

# Cannabis in California: 2020 Data Snapshot

*California Department of Public Health  
Substance and Addiction Prevention Branch*

**December 2022**



This document provides a review of cannabis trends and impacts in California, including:

- Cannabis use
- Secondhand cannabis smoke exposure
- Cannabis poisoning-related emergency department visits
- Calls to the California Poison Control System about cannabis exposure

While cannabis use among California adults and youth has been relatively stable in recent years, exposure to cannabis among children and youth is of increasing concern. This data snapshot provides information on changing cannabis use trends, from 2016 through 2020, in California.\* Of note:

- Between 2016 and 2020, there was a substantial increase in calls to the California Poison Control System about cannabis exposures (128 percent increase). In 2020, one-third of calls were among children under six years of age. The majority of these children were unintentionally exposed to cannabis edibles.
- Cannabis poisoning-related emergency department (ED) visits increased by 47 percent between 2016 and 2020, with children under six years of age, teens aged 15-19, and young adults aged 20-29 having the greatest number of ED visits in 2020.

Accidental or unintentional exposure to cannabis can pose a serious risk to young children. Although rare, cannabis ingestion among young children can result in irregular heartbeat, low blood pressure, seizures, and coma.<sup>1</sup> Because of their smaller size and weight, children are more sensitive to the effects of cannabis and are at higher risk for cannabis poisoning.

Cannabis use among youth is known to impact the developing brain, which can lead to negative effects including problems with memory, learning, attention, and problem-solving.<sup>2</sup>

**These data highlight the need for proactive public health and policy approaches to reduce cannabis exposure among children and youth, including strategies such as:**

- Educating youth about the risks of cannabis use.
- Increasing parent and guardian awareness of risks associated with cannabis exposure.
- Creating safeguards against unintentional cannabis exposure among children, including child-resistant packaging and keeping cannabis secure (locked) and out of view.
- Monitoring and tracking indicators among key populations who may be particularly sensitive to the health effects of cannabis use.

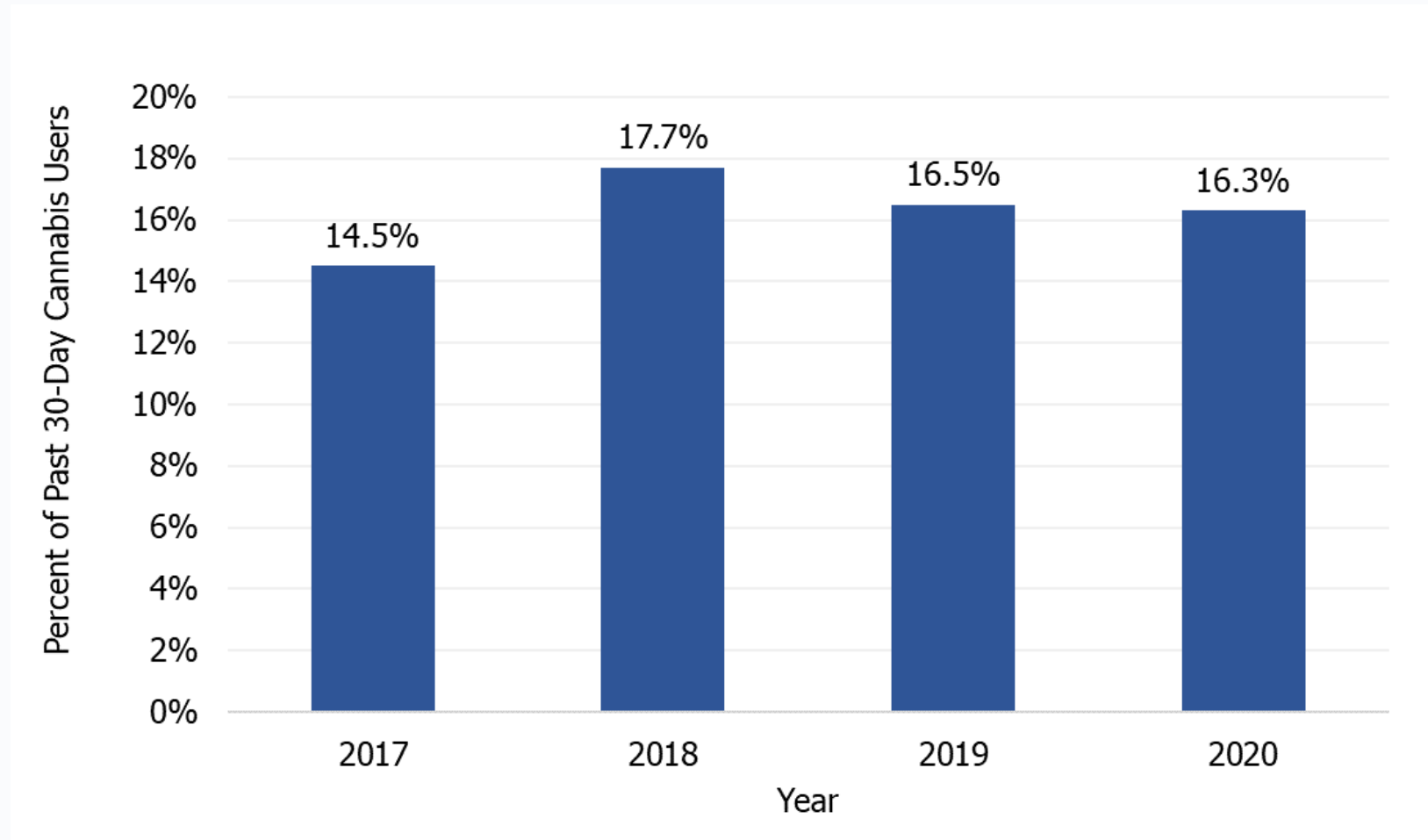
<sup>1</sup> Richards, JR., et al. (2017). Unintentional Cannabis Ingestion in Children: A Systematic Review. *The Journal of Pediatrics* 190:142-152.

<sup>2</sup> Centers for Disease Control and Prevention. [Marijuana and Public Health: Health Effects among Teens](#). 2021.

\*Data from 2020 is the most up to date available across the indicators included in this data snapshot.

