



# Cannabis: Physiological and psychological impact

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The use of affirming language inspires hope and advances recovery.

# LANGUAGE MATTERS. Words have power. PEOPLE FIRST.

The ATTC Network uses affirming language to promote the promises of recovery by advancing evidence-based and culturally informed practices.





#### **Objectives**

- 1. Provide content knowledge and empirical data about THC.
- 2. Discuss the main implications of THC legality in the USVI
- 3. Present the difference between myths and facts regarding THC uses and side effects.
- 4. Provide strategies for dealing with questioning and doubts from children and adolescents







### Content knowledge





#### What is marijuana?

- Marijuana is a gray-green mixture of dried and crushed leaves and flowers of cannabis sativa, the hemp plant.
- Some people smoke marijuana in cigarettes called cigarettes, joints; Many use pipes, water pipes (sometimes called bongs) or marijuana cigars called blunts (which are usually assembled by cutting a cigar lengthwise and replacing all or part of the tobacco with marijuana).
- Marijuana can also be used to brew tea and, especially when sold or consumed for medicinal purposes, is often mixed into (edible) foods such as brownies, cookies, or candy.







#### What is marijuana?

The most potent forms of marijuana include sinsemilla (from special attention female plants) and concentrated resins that contain high doses of marijuana's active ingredients, such as honey-like hash oil, soft, waxy budder, and firm, amber-like shatter. These resins are becoming increasingly popular among those who consume them for recreational or medical purposes.



#### What is marijuana?

The main psychoactive substance in marijuana, which is responsible for most of the intoxicating effects people seek, is delta-9-tetrahydrocannabinol (THC). This substance is found in the resin produced by leaves and shoots, mainly from the female cannabis plant. The plant also contains more than 500 chemicals, including more than 100 compounds that are chemically related to THC and are known as cannabinoids.



### Synthetic marijuana











### What are synthetic cannabinoids?

- Synthetic cannabinoids are man-made chemical compounds that alter the mind.
- They are sprayed on the dry, crushed matter of a plant so they can be smoked or sold as liquids to be vaporized and inhaled in e-cigarettes or other devices.
- These products are also known as herbal or liquid incense.
- They are called cannabinoids because they are similar to chemicals found in the marijuana plant.





### What are synthetic cannabinoids?

- Because of this similarity, synthetic cannabinoids are sometimes called "synthetic marijuana" or "fake weed."
- They are often marketed as legal and harmless alternatives to that drug, but the reality is that synthetic cannabinoids pose risks and can affect the brain much more potency than marijuana.



### What are synthetic cannabinoids?

- Its actual effects can be unpredictable and, in some cases, more dangerous.
- These substances can endanger a person's life.





#### **Facts**

- Cannabis (marijuana) is one of the most used drugs in the United States, and its use is widespread among young people.
- In 2021, 35.4% of young adults aged 18 to 25 (11.8 million people) reported using marijuana in the past year.
- Rates of past year marijuana use among middle and high school students have remained relatively steady since the late 1990s(Monitoring the Future Survey).



#### **Facts**

- In 2022, 30.7% of 12th graders reported using marijuana in the past year and 6.3% reported using marijuana daily.
- In addition, many young people also use vaping devices to consume cannabis products. In 2022, nearly 20.6% of 12th graders reported that they vaped marijuana in the past year and 2.1% reported that they did so daily.



#### **Facts**

#### How many people suffer from a cannabis use disorder?

 Among people aged 12 and older in 2020, about 5.1% (or about 14.2 million) reported suffering from a cannabis use disorder in the past 12 months.











The U.S. Virgin Islands this week passed legislation to legalize cannabis for adults, bringing the number of states and territories in the United States that have legalized recreational marijuana to 25. Governor Albert Bryan Jr. signed the Virgin Islands Cannabis Use Act (Act 8680) on Wednesday, legalizing marijuana use by adults for medicinal, sacramental and other uses.





