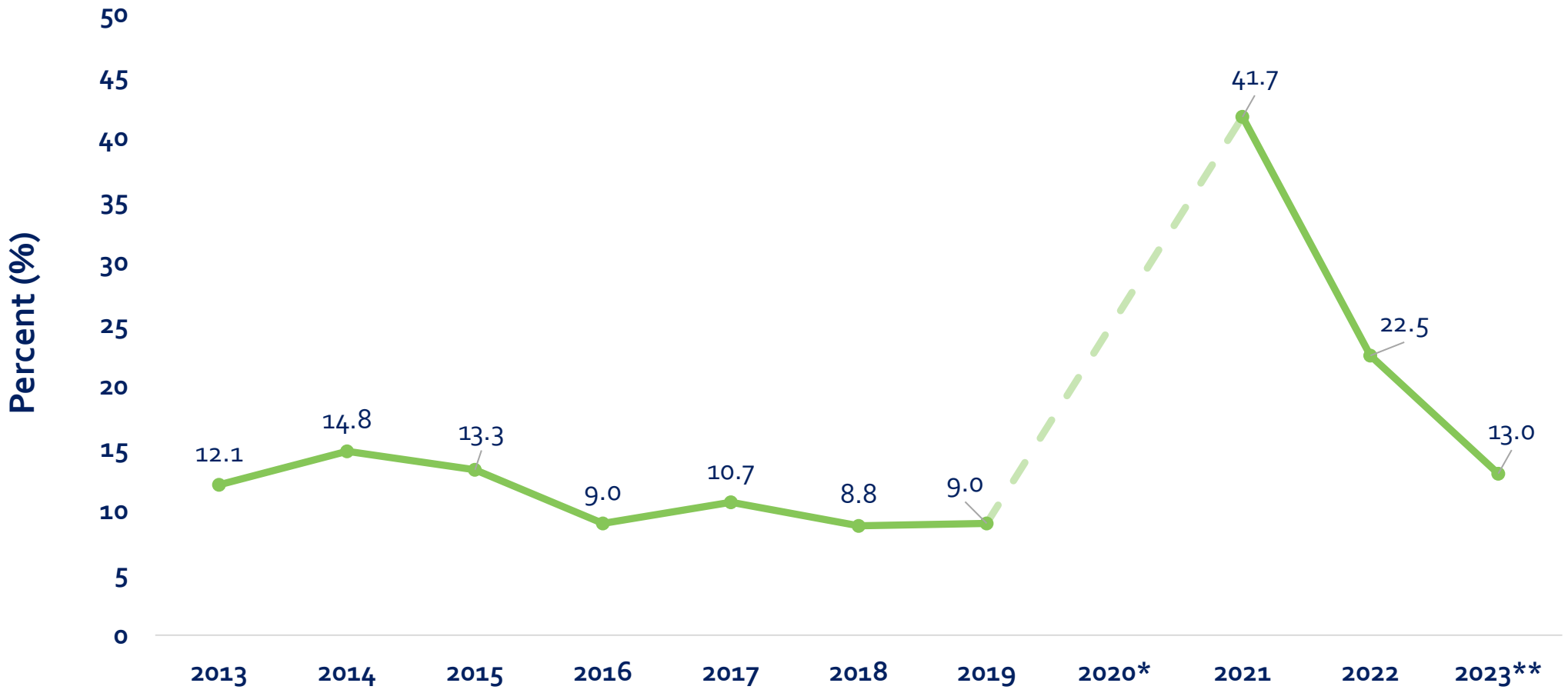




Source: Young Adults Statewide Survey

Tobacco Sales Violations in CT

Reported Retailer Violations - Tobacco Sales to Individuals Under Legal Age in CT, 2013-2023



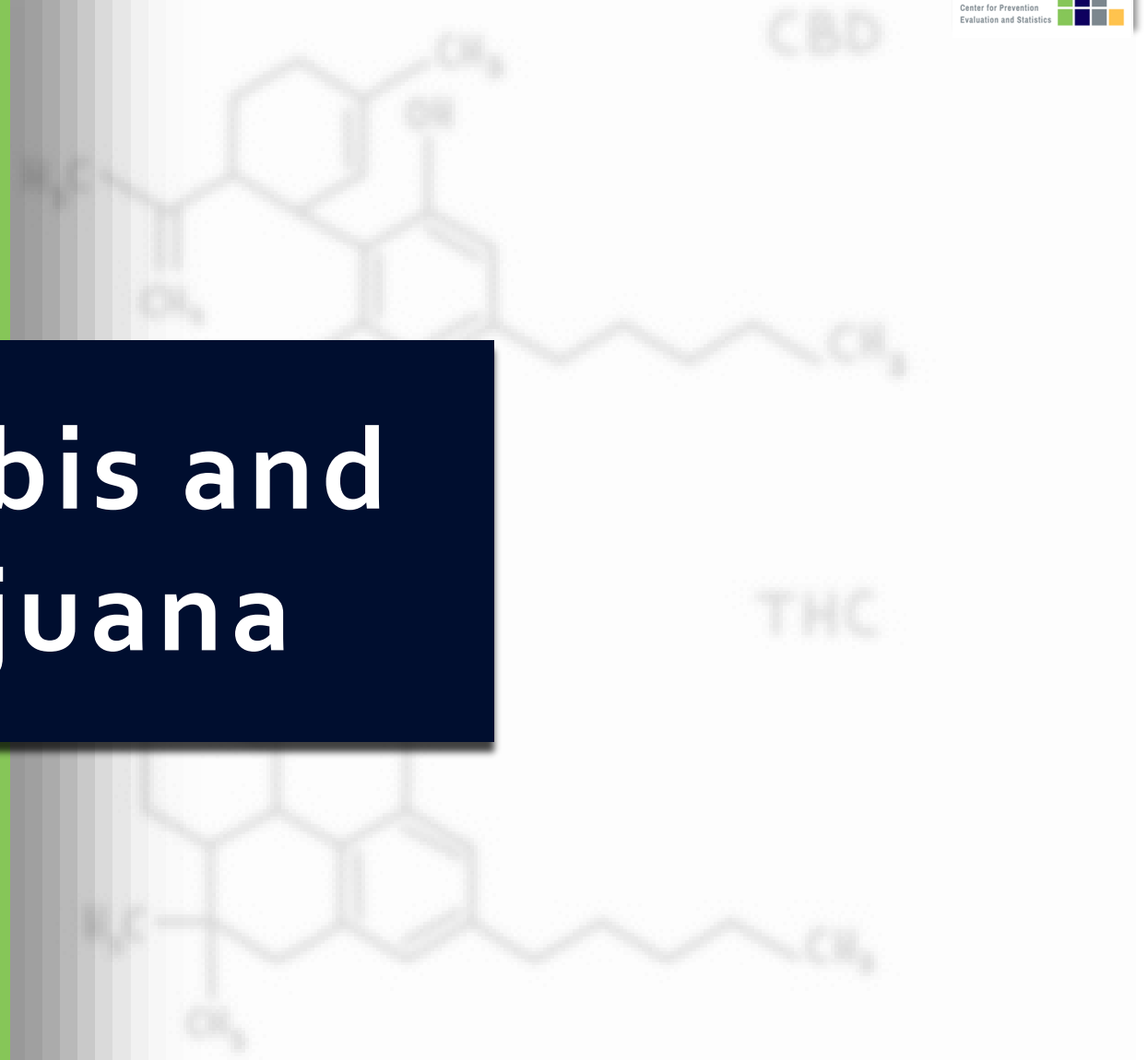
Note: TPEP Investigator noted that COVID impacted the rate significantly (e.g., investigations suspended for 2020, masks required in 2021). Implementation of Tobacco21, which raised the age for tobacco sales in October 2019, may also have had an impact.
*Data not available
**Results not final

Sources: SYNAR, CDC, CT DMHAS

Key Takeaways: Tobacco and EVP

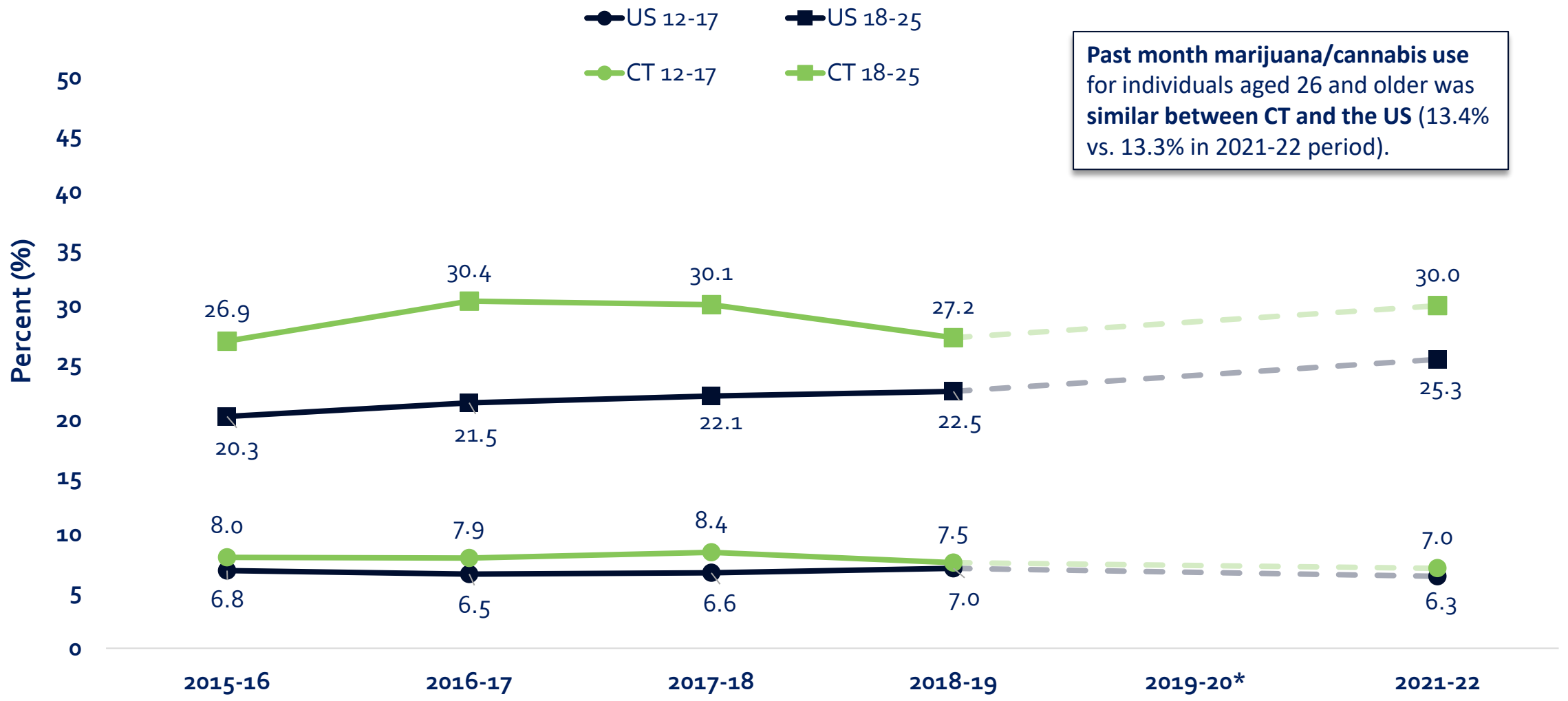
- The use of tobacco products (excluding vaping) has been gradually decreasing over the years across all age groups in Connecticut, whereas the use of EVPs has continuously increased and exceeded the use of tobacco in 2015 among high school students in Connecticut.
- High school students who identified as LGB had a higher prevalence of past 30-day use of EVPs compared to high students who identified as heterosexual.
- According to an online survey, over half of CT young adults who smoked e-cigarettes report using THC/marijuana oils in their vaping device.
- Tobacco sales violations remained stable until 2020. This change can possibly be attributed to COVID.