# Trends in Cannabis Use Among California Adults

**Figure 1. Adult Past 30-Day Cannabis Use, 2017-2020**

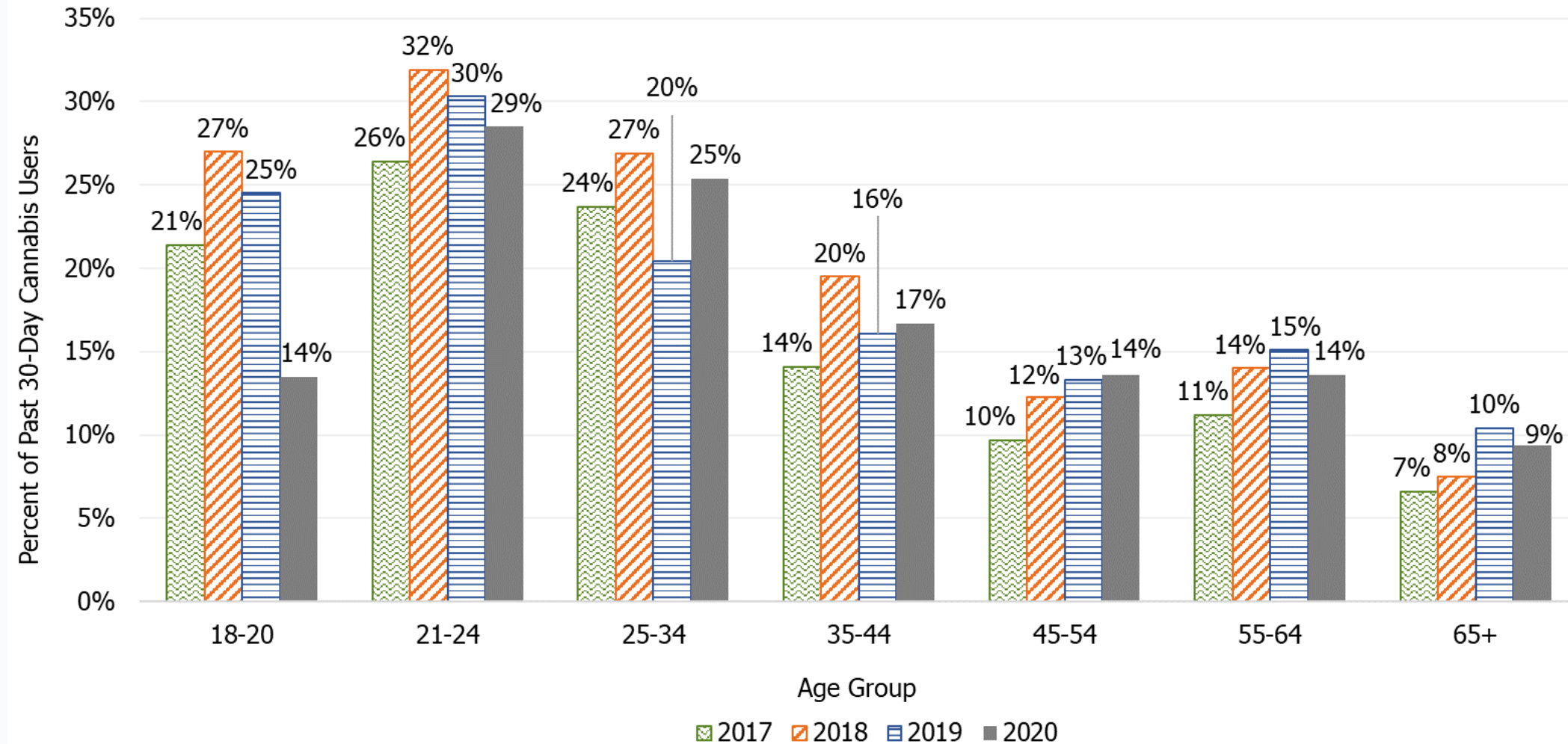


Trends in cannabis use among California adults have been relatively stable since 2018. In 2020, 16 percent of adults in California reported using cannabis in the previous 30 days (also known as current cannabis users) compared to 18 percent in 2018 (Figure 1).<sup>3</sup>

<sup>3</sup> California Health Interview Survey, 2017-2020

# Trends in Cannabis Use Among California Adults

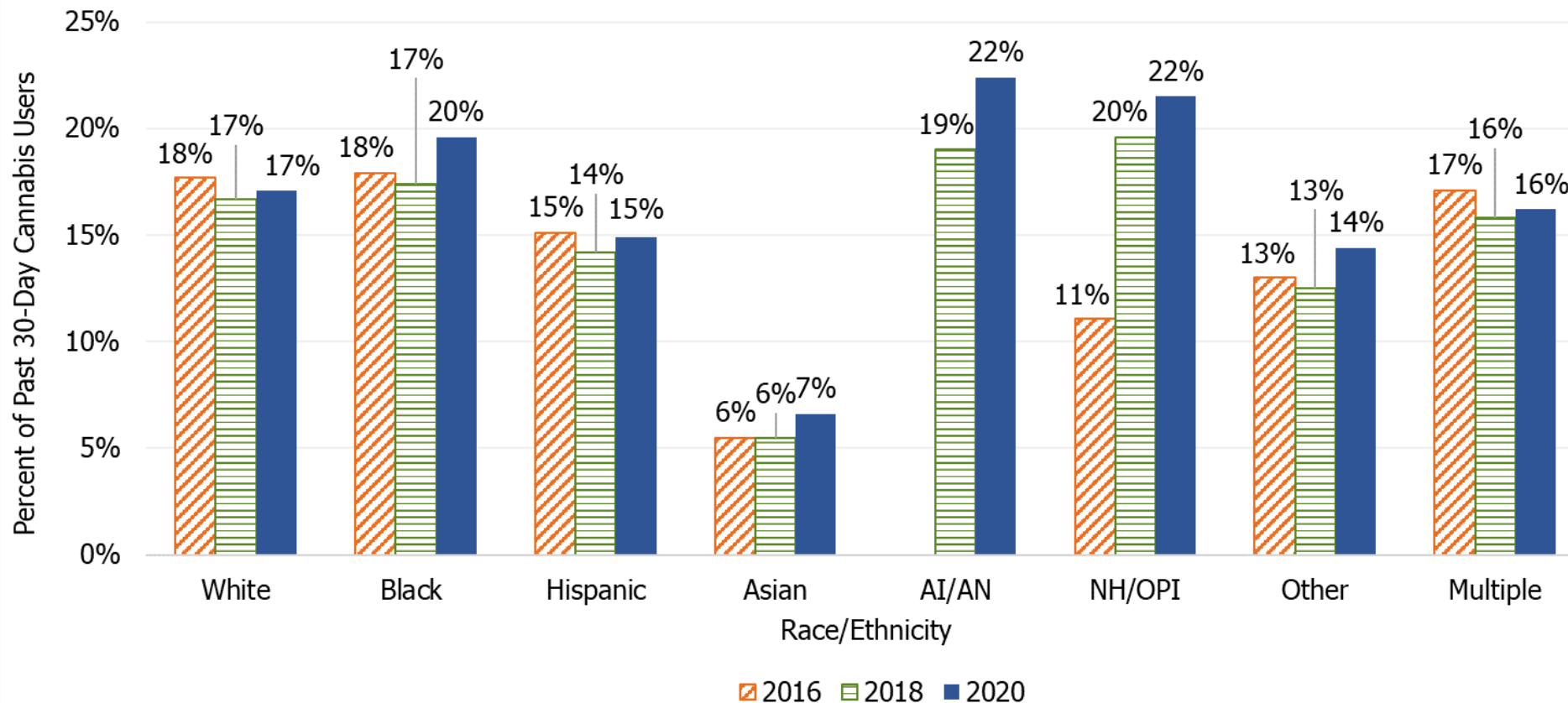
**Figure 2. Adult Past 30-Day Cannabis Use by Age Group, 2017-2020**



Between 2017 and 2020, adults aged 21-24 comprised the largest proportion of adult current cannabis users in California, followed by adults aged 25 to 34 and young adults aged 18-20 (Figure 2). Current cannabis use declines with age after age 35.