SAN JUAN, Puerto Rico (AP) — The U.S. Virgin Islands has authorized the recreational and sacramental use of marijuana for anyone 21 and older, joining several nations across the socially conservative Caribbean that have relaxed their cannabis laws.

The move has been several years in the making, with U.S. Virgin Islands officials traveling to Colorado to meet with cultivators, manufacturers, law enforcement and others to learn about the industry before Gov. Albert Bryan Jr. signed the bill Wednesday.



#### **Pros**

- The potential medicinal properties of marijuana and its components have been the subject of research and heated debate for decades. THC itself has proven medical benefits in particular formulations.
- Researchers generally consider medications like these, which use purified chemicals derived from or based on those in the marijuana plant, to be more promising therapeutically than use of the whole marijuana plant or its crude extracts.



#### Cons

- Use of marijuana as medicine also poses other problems such as the adverse health effects of smoking and THC-induced cognitive impairment.
- A growing number of states have legalized dispensing of marijuana or its extracts to people with a range of medical conditions.
- An additional concern with "medical marijuana" is that little is known about the long-term impact of its use by people with health- and/or age-related vulnerabilities—such as older adults or people with cancer, AIDS, cardiovascular disease, multiple sclerosis, or other neurodegenerative diseases.





# What are your main concerns?





# Myths and facts regarding THC uses and side effects





### Myths and facts regarding THC uses and side effects

1.

#### Marijuana use is okay for some youth

 FACT: Research strongly suggests that marijuana use during adolescence and early adulthood can damage the part of the brain associated with learning and memory. 2.

#### Marijuana isn't addictive

• FACT: Chronic marijuana use can lead to addiction. Research shows that approximately 9 percent, or about 1 in 11, of those who use marijuana will become addicted. This goes up to 17 percent in those who start using while young (in their teens) and increases to 25-50 percent of daily users.

# Myths and facts regarding THC uses and side effects

3.

### Marijuana is safe to use during pregnancy and breastfeeding

• **FACT:** Marijuana use in pregnancy may affect the baby's brain development and when the child reaches school age, it may have problems with attention, behavior, memory, delayed reading skills, and depression.

### Marijuana has minimal impact on driving, road safety and crime

FACT: Marijuana significantly impairs judgment, motor coordination, and reaction time. Studies have found a direct relationship between the concentration of marijuana (THC) in the blood and driving ability. The risk of being involved in an accident doubles after marijuana use.

### Myths and facts regarding THC uses and side effects

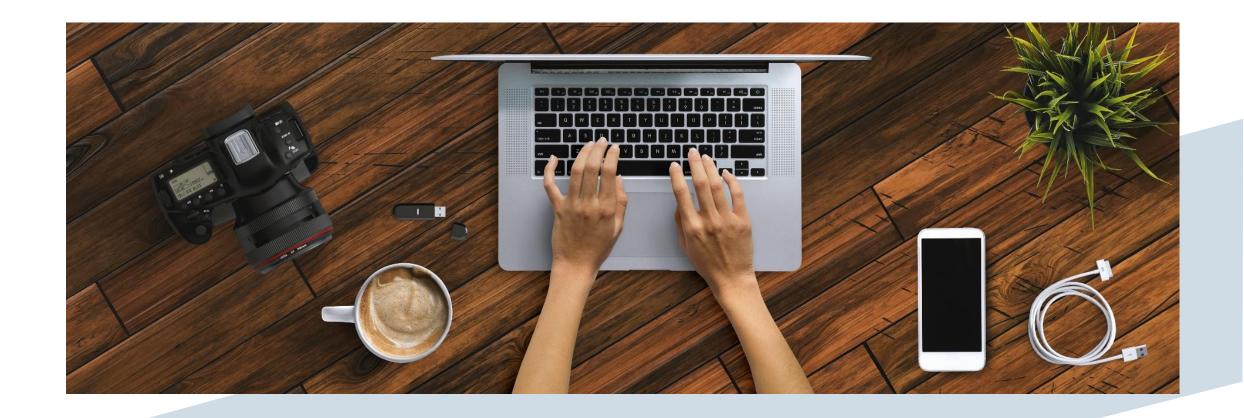
### Marijuana helps one's mood and promotes mental health