Cannabis and Marijuana



Marijuana Use

Past Month Marijuana Use by Age Group in CT and the US, 2015-2022



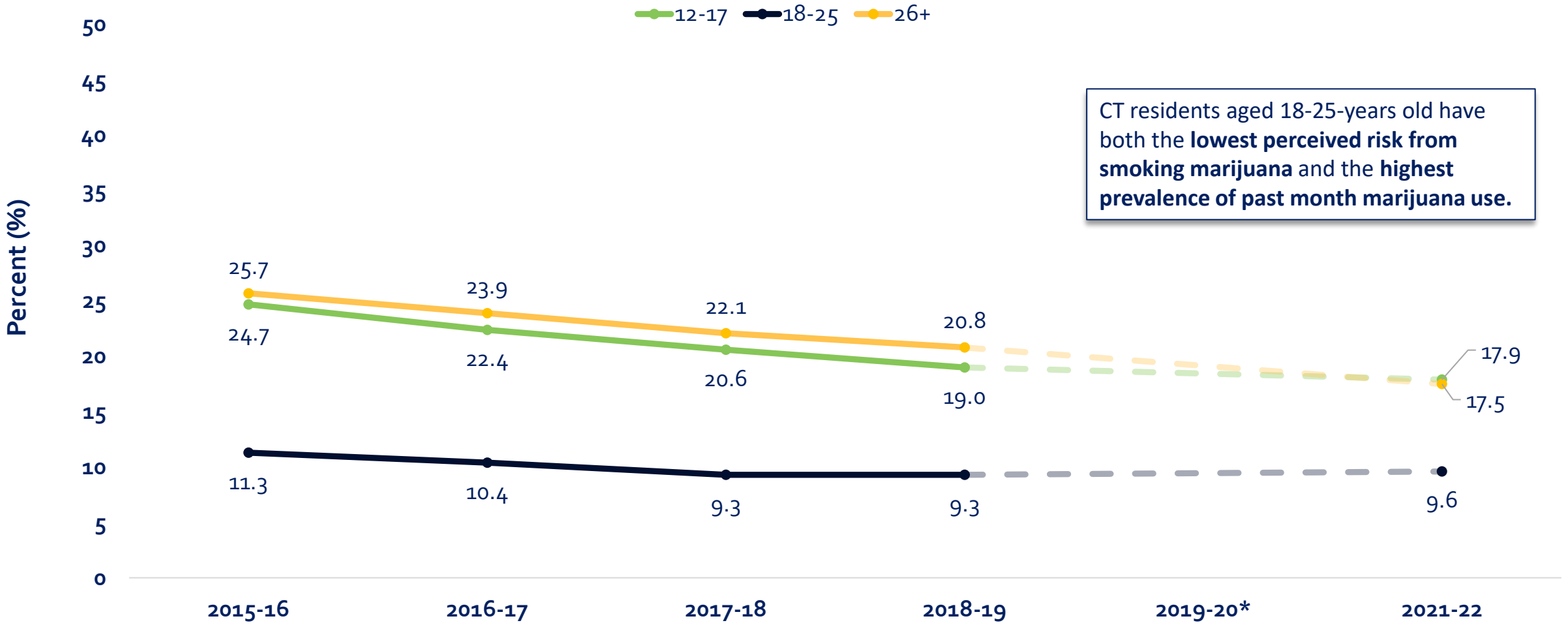
Past month marijuana/cannabis use for individuals aged 26 and older was **similar between CT and the US** (13.4% vs. 13.3% in 2021-22 period).

Note: *State estimates for these years are no longer available due to methodological concerns with combining 2019 and 2020 data.

Source: NSDUH

Perceived Risk from Smoking Marijuana, by Age Group

Percent of Persons Perceiving Great Risk from Smoking Marijuana Once Per Month in CT, 2015-2022



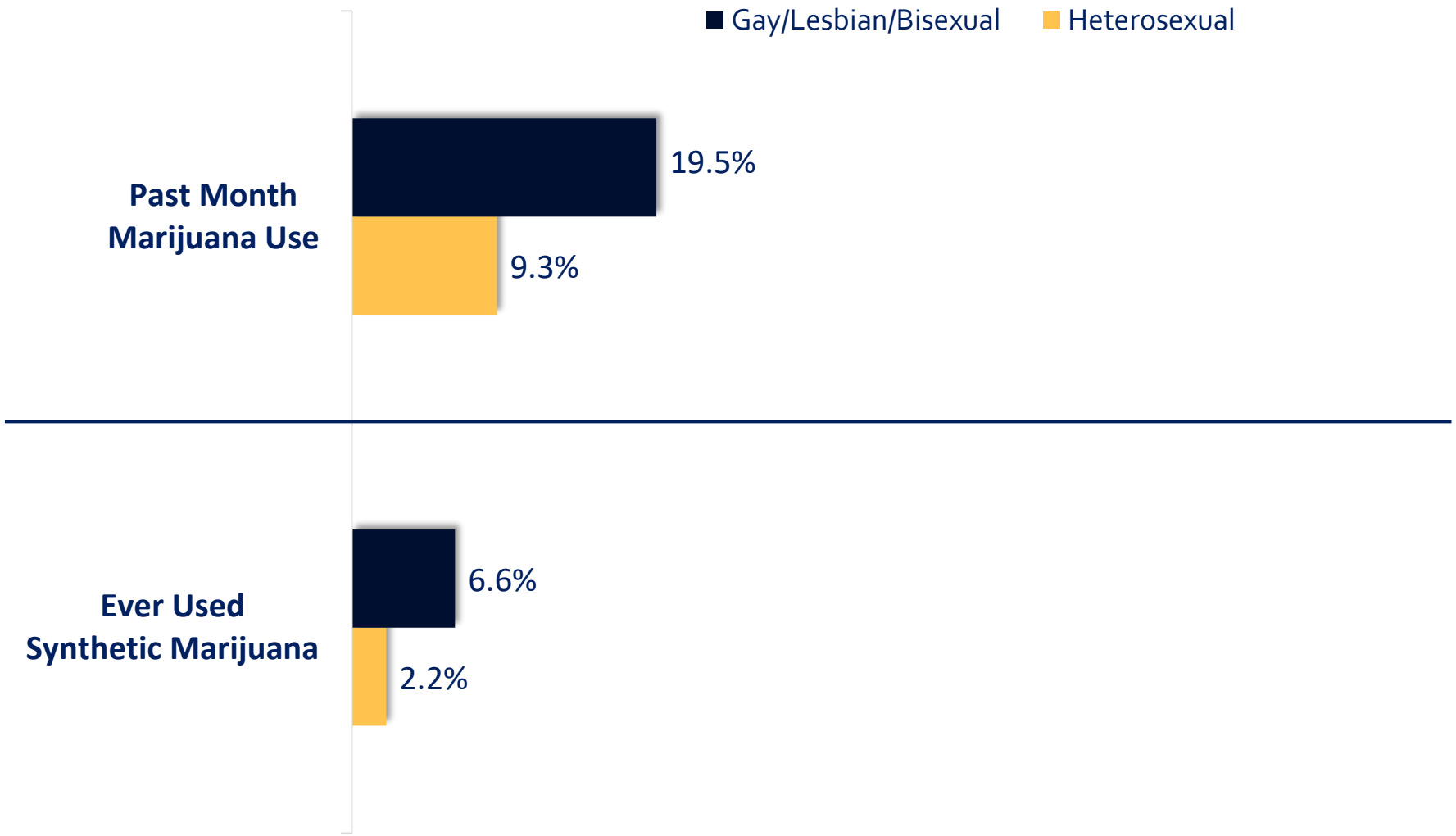
CT residents aged 18-25-years old have both the **lowest perceived risk from smoking marijuana** and the **highest prevalence of past month marijuana use.**

Note: The 2015 NSDUH underwent significant redesigns, including the order of perceived risk questions, affecting comparability.
*State estimates for these years are no longer available due to methodological concerns with combining 2019 and 2020 data.