# Trends in Cannabis Use Among California Youth

**Figure 3. Youth Past 30-Day Cannabis Use by Race/Ethnicity, 2016-2020**



Notes: AI/AN is American Indian/Alaskan Native; NH/OPI is Native Hawaiian/Other Pacific Islander. AI/AN estimates for 2016 are suppressed due to small sample size.

In 2020, 15 percent of high school students in California reported using cannabis in the previous 30 days. This was unchanged from 2018 (15 percent). In California, the percentage of 12th graders who reported current cannabis use is lower (18 percent) than the national percentage of 12th graders who reported current cannabis use, which was 22 percent in 2020.<sup>4,5</sup>

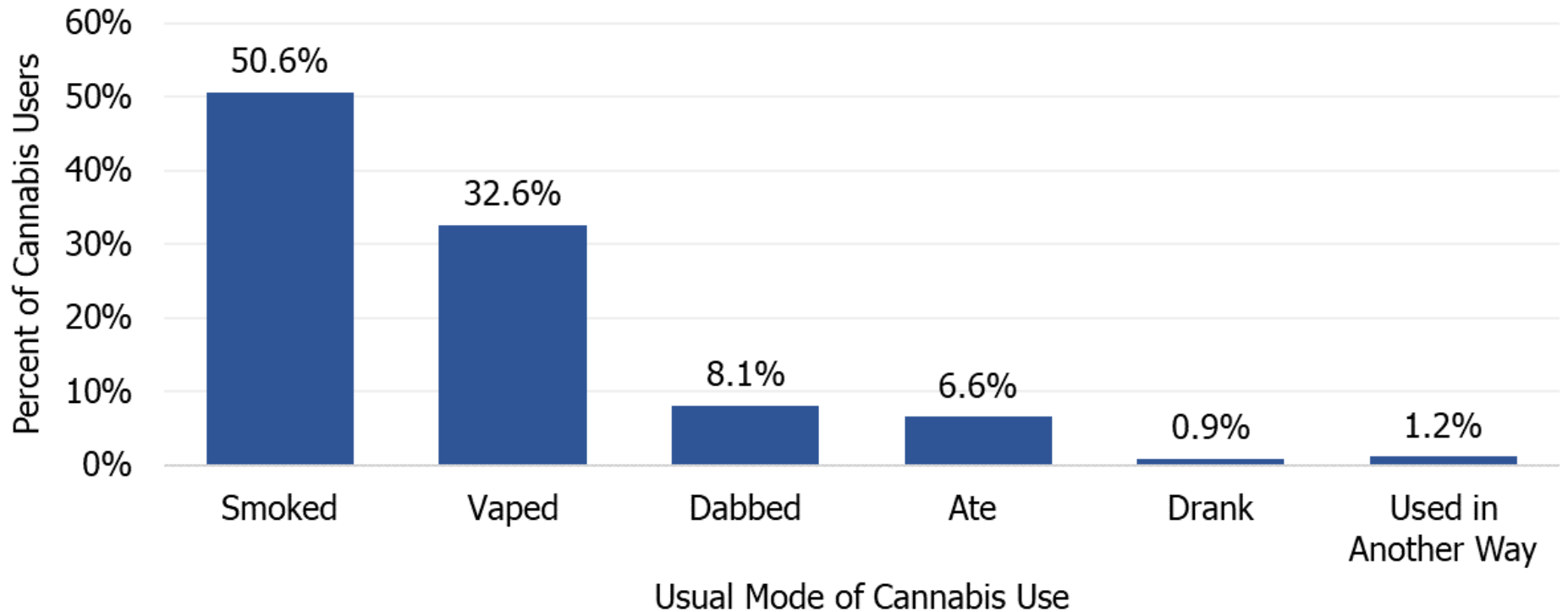
In 2020, as in 2018, American Indian/Alaska Native and Native Hawaiian/Other Pacific Islander students had the highest prevalence of current cannabis use, followed by Black, White, and Multiple Race/Ethnicity students (Figure 3).

<sup>4</sup> California Student Tobacco Survey, 2016-2020

<sup>5</sup> Johnston, LD., et al. (2021). Monitoring the Future National Survey Results on Drug Use 1975-2020: Overview, Key Findings on Adolescent Drug Use. Ann Arbor: Institute for Social Research, University of Michigan.

# Trends in Cannabis Use Among California Youth

**Figure 4. Usual Mode of Cannabis Use Among Youth, 2020**



In 2020, the most commonly reported method of usual cannabis use among California high school students was smoking (51 percent). However, many youth who use cannabis (33 percent) reported vaping as their usual mode of cannabis use (Figure 4).



Image Credit: Getty Stock Image





Image Credit: Getty Stock Image

### **Cannabis Perceptions**

From 2017-2019, 35 percent of 7th, 9th, and 11th graders in California reported perceiving great risk of harm from using cannabis occasionally.

Thirty-eight percent of 7th graders perceived great risk of harm from using cannabis occasionally, compared to 32 percent of 11th graders. Forty-five percent of 7th, 9th, and 11th graders also reported that cannabis was very easy or fairly easy to obtain.<sup>6</sup>

### **Cannabis Secondhand Smoke Exposure**

In 2020, 16 percent of California high school students reported being in a room with someone else who was smoking cannabis in the previous 14 days, while 10 percent reported being in a car with someone else who was smoking cannabis in the previous 14 days.<sup>7</sup> Secondhand cannabis smoke potentially exposes individuals to chemicals that are known to the State of California to cause cancer and other health effects.<sup>8</sup>



