

# Marijuana and California Youth: Trends and Impacts

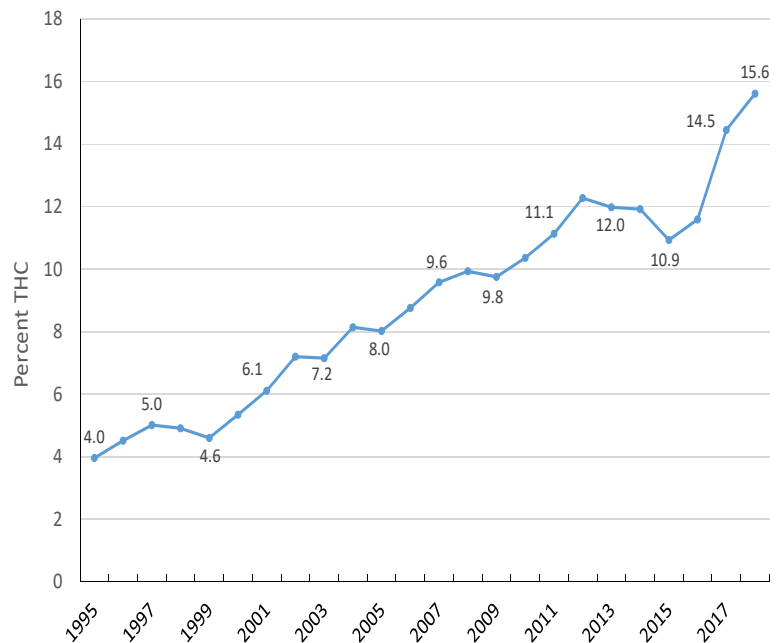


## About Marijuana

Marijuana is the most commonly used drug in the United States.<sup>1</sup> It can be taken in many forms, such as eaten in cookies and candies (i.e., edibles), smoked, vaped, or dabbed as an oil or concentrate. The chemical tetrahydrocannabinol (THC) that is present in the marijuana plant is what gives the user a feeling of being “high”. The plant contains other chemicals such as cannabidiol (CBD) and flavor compounds called terpenes, which may also have an effect on the user's mood.

The amount of THC can vary widely by form. For example, marijuana that is dabbed can have up to ten times more THC per puff than smoked marijuana.<sup>2</sup> The amount of THC in marijuana has increased significantly over the last 25 years, from about four percent in 1995 to over 15 percent by 2018 (Figure 1). Some forms of marijuana, like edibles and concentrates, have very high levels of THC – up to 90 percent, making youth use of marijuana a cause for concern.<sup>3,4</sup>

Figure 1. Increase in THC concentration from 1995 to 2018. Source: National Institutes on Drug Abuse (NIDA) Potency Monitoring Program, Quarterly Report # 142.



## Marijuana and Health

### Fast Fact

Marijuana can affect brain development. Studies have shown that youth who are heavy users of marijuana may have a reduction in mental abilities that lasts into adulthood.<sup>5</sup>



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Marijuana use among youth, particularly products with high concentrations of THC, are known to have serious health effects on the developing brain.

Youth who use marijuana are at increased risk for mental health problems, including depression and increased risk of suicide.<sup>6</sup>

Youth who use marijuana may also suffer from poorer academic performance, especially among those who begin using marijuana at young ages.<sup>7,8</sup>

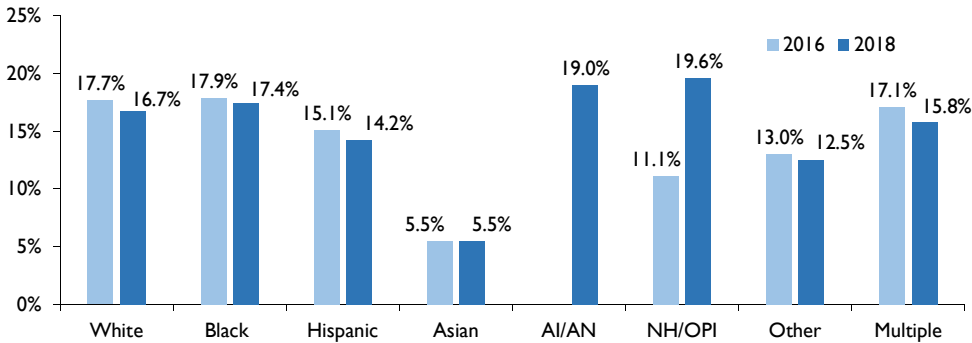
These negative effects may continue into adulthood among users.<sup>9</sup>

