# What You Need to Know About Youth and Marijuana

national council for Mental Wellbeing

# Massachusetts

#### WHAT IS MARIJUANA?

Marijuana refers to the extracts or dried leaves, flowers, stems and seeds of the cannabis plant.<sup>1</sup> The plant is made up of more than 100 different compounds, or cannabinoids, like tetrahydrocannabinol (THC) and cannabidiol (CBD).<sup>2</sup> It is also called cannabis, weed, pot, or bud – see the U.S. Drug Enforcement Administration (DEA) Report for more street names.

## WHAT ARE THE MARIJUANA LAWS IN MASSACHUSETTS?\*

Marijuana use by youth under age 21 is illegal in Massachusetts and every state, unless it has been recommended by a medical provider and the appropriate certification has been obtained. There is more information about the policies in Massachusetts at <u>Massachusetts Cannabis Control Commission</u>. Additional resources can be found on the <u>Cannabis Resource Center</u> webpage.

Medical Use of Marijuana .....LEGAL



Adult Non-Medical Use of Marijuana .....LEGAL

## **WHAT IS THC?**

Tetrahydrocannabinol, or THC, is the primary cannabinoid responsible for the impairing effects in cannabis.<sup>3</sup> There are a number of different forms of THC, including Delta-9 and Delta-8 THC. All forms of THC can be impairing. While Delta-9 THC is the most commonly known, products containing other forms of THC, like Delta-8 THC, are increasingly available in the marketplace, even in states where cannabis use has not been legalized.<sup>10</sup>

# How many young people in Massachusetts use marijuana?

16.6%

OF HIGH SCHOOL AGED YOUTH

in Massachusetts had used marijuana one or more times in the previous 30 days.8

Current adolescent marijuana usage data can be found in the most recent release of the Centers for Disease Control and Prevention's annual <u>Youth</u> <u>Risk Behavior Survey</u>.

## HOW DO PEOPLE USE MARIJUANA? WHAT ARE THE DIFFERENT PRODUCTS?

Marijuana and its oils and concentrates can be consumed in a variety of ways, including by smoking (e.g., joints, bowls, bongs, blunts), vaping (e.g., electronic vaporizing devices like e-cigarettes, vape pens), eating (e.g., cookies, chocolate, candies), drinking (e.g., soda, coffee, tinctures) and dabbing (through a dab rig).<sup>4</sup> Currently, there is not enough research to suggest that one way of consuming marijuana is safer than another.<sup>4</sup> Each method has different public health and safety risks and all can be harmful to youth brain development.<sup>4</sup>

<sup>\*</sup>This is accurate as of July 2023. Up-to-date state marijuana laws can be found on the National Council of State Legislatures State Cannabis Laws interactive map.

#### **DOES MARIJUANA AFFECT THE BRAIN?**

Yes, marijuana use directly affects the brain – specifically the parts responsible for:



Memory



Learning



**Attention** 



**Decision-making** 



Coordination



**Emotions** 



Reaction time<sup>2</sup>

When people begin using marijuana during their youth, especially with regular or heavy use, there is increased risk for impairments in brain development and attention, memory and learning.<sup>2</sup> These deficits may be long-lasting and can affect how youth perform in school.<sup>2</sup>



#### WHAT ARE THE OTHER HEALTH EFFECTS OF MARIJUANA?

### Marijuana can cause:

- Impairments in coordination and reaction time leading to increased risk for motor vehicle crashes and other injuries.<sup>1</sup>
- Increased risk of depression and anxiety.2
- Long-term physical and behavioral effects, including increased risk of schizophrenia and other psychoses.<sup>2</sup>
- Increased risk of suicide.<sup>2</sup>
- Chronic bronchitis from smoking marijuana.<sup>2</sup>

How marijuana affects a person depends on several factors, including the amount of THC in the marijuana, how often it is used, genetics, the age of first use and whether other substances like tobacco and alcohol are used at the same time.<sup>2</sup>

# HOW DO I KNOW IF A YOUNG PERSON HAS A CANNABIS USE DISORDER?

Some people who use marijuana may develop cannabis use disorder (CUD). The risk of developing CUD is higher in people who started using marijuana as a youth and who use marijuana very frequently. Some signs of CUD include craving marijuana, using more than intended, needing to use more to get the same high and using marijuana even though it causes problems at home, school or work and with relationships.