Source: NSDUH

Marijuana Use by Sexual Identity

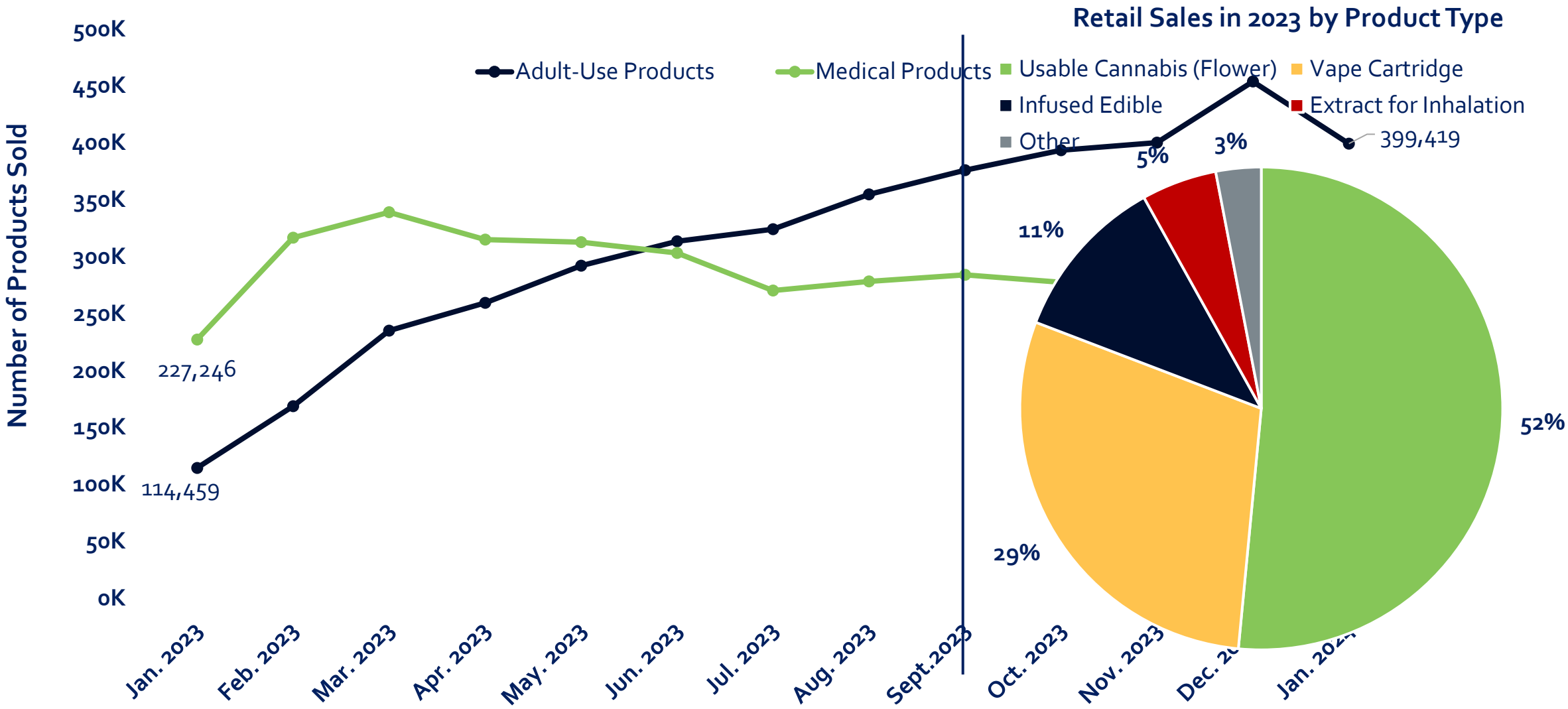
Percent of High School Students Reporting Use of Marijuana in CT, 2021



Source: CSHS (CT YRBS) 2021

Cannabis Retail Sales: Products Sold

Number of Adult-Use Cannabis and Medical Marijuana Products Sold in CT by Month, 2023-2024



Note: "Other" products sold include pills, capsules, non-smokable infused extract, tincture, marijuana infused topicals, liquid marijuana Rick Simpson Oil (RSO), marijuana mix infused, and lozenge.

Source: CT Department of Consumer Protection

Key Takeaways: Cannabis and Marijuana

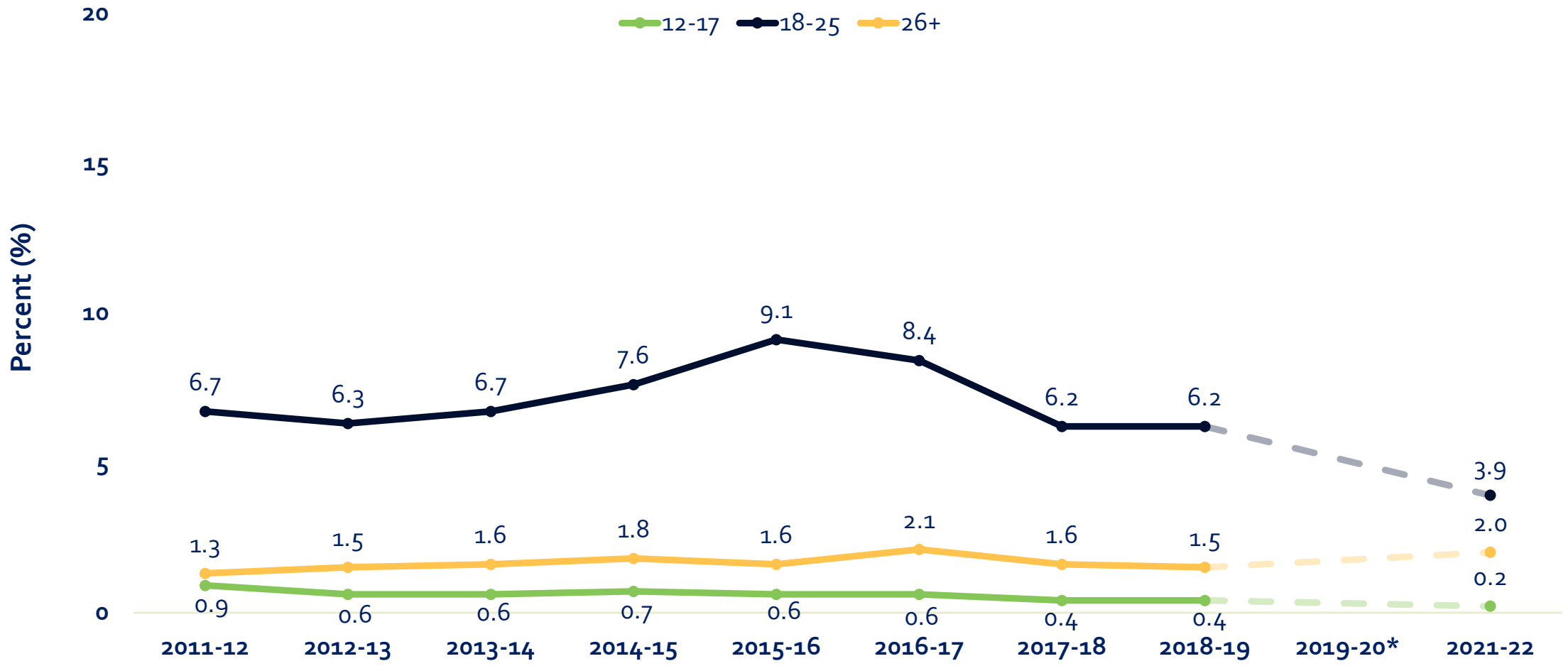
- In Connecticut, perception of risk from smoking marijuana is showing a decreasing trend for all age groups.
  - Further data is needed to illuminate cannabis use trends and perceptions in Connecticut post-legalization of adult-use cannabis.
- There was a higher prevalence of past month marijuana use among Connecticut's high school students who identify as LGB versus heterosexual students in 2021.
  - A slightly higher percentage of Connecticut's high school students who identify as LGB reported ever using synthetic marijuana than heterosexual students.
- Adult-use cannabis products exceeded the sales of medical-use cannabis in May 2023 and the number of adult-use cannabis products sold continued to increase during the latter months of 2023.

Cocaine


dopamine transporter
functioning normally
dopamine
receptor
postsynaptic
neuron
cocaine
dopamine transporter
blocked by cocaine

Cocaine Use

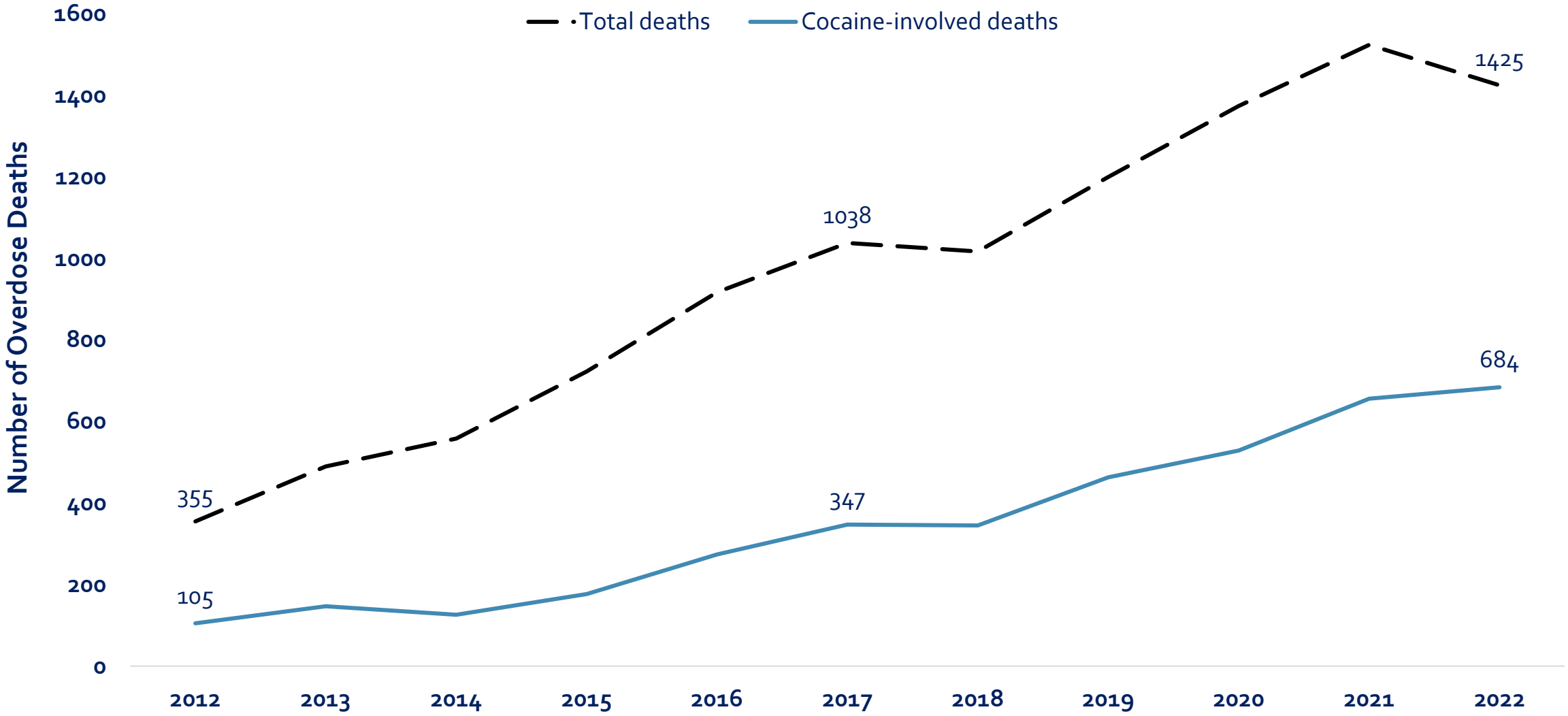
Percent Reporting Past Year Cocaine Use by Age Group in CT, 2011-2022



Note: *State estimates for these years are no longer available due to methodological concerns with combining 2019 and 2020 data.