Marijuana is the most commonly used drug among California youth. In 2018, 31.4 percent of California high school students reported having ever tried marijuana.

## Fast Fact

In 2018, nearly 15 percent of California high school students had used marijuana in the past 30 days.<sup>10</sup>

Figure 2. Past 30-Day Marijuana Use Among CA High School Students by Race/Ethnicity, 2016 and 2018. Source: The California Student Tobacco Survey, 2016-2018. Notes: AI/AN = American Indian/Alaska Native; NH/OPI = Native Hawaiian/Other Pacific Islander. AI/AN data is suppressed for 2016 due to small sample size.



In 2018, 14.7 percent of high school students in California reported using marijuana in the previous 30 days. This was unchanged from 2016 (14.5 percent), and lower than the national percentage of youth who used marijuana, which was nearly 20 percent (19.3 percent) in 2018.<sup>10,11</sup>

Marijuana use in the previous 30 days by California high school students did not increase for most racial/ethnic groups from 2016 to 2018 (Figure 2). However, use did increase for Native Hawaiian/Other Pacific Islanders.

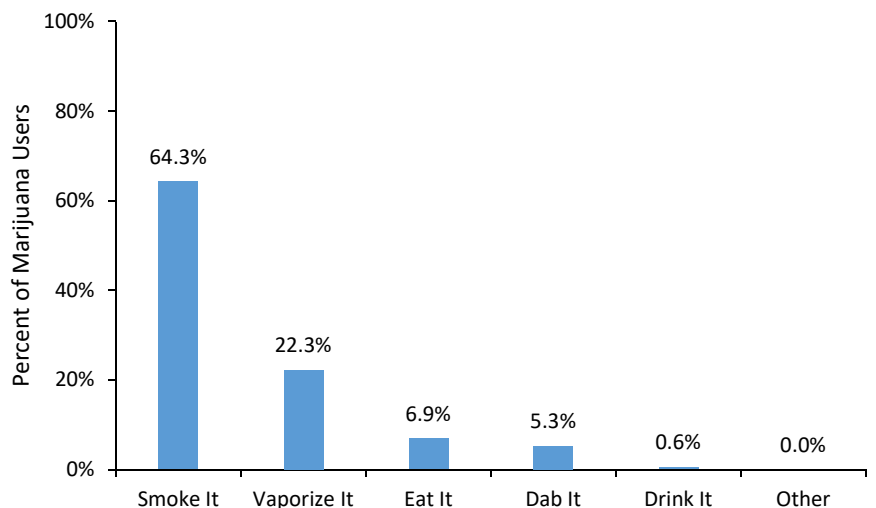
In 2018, the most commonly reported method of usual marijuana use among high school students was smoking (64.3 percent). However, nearly a quarter of youth who used marijuana (22.3 percent) reported that vaping is the form of marijuana they usually use (Figure 3).

Use of vaped marijuana has been associated with a higher likelihood of developing substance use problems than marijuana smoking.<sup>12</sup>

Figure 3. Usual method of marijuana use among California high school students in 2018. Source: 2018 California Student Tobacco Survey.



Credit: Adobe Stock Image





## Fast Fact

Marijuana smoke contains more ammonia, hydrogen cyanide, and toxic aromatic hydrocarbons than cigarette smoke.