Image Credit: Getty Stock Image

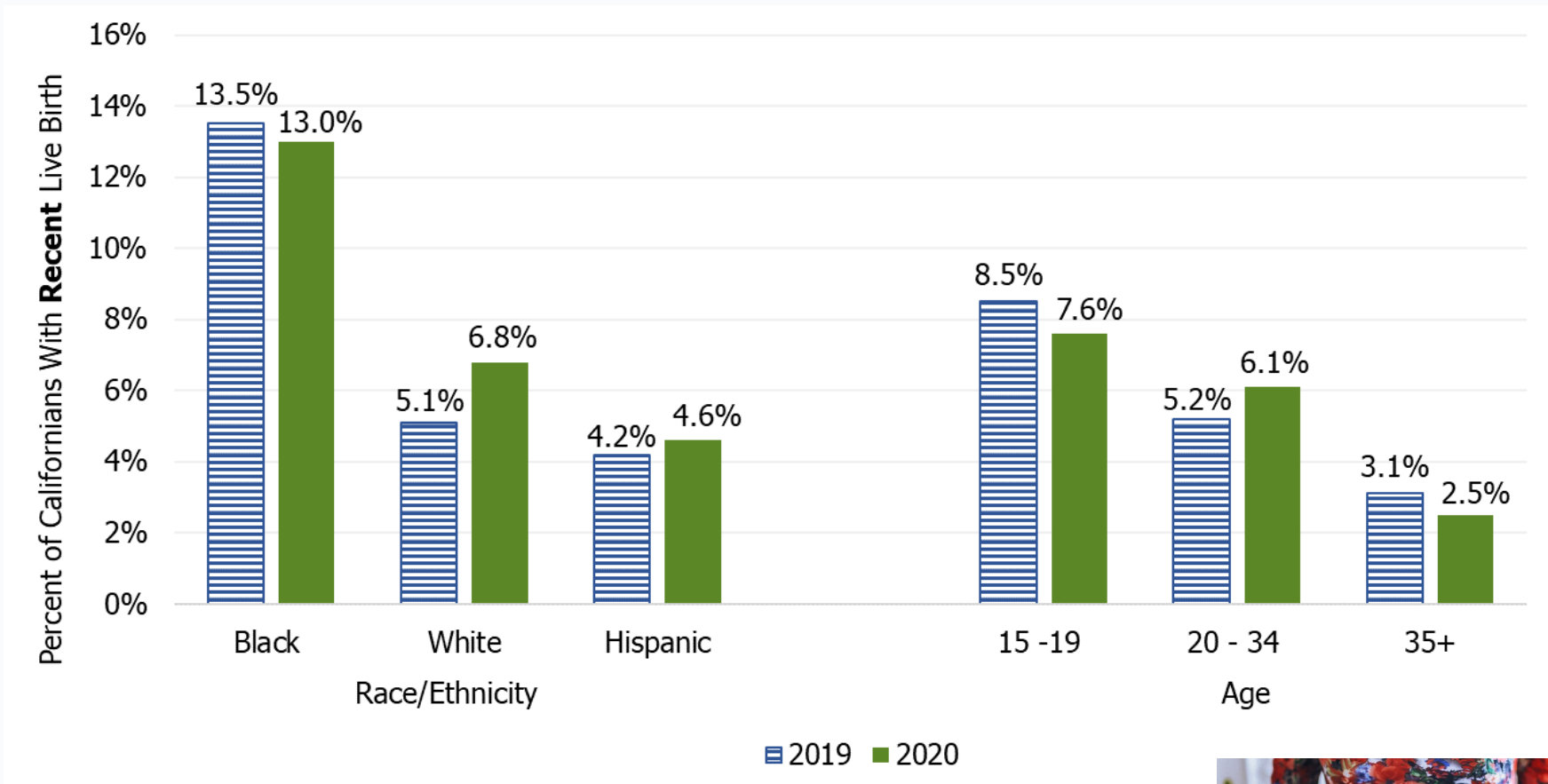
<sup>6</sup> California Healthy Kids Survey, 2017-2019

<sup>7</sup> California Student Tobacco Survey, 2020

<sup>8</sup> Moir, D., et al. (2008). A Comparison of Mainstream and Sidestream Marijuana and Tobacco Cigarette Smoke Produced Under Two Machine Smoking Conditions. *Chemical research in toxicology*, 21(2), 494-502.

# Cannabis Use During Pregnancy

Figure 5. Cannabis Use During Pregnancy Among Californians with a Recent Live Birth, 2019-2020



Exposure to cannabis during pregnancy or through breastfeeding can have serious negative effects on childhood brain development and cognitive function. Babies exposed to cannabis before they are born may have long term deficits in language comprehension, memory, and attention.<sup>9</sup> In 2020, among women with a recent live birth, Black and those aged 15-19 reported the highest use of cannabis during pregnancy (13 and 8 percent, respectively) (Figure 5).<sup>10</sup>



Image Credit: Microsoft Stock Image

<sup>9</sup> Centers for Disease Control and Prevention. [Marijuana Use and Pregnancy](#). 2020.

<sup>10</sup> Maternal and Infant Health Assessment Survey, 2019-2020.