Cocaine-Involved Overdose Deaths

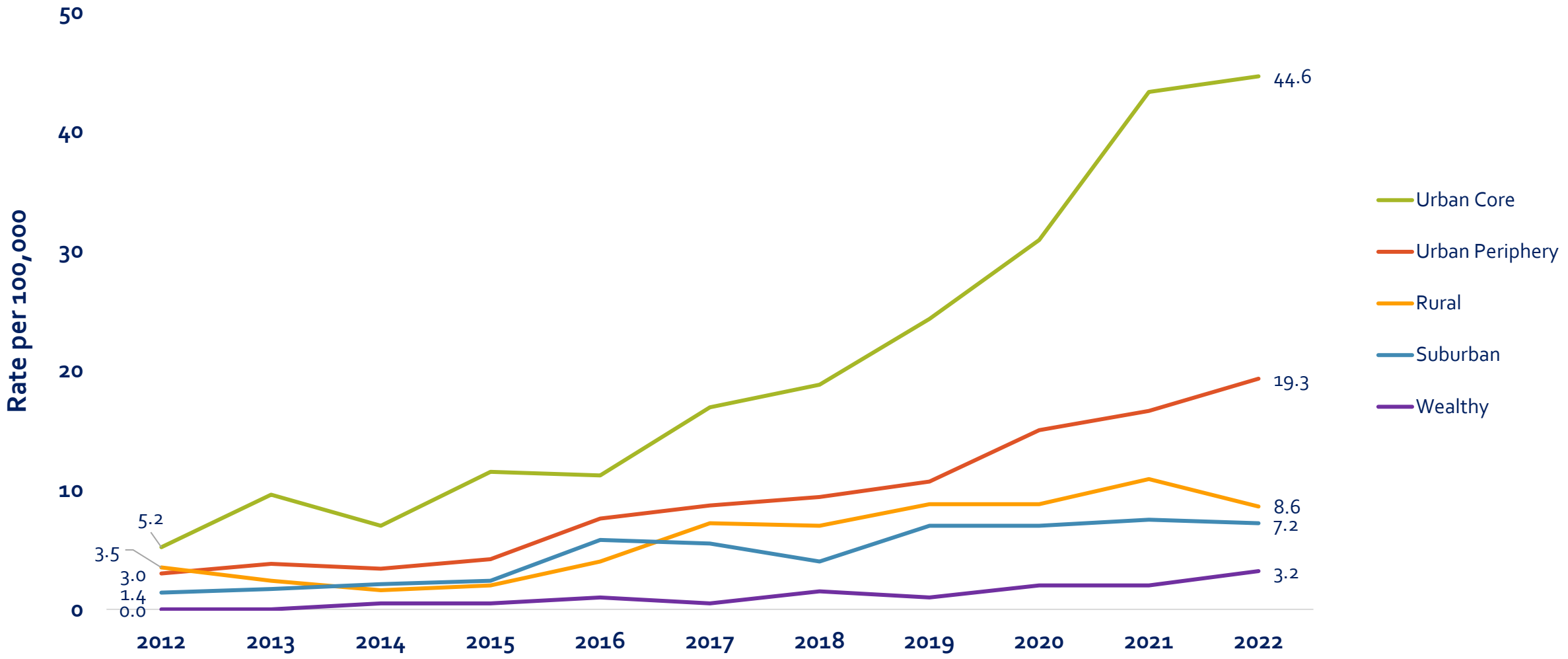
Number of Overdose Deaths by Year in CT, 2012-2022



Source: Office of the Chief Medical Examiner

Cocaine-Involved Overdose Mortality Rate: Community Types

Cocaine-Involved Overdose Mortality Rate (per 100,000) by 5 CT Community Types, 2012-2022

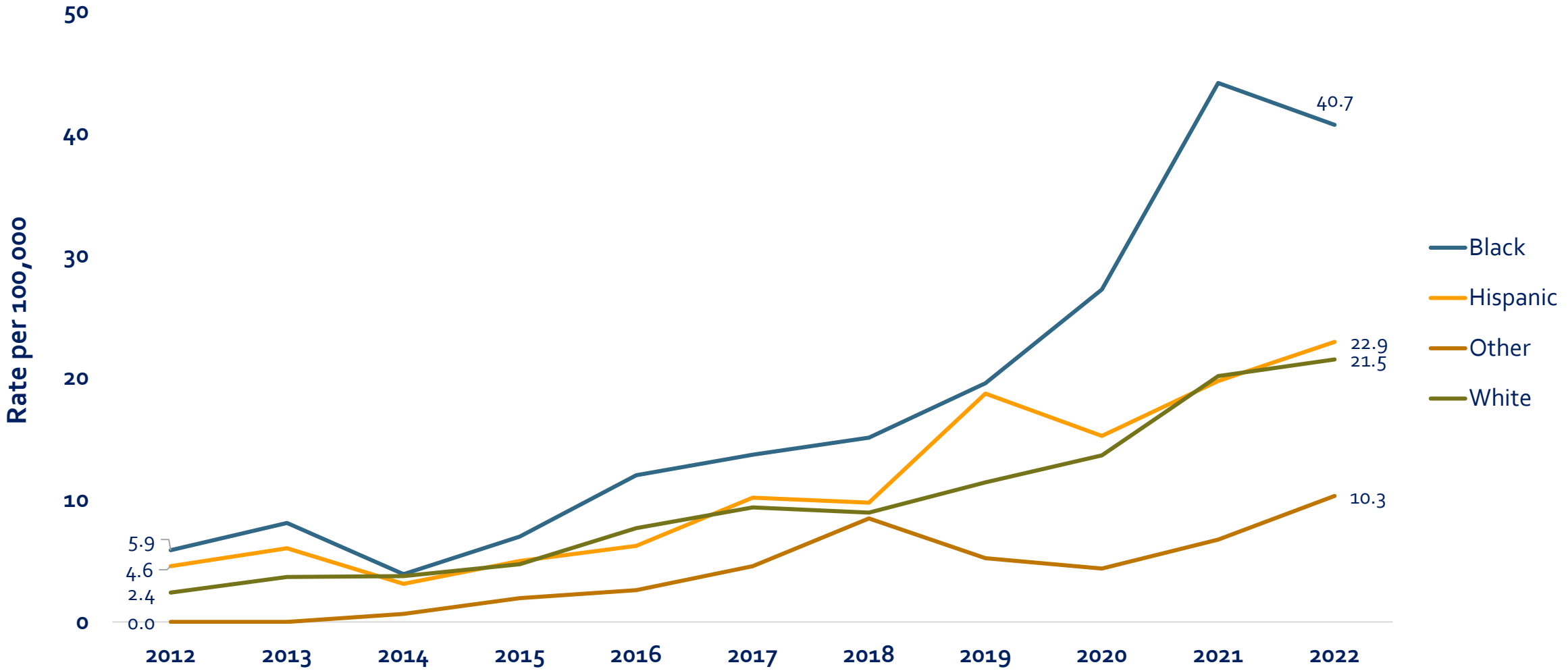


Note: Death rate by town of residence.

Source: Office of the Chief Medical Examiner

Cocaine-Involved Overdose Mortality Rate: Race/Ethnicity

Cocaine-Involved Overdose Mortality Rate (per 100,000) by Race/Ethnicity, 2012-2022



