Tea on THC Key Stats

The General Assembly directed the Colorado School of Public Health in 2021 to review the scientific literature on the use and effects of high concentration cannabis. Here are some of their key findings.



Trends in THC Concentration

- THC concentrations nationally averaged around 3% in 1983 and increased to around 13% by 2008, with some products containing as much as 37% concentration (National Criminal Justice Reference Service, 2009).
- By 2018, flower strains contained 17% to 28% THC, and high concentration products had as much as 95% THC (Stuyt, 2018).
- In Colorado, THC concentrations in flower rose from <15% to 20% between 2014 and 2020, and in concentrates, from 40% to 70% (MPG Consulting, 2020).
- As the concentration of THC in cannabis has increased, the CBD has decreased. The ratio of THC to CBD averaged 14:1 in 2001 and reached 80:1 by 2014 (ElSohly et al., 2016).



Cannabis & Pregnancy

- Cannabis is the most widely used drug during pregnancy and use is increasing (Substance Abuse and Mental Health Services Administration, 2023; American College of Obstetricians and Gynecologists, 2017; Ryan et al., 2018).
- Between 2% and 5% of women self-report using cannabis during pregnancy (El Marroun et al., 2011; VanGelder et al., 2010; Passey et al., 2014; Beatty et al., 2012; Schempf et al., 2008).
- Among mothers who are younger, live in urban areas, and are socioeconomically disadvantaged, between 15% and 28% self-report using cannabis during pregnancy (American College of Obstetricians and Gynecologists, 2017; Passey et al., 2014; Schempf et al., 2009).
- About half of women who use cannabis before becoming pregnant continue using it during their entire pregnancy (Passey et al., 2014; Beatty et al., 2012; Moore et al., 2010).
- From 2002 to 2020, prevalence of cannabis use in pregnancy during the first trimester increased from 6.3% to 16%, in the second trimester from 1.9% to 4.2%, and in the third trimester from 2.0% to 4.7% (Hayes et al., 2023).
- As many as 18% of women who use cannabis during pregnancy meet criteria for cannabis use disorder (Ko et al., 2015).



Cannabis Use Among Youth

- In 2021, 18.7% of those 12 and older, including 35.4% of those 18-25, used cannabis. It was the most commonly used drug in those age groups (Substance Abuse and Mental Health Services Administration, 2022).
- Forty percent of youth aged 12-17 who used cannabis in 2021 did so by vaping, which normally involves high concentration cannabis (Substance Abuse and Mental Health Services Administration, 2022).
- About 60% of everybody who used cannabis for the first time in 2021 was under 21 – that's 1.6 million new underage users (Substance Abuse and Mental Health Services Administration, 2022).

Mental Health Effects

- Adolescents who use cannabis have a 1.71X increased risk of developing psychosis compared to nonusers (Kiburi et al., 2021).
- In one study, 27.4% of respondents reported hallucinations during or after using marijuana (Levy et al., 2019).
- Young adults have 1.37X increased odds of developing depression if they used cannabis in adolescence, compared to nonusers (Gobi et al., 2019).
- Daily cannabis users have 3.2X increased odds of developing a psychotic disorder compared with never users (Starzer et al., 2018).
- Daily users of high potency products have 5X increased odds of developing a psychotic disorder compared with never users (Starzer et al., 2018).
- 47.4% of cannabis-induced psychosis events convert to either schizophrenia or bipolar disorder (Di Forti et al., 2019).