# Cannabis Poisoning-Related Emergency Department Visits

**Figure 6. Emergency Department Visits Related to Cannabis Poisoning, 2016-2020**

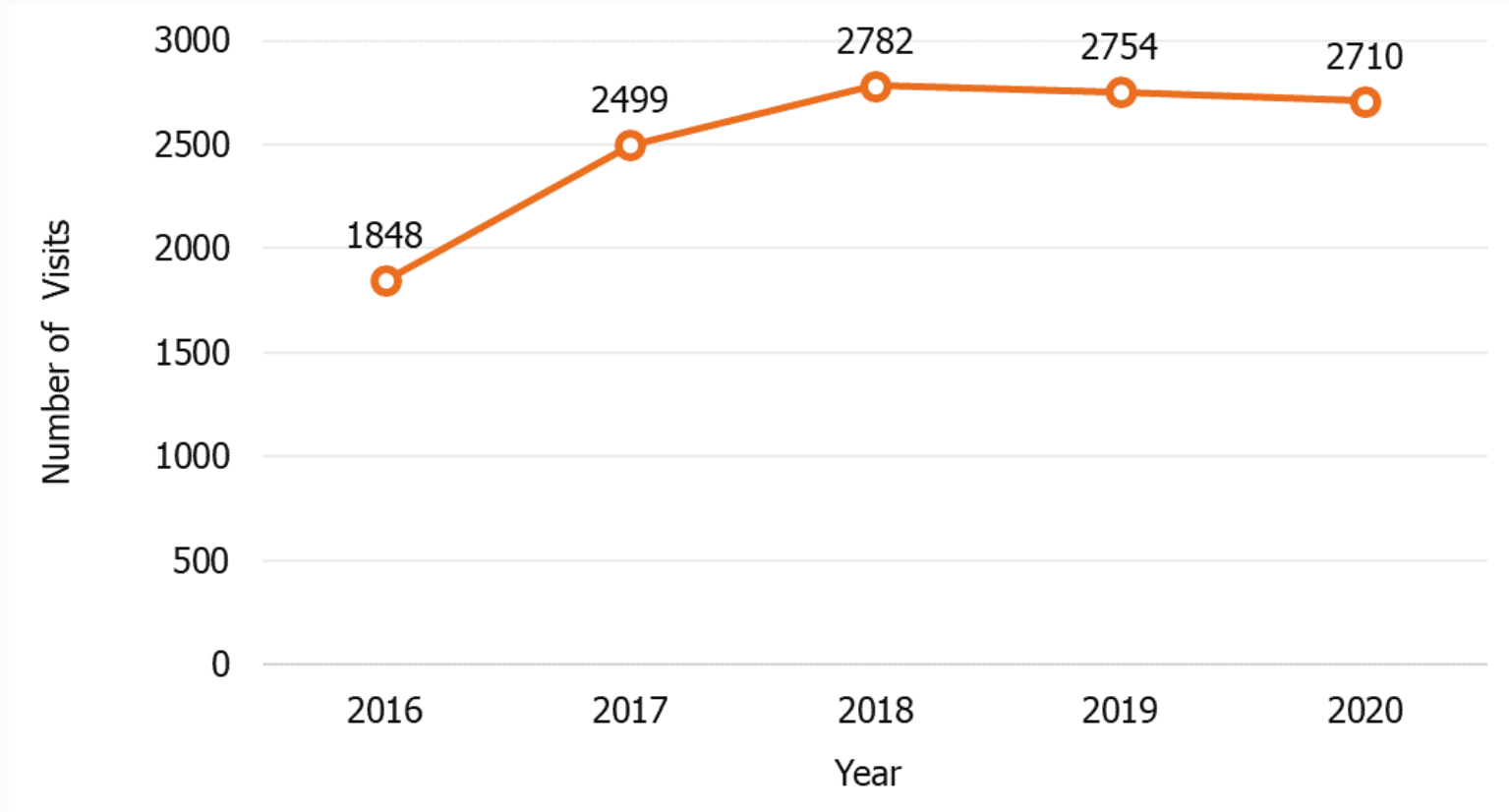


Image Credit: Microsoft Stock Image

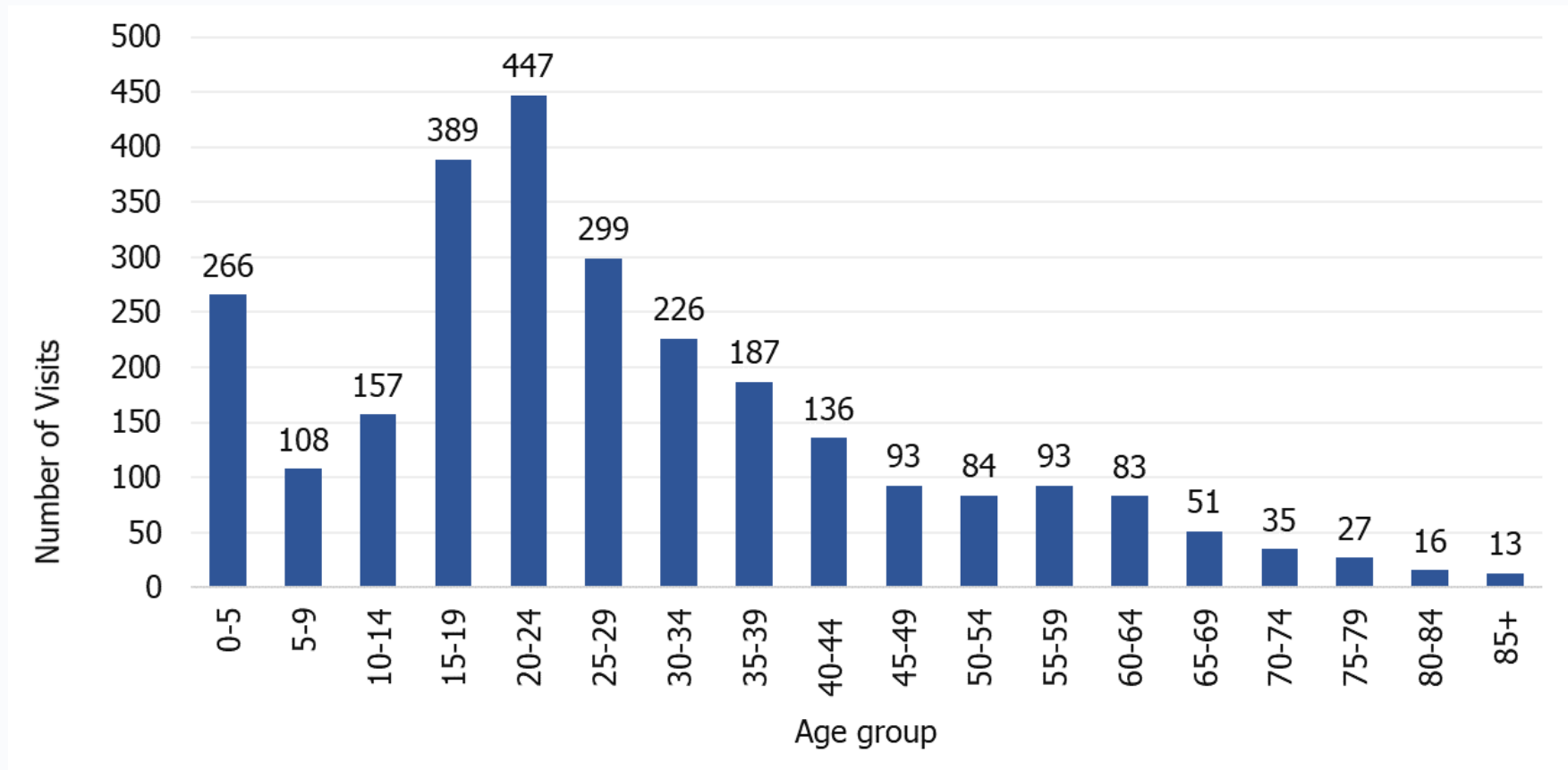
Between 2016 and 2020 the number of emergency department visits related to cannabis poisoning increased, from 1,848 visits in 2016 to 2,710 visits in 2020 (Figure 6).<sup>11</sup>

<sup>11</sup> California Department of Health Care Access and Information, Emergency Department Visit Data, 2016-2020



# Cannabis Poisoning-Related Emergency Department Visits

Figure 7. Emergency Department Visits Related to Cannabis Poisoning by Age Group, 2020