Source: Office of the Chief Medical Examiner

Key Takeaways: Cocaine

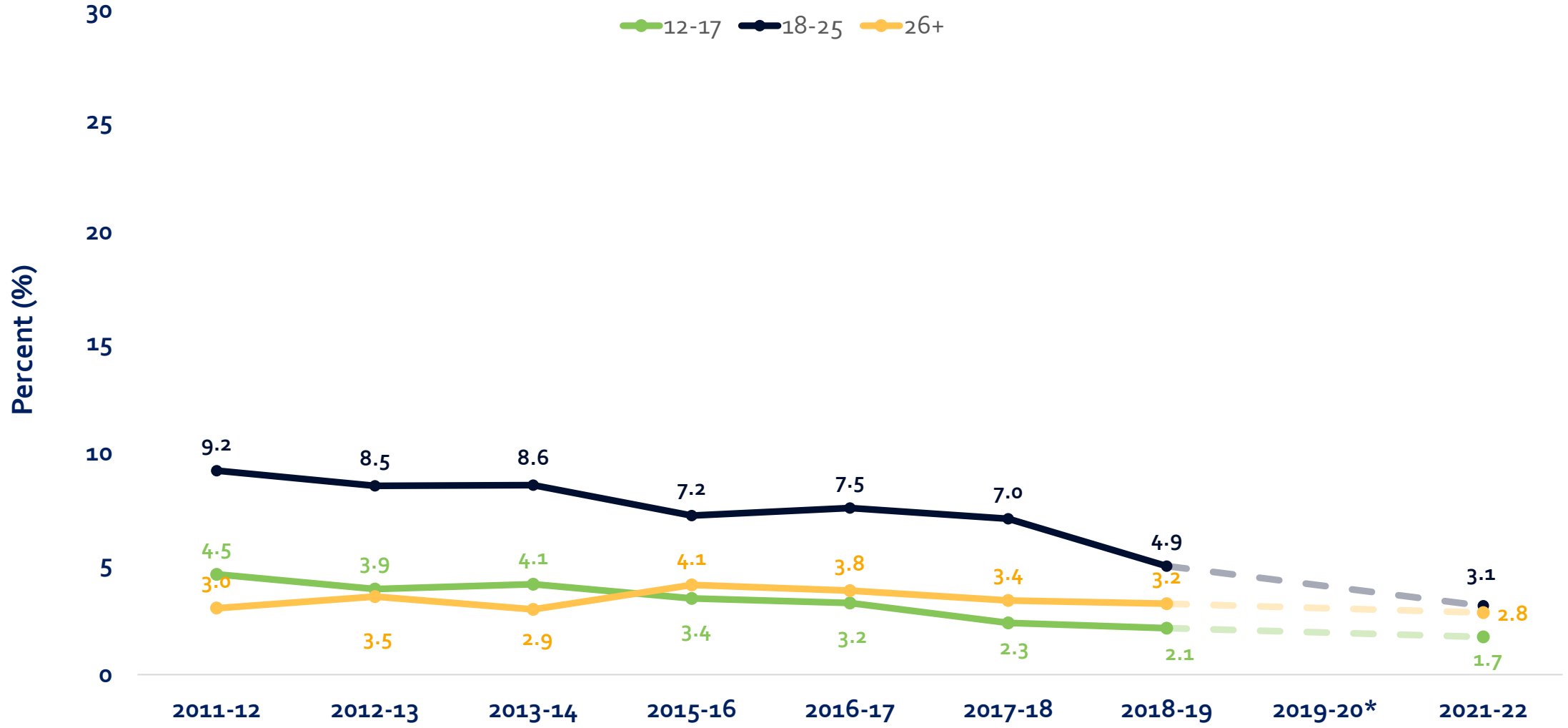
- Past year cocaine use was most prevalent in young adults aged 18-25 in Connecticut.
- Cocaine-involved overdose mortalities have continued to rise over the years in Connecticut.
- Most cocaine-involved overdose mortalities have been seen in:
  - Urban periphery areas
  - Non-Hispanic Black/African American population

Prescription Pain Medications



Prescription Pain Medication Misuse

Percent of Persons Reporting Past Year Non-Medical Use of Pain Relievers by Age Group in CT, 2011-2022

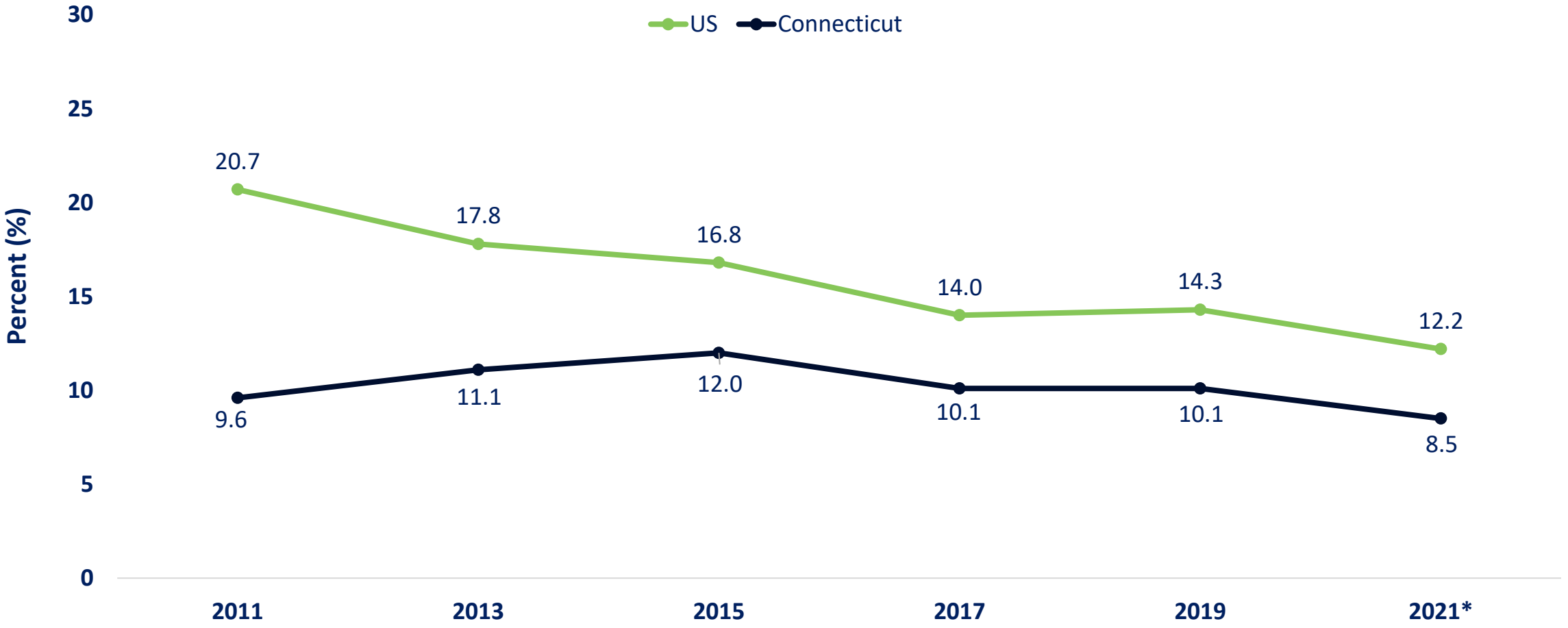


Note: *State estimates for these years are no longer available due to methodological concerns with combining 2019 and 2020 data.

Source: NSDUH

Prescription Pain Medication Misuse Among High School Students

Percent of High School Students Reporting Ever Misusing Prescription Pain Medication, 2011-2021



Note: The wording of this question has changed over the years. In 2015 the question asked about taking prescription drugs without a prescription but didn't specify pain medicine. In 2013 and earlier, it asked about taking drugs without a prescription to get high.

***Caution should be taken when comparing CSHS 2021 data to that of previous years due to differences in methodology in survey collection.**

Opioid Prescriptions in CT

Number of Opioid Prescriptions Per Year in CT, 2014-2022



Source: CPMRS, Department of Consumer Protection

Key Takeaways: Prescription Pain Medication

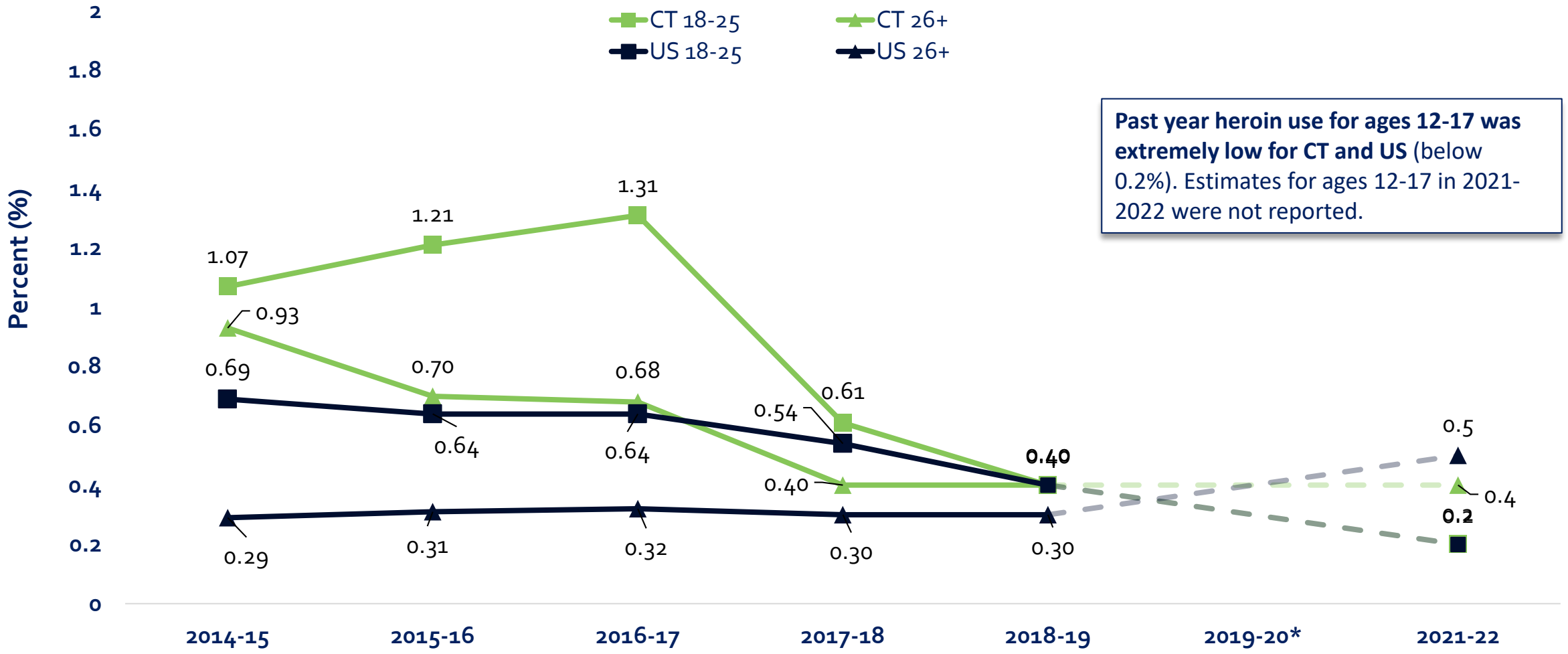
- The percentage of Connecticut individuals reporting past year non-medical use of pain relievers has somewhat decreased across all age groups between 2011 and 2022.
  - The prevalence of past year non-medical use of pain relievers has been consistently highest among individuals aged 18-25 during this time period.
- The number of opioid prescriptions dispensed per year has been steadily decreasing since 2015.
  - 2015: 2,625,042 prescriptions
  - 2022: 1,608,256 prescriptions