Secondhand marijuana smoke contains many of the same chemicals as cigarette smoke, and has been shown to be dangerous to health even over short time periods.<sup>13,14</sup>

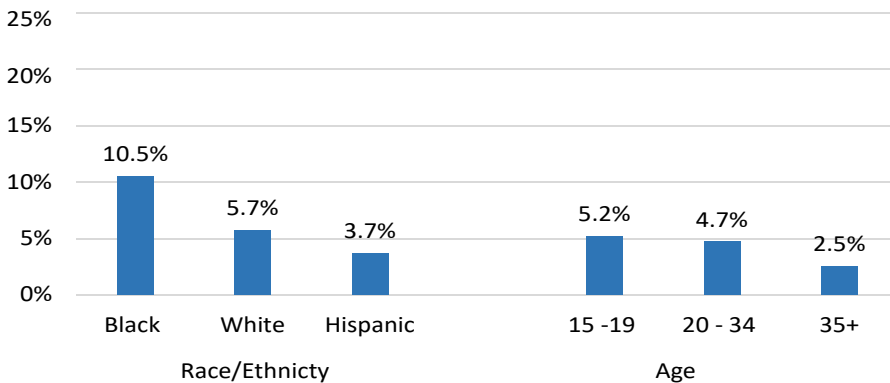
In 2018, 30.7 percent of California high school students reported being in a car or room with someone else who was smoking marijuana in the previous 30 days, potentially exposing them to chemicals that are known to the State of California to cause cancer and other health effects.<sup>15</sup>



Credit: Adobe Stock Image

## Prenatal Marijuana Exposure

Figure 4 . Marijuana use during pregnancy among women with a live birth, 2016.  
Source: 2016 Maternal and Infant Health Assessment (MIHA).



## Fast Fact

A recent study shows that marijuana use among pregnant women in California increased between 2009 and 2016.<sup>16</sup>

Exposure to marijuana during pregnancy or through breastfeeding can have serious negative effects on childhood brain development and cognitive function. Babies exposed to marijuana before they are born may have long term deficits in language comprehension, memory, and attention.<sup>17</sup>

In 2016, 4.2 percent of women with a live birth in California used marijuana during pregnancy.

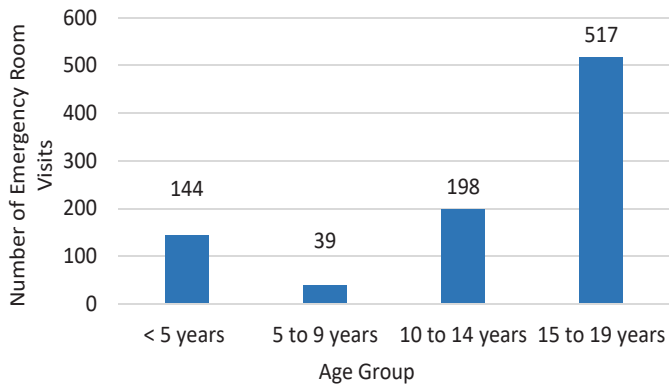
Marijuana use was higher among younger women and Black women (Figure 4).



### Fast Fact

In 2018, the year the sale of recreational marijuana became legal in California, there were 1,488 calls to Poison Control Centers in California related to marijuana, a 75 percent increase in calls from 2016.

Figure 5. Number of emergency room visits for marijuana poisoning by age group in California in 2018. Source: California Office of Statewide Health Planning and Development, Emergency Department Data.




Accidental or unintentional exposure to marijuana can pose a serious risk to young children. Although rare, marijuana ingestion among young children can result in irregular heartbeat, low blood pressure, seizures, and coma.<sup>18</sup> In 2018, the California Poison Control Center received 329 calls about unintentional marijuana exposure among children aged 0 to 5 years.

In 2018, the California Poison Control Center received 111 calls about unintentional marijuana exposure and 287 calls about intentional marijuana exposure among youth aged 6 to 19 years old.

In 2018, 144 children under the age of five visited the emergency room for marijuana poisoning (Figure 5) and 78 children under age five were hospitalized.



Credit: Adobe Stock Image

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