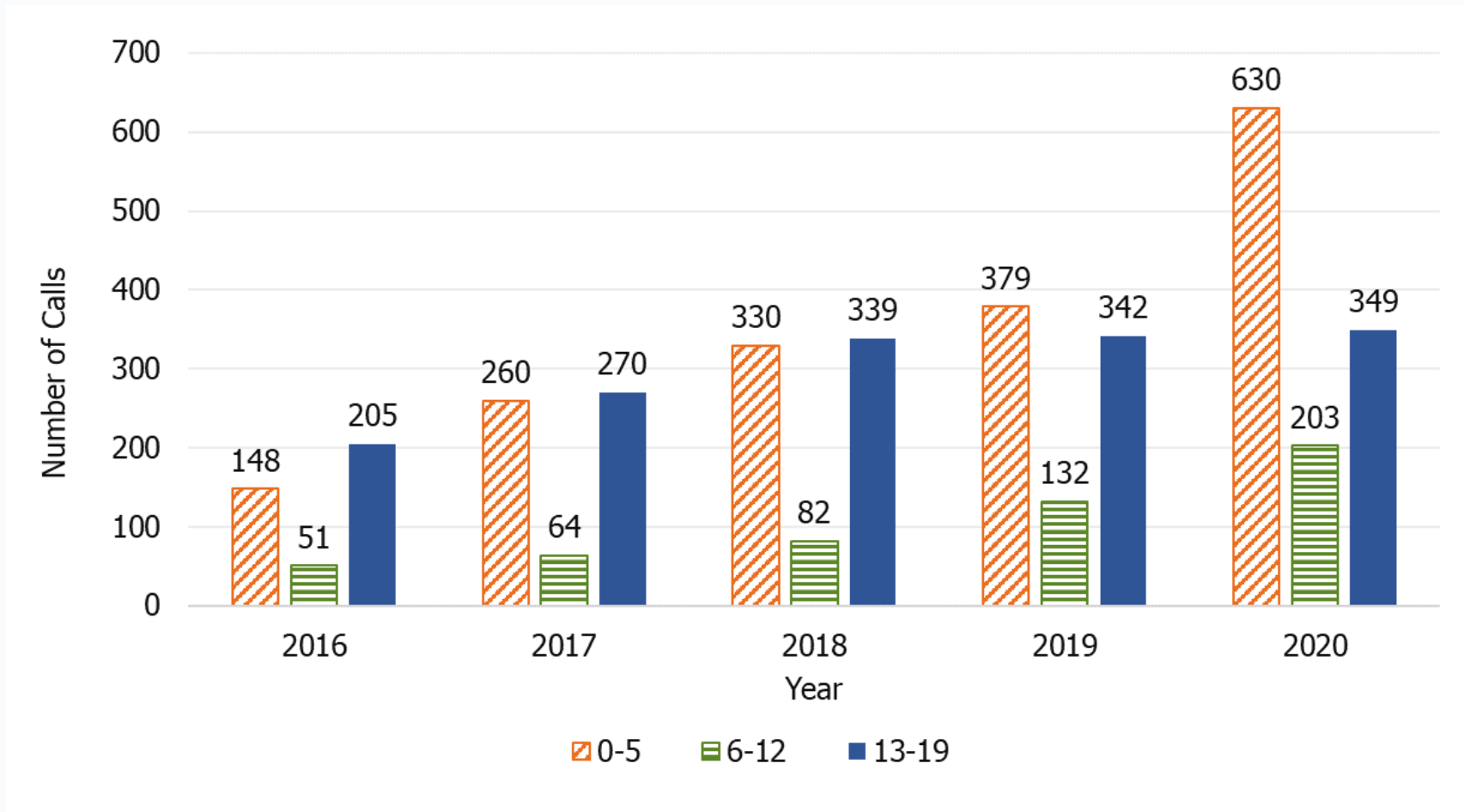
In 2020, the 15-19 and 20-24 year old age groups had the highest number (389 and 447 visits, respectively) of cannabis poisoning-related emergency department visits among all ages (Figure 7). Among youth under five years of age, there were 266 cannabis poisoning-related emergency department visits in 2020.



Image Credit: Microsoft Stock Image

# Calls to the California Poison Control System about Cannabis Exposure Among Youth

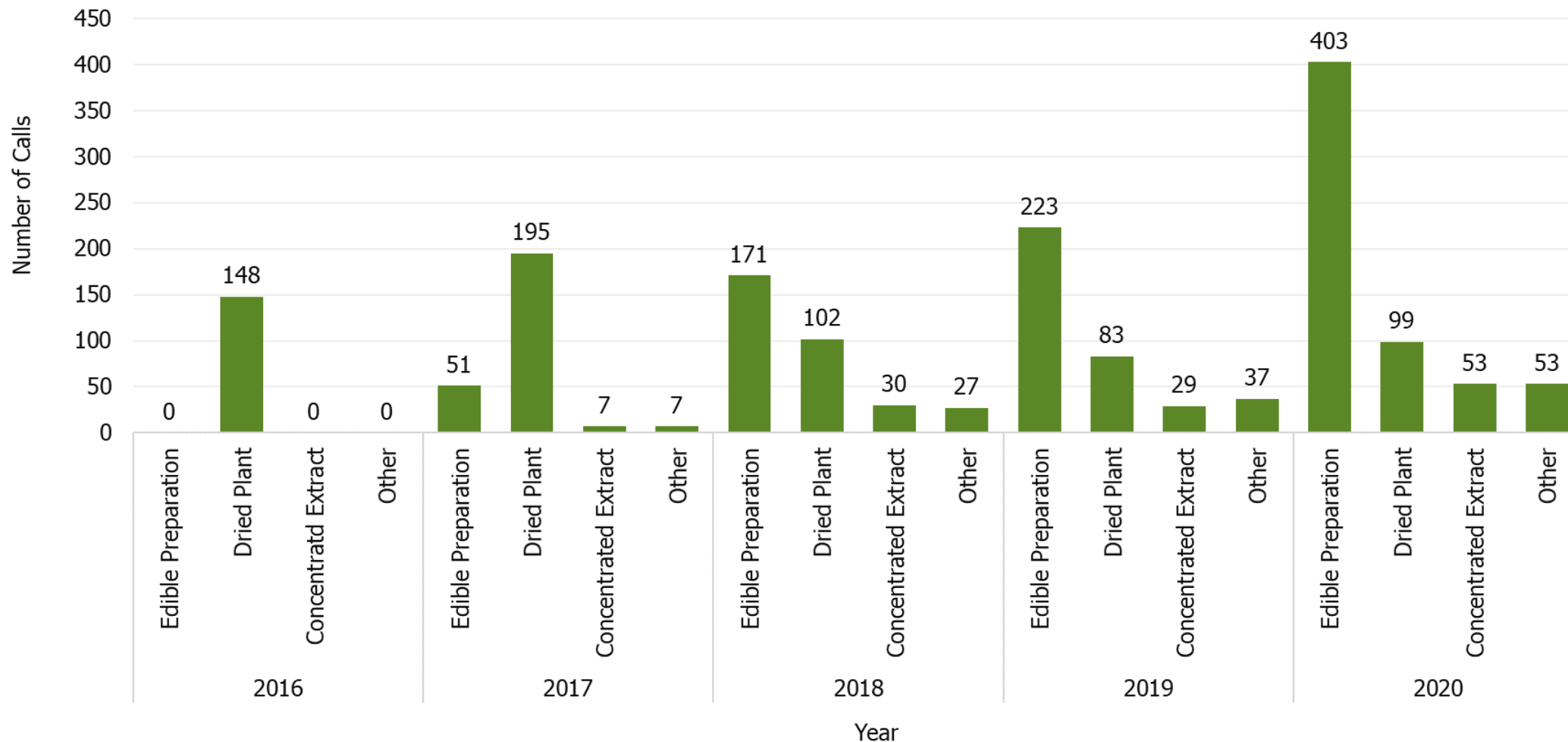
**Figure 8. Cannabis-Related Calls to the California Poison Control System by Youth Age Group, 2016-2020**



Although there was an increase in Poison Control System calls across all age groups from 2016 to 2020 (850 calls in 2016 and 1,934 calls in 2020), calls increased significantly among children. Between 2016 and 2020, there was an increase of 326% in Poison Control System calls about cannabis exposure among children under six years old (148 calls in 2016 and 630 calls in 2020) (Figure 8).<sup>12</sup>

# Calls to the California Poison Control System about Cannabis Exposure Among Youth

**Figure 9. Cannabis-Related Calls to the California Poison Control System for Children Under Six Years Old by Product, 2016-2020**