Opioids



Heroin Use

Percent of Persons Reporting Past Year Use of Heroin by Age Group in CT and the US, 2014-2022



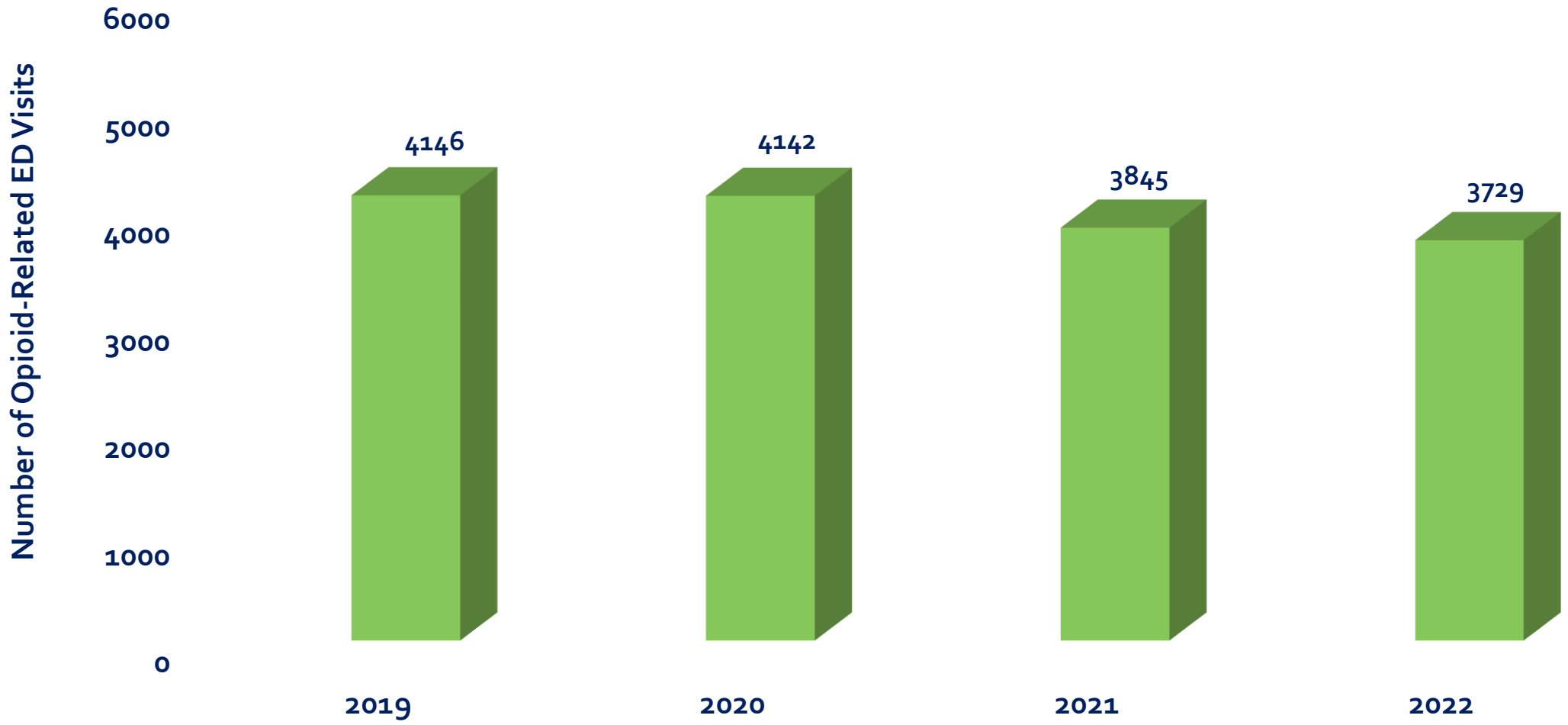
Past year heroin use for ages 12-17 was extremely low for CT and US (below 0.2%). Estimates for ages 12-17 in 2021-2022 were not reported.

Note: Estimates for the 12-17 age group were not reported for both CT and the U.S. due to low precision.
*State estimates for these years are no longer available due to methodological concerns with combining 2019 and 2020 data.

Source: NSDUH

Opioid-Related Emergency Department Visits

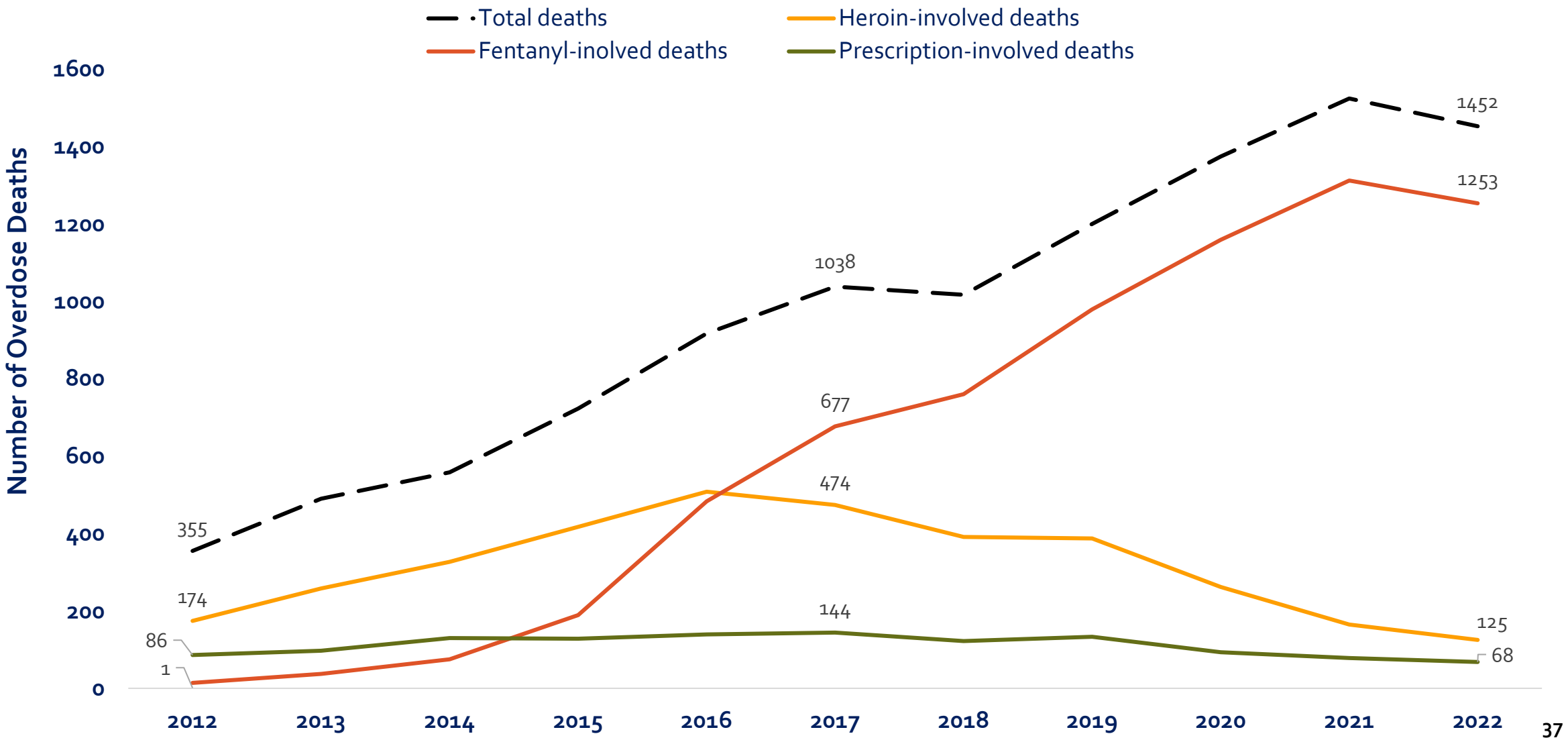
Number of Opioid-Related Emergency Department Visits in CT, 2019-2022



Source: CHIME Discharge Data

Opioid-Involved Overdose Deaths

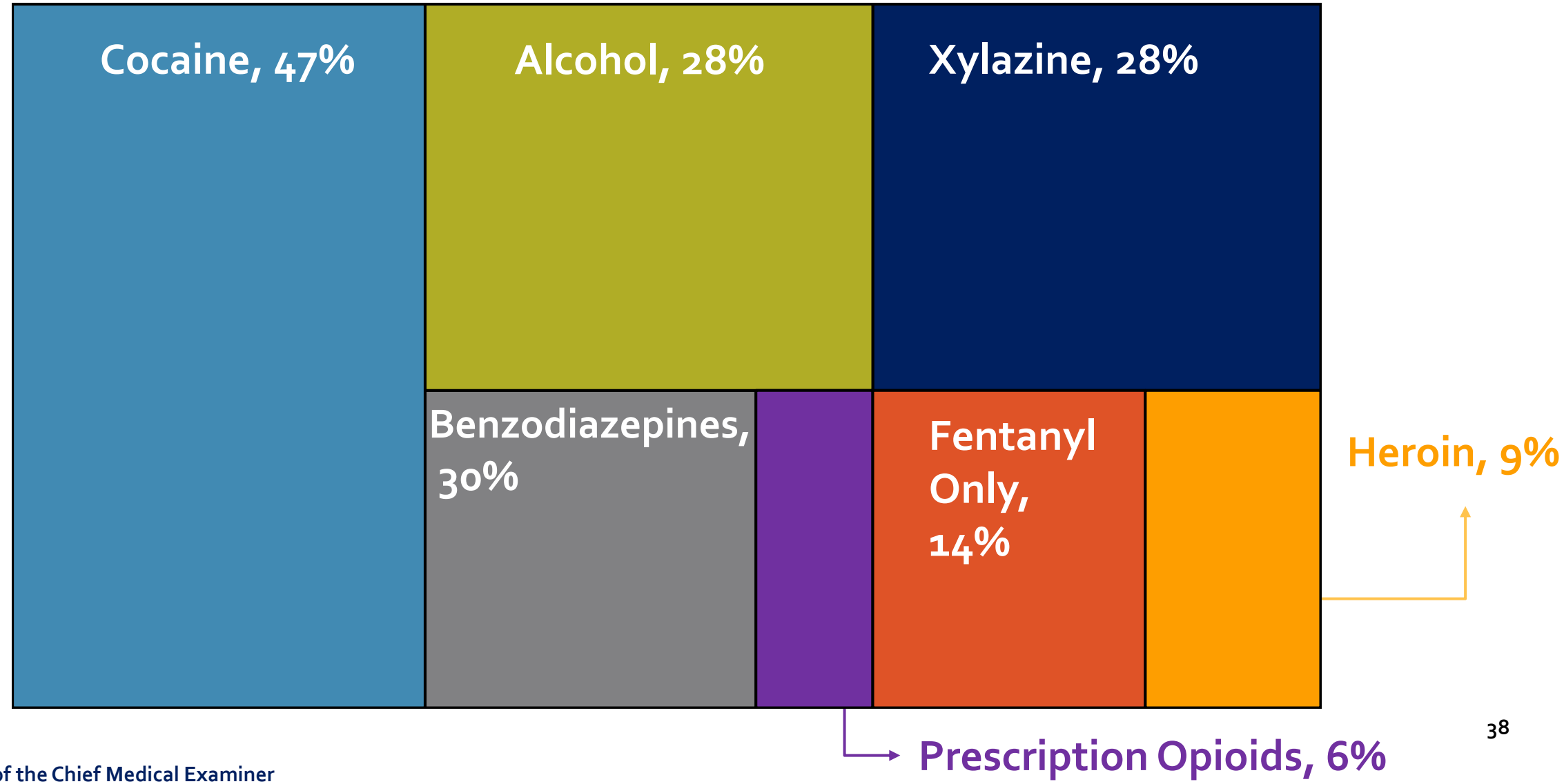
Number of Overdose Deaths by Year in CT, 2012-2022