People with CUD are at risk for other issues, such as attention, memory and learning problems. Research is still underway to fully understand the health effects of marijuana.



For more information, check out the Cannabis Resource Center

# References

- 1. National Institute on Drug Abuse. (2021, December 24). Marijuana DrugFacts. https://www.drugabuse.gov/publications/drugfacts/marijuana.
- Centers for Disease Control and Prevention. (2021, June 2). Health effects of marijuana. https://www.cdc.gov/marijuana/health-effects/index.html.
- 3. National Institute on Drug Abuse. (2020, June 25). Marijuana concentrates DrugFacts. <a href="https://www.drugabuse.gov/publications/drugfacts/marijuana-concentrates">https://www.drugabuse.gov/publications/drugfacts/marijuana-concentrates</a>.
- 4. Schauer, G. L., Njai, R., Grant-Lenzy, A. M. (2020). Modes of marijuana use smoking, vaping, eating and dabbing: results from the 2016 BRFSS in 12 states. Drug Alcohol Depend, 209. doi: 10.1016/j.drugalcdep.2020.107900.
- 5. Harvard Health Publishing Harvard Medical School. (2021, September 24). Cannabidiol (CBD) what we know and what we don't. <a href="https://www.health.harvard.edu/blog/cannabidiol-cbd-what-we-know-and-what-we-dont-2018082414476">https://www.health.harvard.edu/blog/cannabidiol-cbd-what-we-know-and-what-we-dont-2018082414476</a>.
- 6. Congressional Research Service. (2019, March 22). Defining hemp: a fact sheet. https://sgp.fas.org/crs/misc/R44742.pdf.
- 7. United States Food and Drug Administration. (2021, September 14). 5 Things to know about delta-8 tetrahydrocannabinol delta-8 THC. <a href="https://www.fda.gov/consumers/consumer-updates/5-things-know-about-delta-8-tetrahydrocannabinol-delta-8-thc">https://www.fda.gov/consumers/consumer-updates/5-things-know-about-delta-8-tetrahydrocannabinol-delta-8-thc</a>.
- 8. Centers for Disease Control and Prevention. (2021). High school YRBS Massachusetts 2021 results. https://nccd.cdc.gov/Youthonline/App/Results.aspx?TT=C&SID=HS&QID=H47&LID=MA&LID2=SL&YID=2021&YID 2=SY&SYID=&EYID=&HT=C03&LCT=LL&COL=S&ROW1=N&ROW2=N&TST=false&C1=&C2=&SC=DEFAULT&SO=ASC&VA=CI&CS=Y&DP=1&QP=G&FG=G1&FA=A1&FR=R1&FS=S1&FSC=P1&FSI=I1
- Centers for Disease Control and Prevention. (2020). Addiction (Marijuana or Cannabis Use Disorder). https://www.cdc.gov/marijuana/health-effects/addiction.html.
- 10. Centers for Disease Control and Prevention. (2021). Increases in Availability of Cannabis Products Containing Delta-8 THC and Reported Cases of Adverse Events. <a href="https://emergency.cdc.gov/han/2021/han00451.asp#:~:text=However%2C%20THC%20has%20several%20other,psychoactive%20as%20delta%2D9%20THC.">https://emergency.cdc.gov/han/2021/han00451.asp#:~:text=However%2C%20THC%20has%20several%20other,psychoactive%20as%20delta%2D9%20THC.</a>









FINANCIAL DISCLAIMER: This project is supported by the Centers for Disease Control and Prevention (CDC) of the U.S. Department of Health and Human Services (HHS) as part of a financial assistance award totaling \$1,500,000 with 100% funded by CDC/HHS. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by CDC/HHS or the U.S. Government.