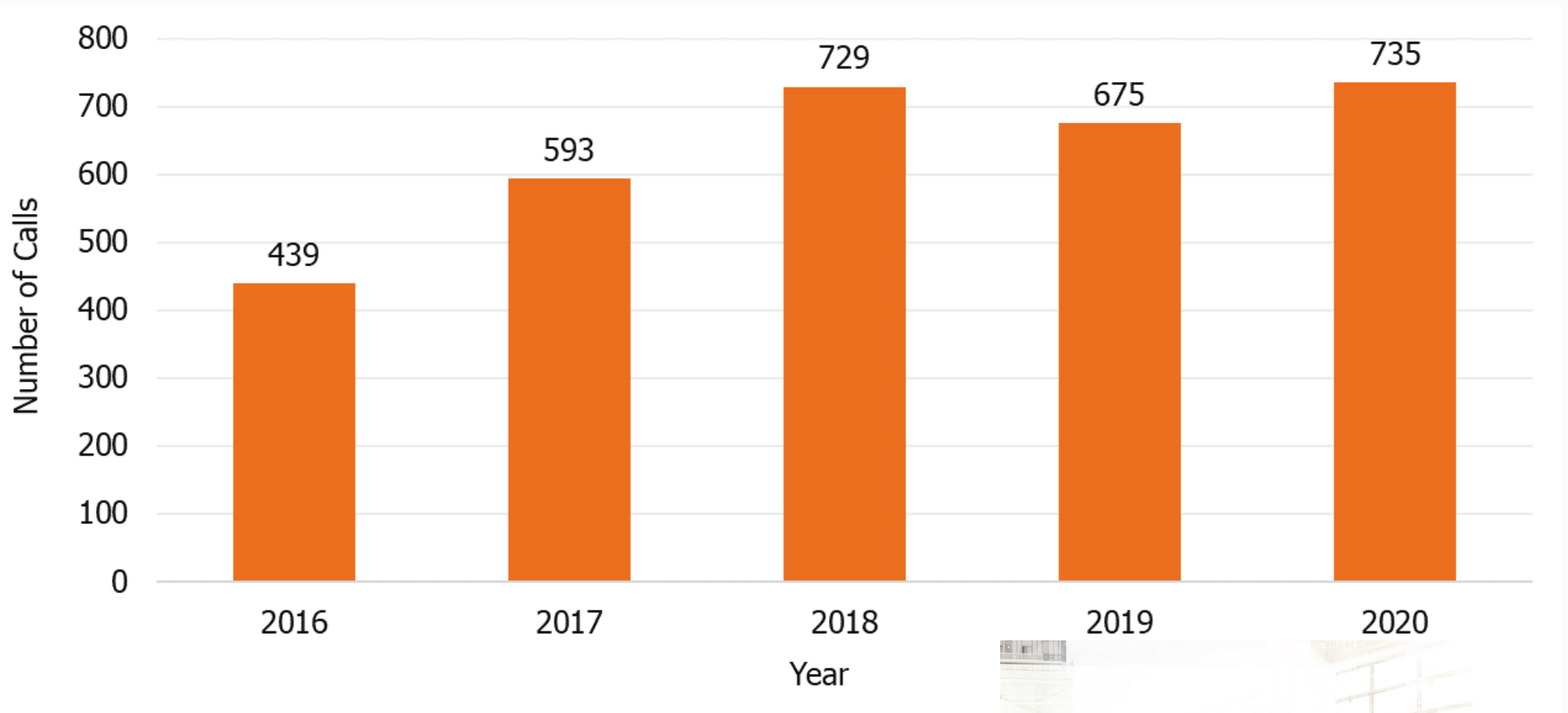
Since 2018, exposure to cannabis edibles has made up the largest share of cannabis-related calls to the California Poison Control System for children under six years of age. While no calls were reported in 2016, between 2017 and 2020 there was a 690% increase in the number of calls to the California Poison Control System related to cannabis edibles for children under six (Figure 9).

Because of their smaller size and weight, children are more sensitive to the effects of cannabis and are at higher risk for cannabis poisoning.<sup>13</sup>

<sup>13</sup> Lisi, D. M. (2022). Cannabis Edibles and Pediatric Toxicity Risk. *US Pharm*, 47(9), 6-12.

# Calls to the California Poison Control System about Cannabis Exposure Among Adults

**Figure 10. Cannabis-Related Calls to the California Poison Control System for Adults Aged 20 and Older, 2016-2020**



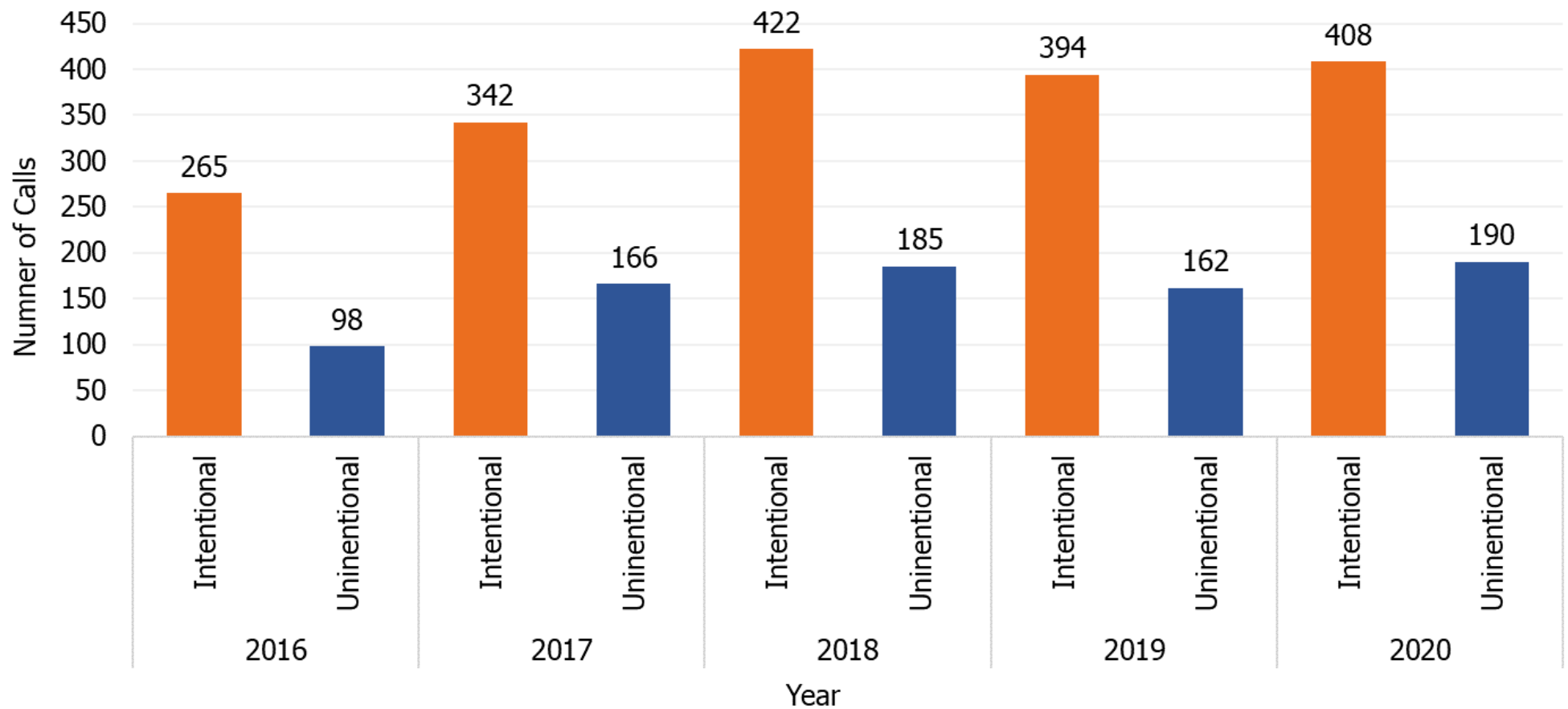
Between 2016 and 2020 there was a 67% increase in the number of cannabis-related calls to the California Poison Control System for adults aged 20 and older (Figure 10).