Source: Office of the Chief Medical Examiner

Drugs Identified in Fentanyl-Involved Overdose Deaths

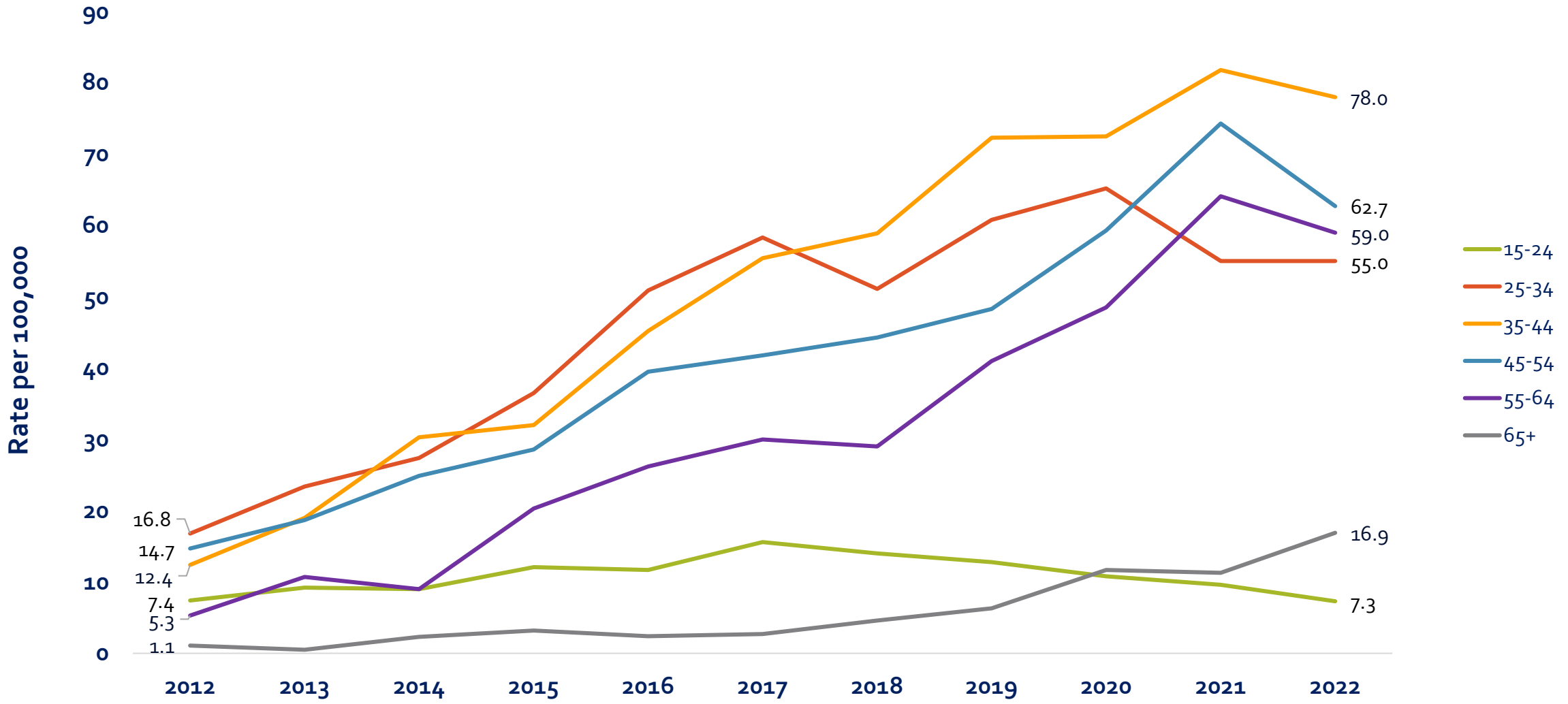
Multiple Drugs Involved in Opioid Overdose Deaths in CT, 2022 (n = 1253)



Source: Office of the Chief Medical Examiner

Opioid-Involved Overdose Mortality Rate: Age Groups

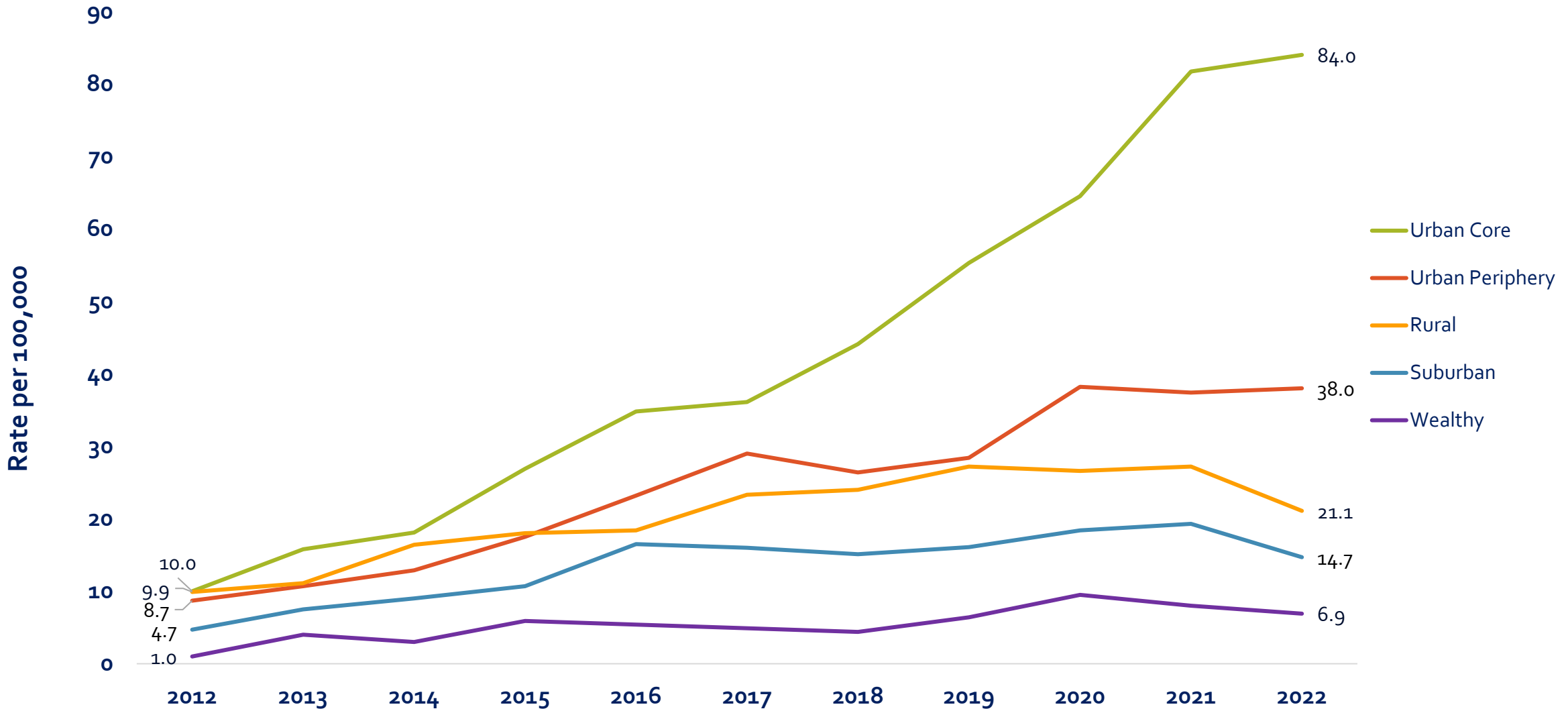
Opioid-Involved Overdose Mortality Rate (per 100,000) by Age in CT, 2012-2022



Source: Office of the Chief Medical Examiner

Opioid-Involved Overdose Mortality Rate: Community Types

Opioid-Involved Overdose Mortality Rate (per 100,000) by 5 CT Community Types, 2012-2022