Image Credit: Microsoft Stock Image

# Calls to the California Poison Control System about Cannabis Exposure Among Adults

**Figure 11. Cannabis-Related Calls to the California Poison Control System for Adults Aged 20 and Older by Intent, 2016-2020**



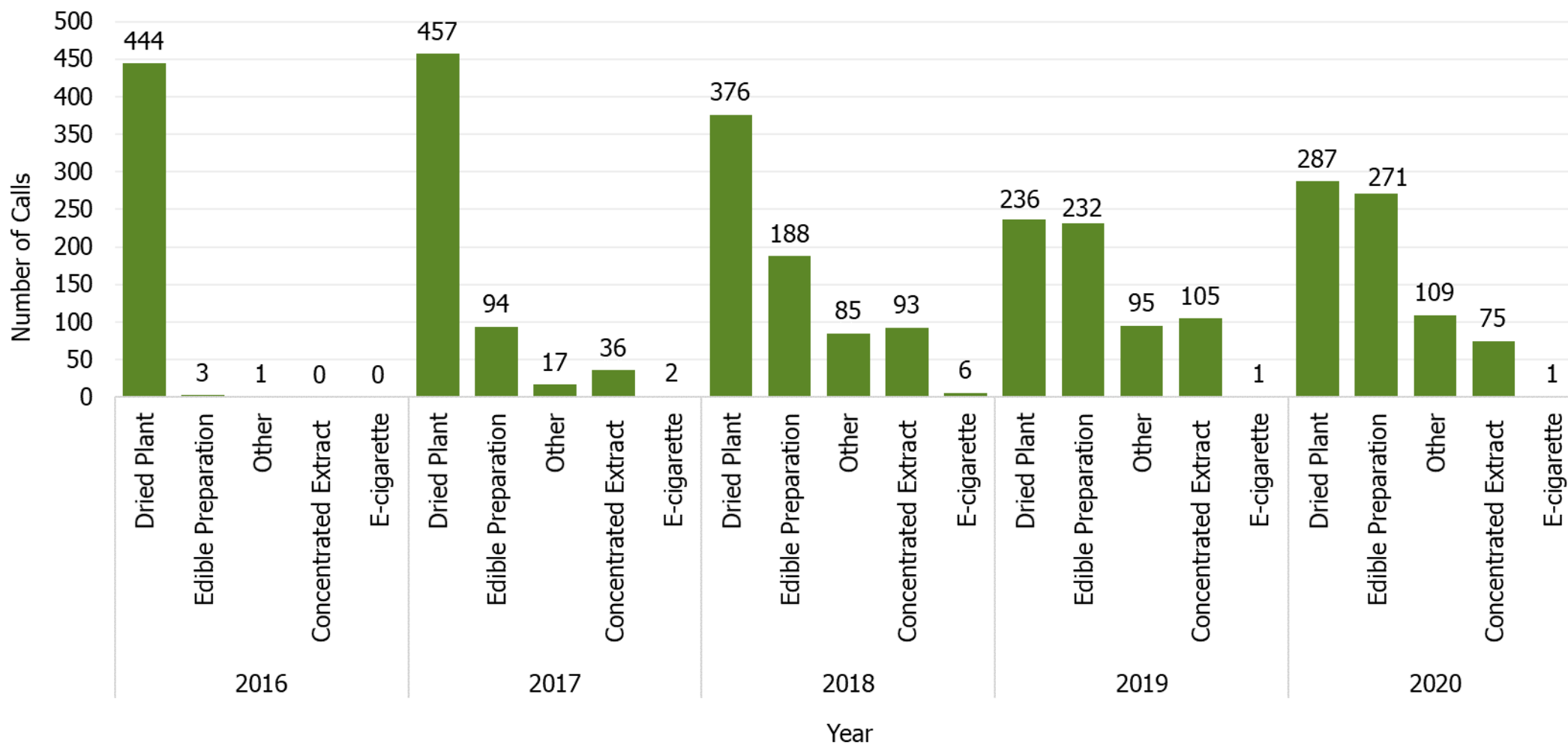
Note: Calls to the California Poison Control System related to cannabis exposure due to unknown or other reasons are excluded.

Calls to the California Poison Control System about cannabis most often involved intentional exposure to cannabis products among adults ages 20 and older (Figure 11). In 2020, there were 408 calls to the California Poison Control System about intentional cannabis exposure among adults aged 20 and older compared to 190 calls about unintentional cannabis exposure.



# Calls to the California Poison Control System about Cannabis Exposure Among Adults

**Figure 12. Cannabis-Related Calls to the California Poison Control System for Adults Aged 20 and Older by Product, 2016-2020**



Between 2016 and 2020, among adults aged 20 and older, there were more cannabis-related calls to the California Poison Control System for exposure to dried plant than any other product type, although the number of calls related to dried plant has decreased each year since 2017. During the same time period, calls involving exposure to edible preparations increased from just three calls in 2016 to 271 calls in 2020 (Figure 12).

The California Department of Public Health (CDPH), Substance and Addiction Prevention Branch's (SAPB) Youth Cannabis Prevention Initiative (YCPI) works to address the negative impacts and consequences of youth cannabis use through health education; public awareness; state and local partnerships; and policy, systems, and environmental change. Visit the [CDPH Youth Cannabis Prevention Initiative website](#) to learn more about YCPI.

The YCPI is supported by the Youth Education Prevention, Early Intervention and Treatment Account (YEPEITA), established by the Control, Regulate and Tax Adult Use of Marijuana Act (AUMA). AUMA legalized the recreational sale and use of cannabis to people over the age of 21 and set up the Cannabis Tax Fund, including the YEPEITA.

For questions about this data snapshot or the YCPI, please contact us at [cannabis@cdph.ca.gov](mailto:cannabis@cdph.ca.gov).