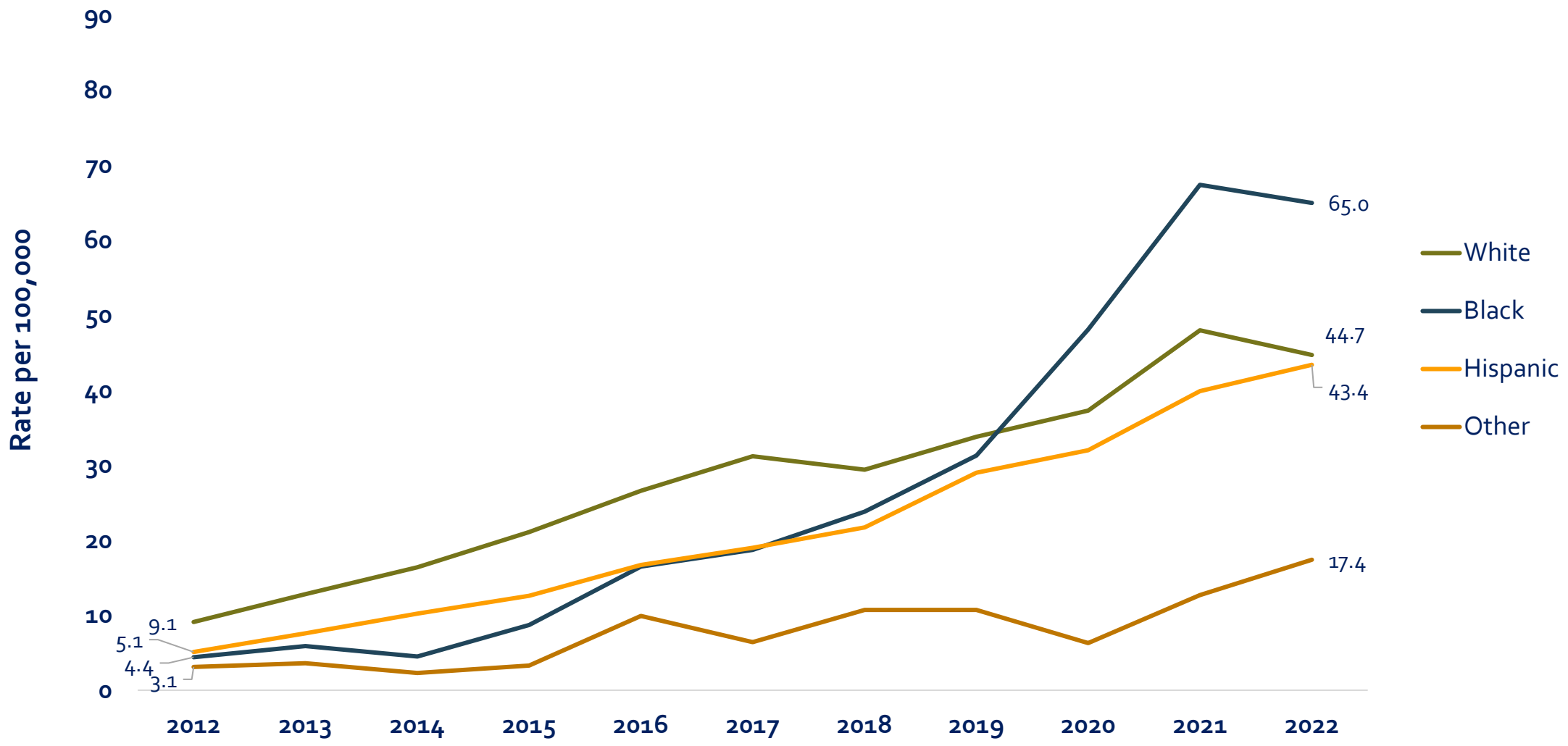


Note: Death rate by town of residence

Source: Office of the Chief Medical Examiner

Opioid Overdose Mortality Rate: Race/Ethnicity

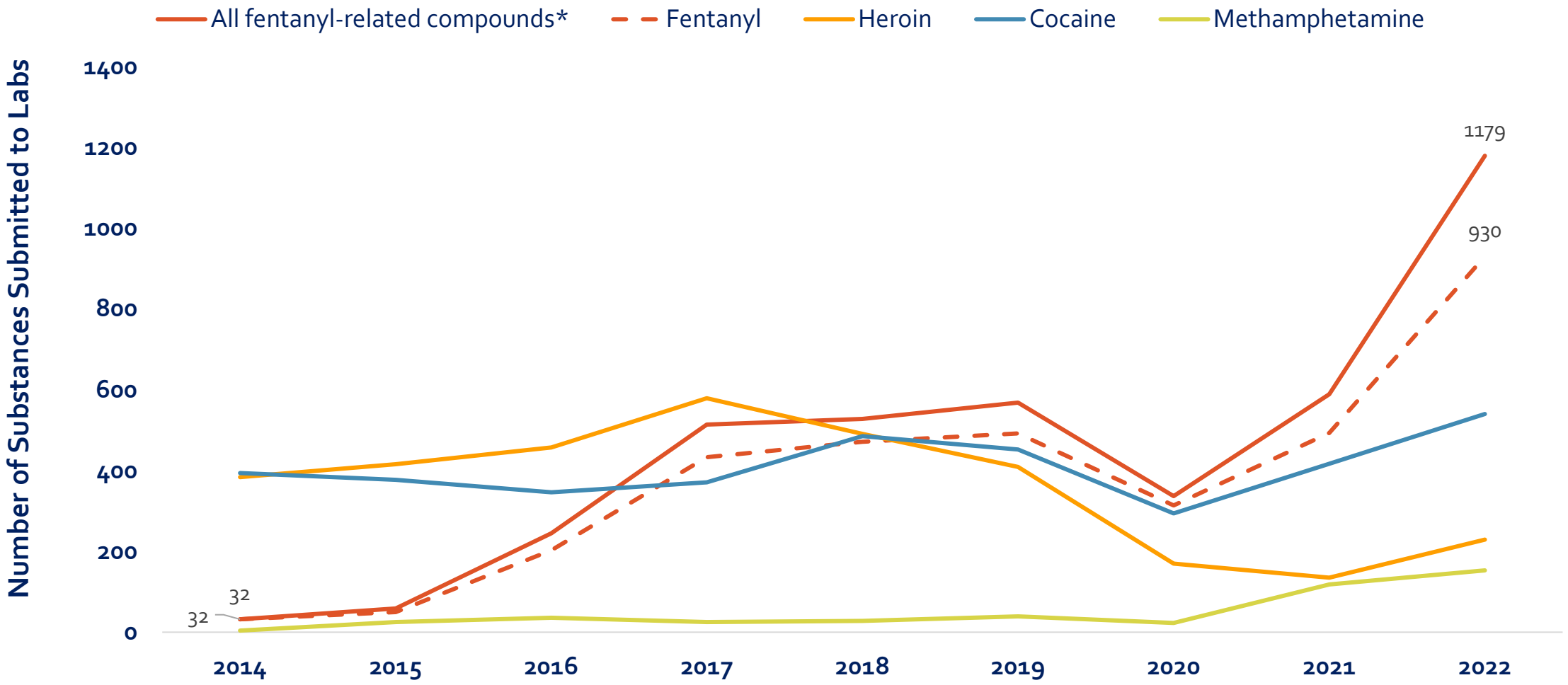
Opioid Overdose Mortality Rate Per 100,000 by Race/Ethnicity in CT, 2012-2022



Source: Office of the Chief Medical Examiner

Drug Seizure Submissions

Connecticut Counts for the Most Frequently Identified Drugs, 2014-2022



***All fentanyl-related compounds includes:**
fentanyl, 4-fluoroisobutyryl fentanyl, acetyl fentanyl, acryl fentanyl, carfentanil, cyclopropyl fentanyl, furanyl fentanyl, U-47700, ANPP, butyryl fentanyl, fluoroisobutyryl fentanyl, methoxyacetyl fentanyl, *o*-fluoro acryl fentanyl, valeryl fentanyl, *p*-fluoroisobutyryl fentanyl, and *p*-fluorobutyryl fentanyl.

Source: US DEA, Diversion Control Division, 2014-2022

Key Takeaways: Opioids

- Fentanyl continues to be involved in the majority of substance overdose mortalities in Connecticut.
  - Fentanyl has been the most frequently submitted substance to labs in recent years.
- Opioid-involved overdose mortalities in Connecticut have been more prevalent among:
  - Individuals aged 35-44
  - Non-Hispanic Black population
  - Urban core communities
- Substance overdose mortalities in Connecticut often involve multiple substances (e.g., no heroin-involved overdose deaths in 2022 involved only heroin and no other substance).
- The number of opioid-related emergency department (ED) visits in the state has increased since 2013.
  - 2013: 1,126 ED visits
  - 2022: 3,729 ED visits
- Since 2020, Connecticut has seen a slight increase in the number of substances seized for both methamphetamine and cocaine.

Gaps, Limitations, and Looking Ahead

- Most updated sub-state (regional) data from NSDUH are from 2016-2018, which is now outdated.
- NSDUH data from 2019-2020 period are not available due to methodological concerns.
- State reports of substance use and misuse on minority populations (such as LGBTQ+) are still limited.

Looking ahead

- Fentanyl-involved overdose continues to be a public health crisis and needs to be rigorously addressed.
- Post-legalization cannabis use in Connecticut requires continuous surveillance.
- Further detailed data collection and reports within minority populations are needed to inform disparities.
- Keep an eye on stimulants (e.g., cocaine, methamphetamine)

For more information, contact

Megan O'Grady: ogrady@uchc.edu
Jennifer Sussman: sussman@uchc.edu

or visit the SEOW Prevention Data Portal at

https://preventionportal.ctdata.org/

Extra slides

Conclusions

- *Although there has been some decline in alcohol use among high school students, the prevalence in Connecticut overall remains greater than the national average.*
- *Perception of risk from smoking marijuana is showing a decreasing trend for all age groups in Connecticut.*
- *Adult-use cannabis products exceeded the sales of medical-use cannabis in May 2023.*
- *Vaping/ENDS and Marijuana/Hashish/THC have been the top community concerns for youth aged 12-17 while alcohol and prescription drugs have been the top community concerns for older adults aged 66 or older in Connecticut.*
- *Most cocaine-involved overdose mortalities have been seen in Connecticut's urban periphery areas and have continued to rise over the years.*
- *Fentanyl continues to be involved in most substance overdose mortalities in Connecticut.*
  - *Fentanyl has been the most frequently submitted substance to labs in recent years.*
- *Opioid-involved overdose mortalities are prevalent among:*
  - *Adult population aged 35-44; Non-Hispanic Black population; Urban core areas*
- *Substance overdose deaths in Connecticut often involve multiple substances (e.g., only 3% of all heroin-involved overdose deaths are deaths involving only heroin and no other substance).*