• FACT: Like alcohol, marijuana and associated THC-containing products are intoxicants and can contribute to impaired judgment and increased susceptibility to mental health problems, including depression, insomnia and paranoid delusions. Regular marijuana use is correlated with an increased risk and/or worsening of the symptoms for individuals with anxiety, depression and psychotic illnesses.

### Myths and facts regarding THC uses and side effects

#### 6. Secondhand marijuana smoke is safe

- **FACT**: smoking marijuana clearly damages the human lung, causing chronic bronchitis and injury to the cell linings of the large airways.
- Second hand smoke from burning marijuana has been shown to contain many of the same toxins, irritants and carcinogens as tobacco and wood burning smoke.







Drug use might lead to certain

harms and/or benefits

- **Knowing the facts**
- Most drugs are useful in some way, all drug use carries some risk

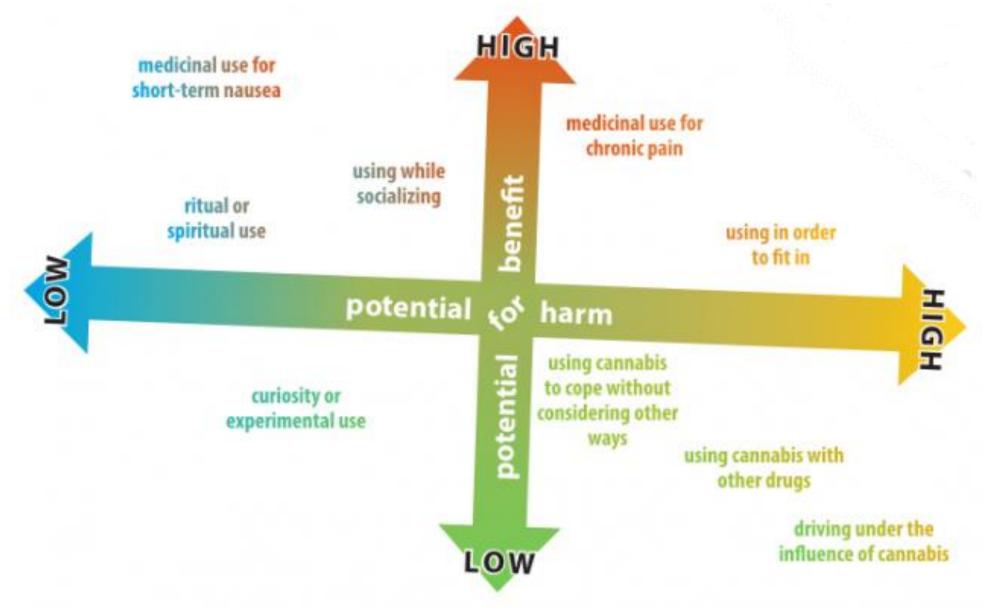
d.

- Very difficult topic a.
- Human beings are complex Everything is debatable b. e.

#### 1. Knowing the facts

- More drug equals more risk.
- Younger age equals more risk.
- Places, times and activities influence risk.
- The reasons young people use cannabis are important.
- Risks related to cannabis use vary from person to person, and sometimes, from day to day for a particular person. Everything is debatable.







#### 2. Be present!

- Research suggests that one of the most important factors in healthy child development is a strong, open relationship with a parent.
- Attention, love and patience is what really counts.
- Encourage open lines of communication (various topics).
- Establish connection send a message.



#### 3. Communication

- There is no "right age" to start talking about cannabis.
- There are no rules.
- Important to star communicating before critical age (stage).

- Use movies, commercials, family situations, and/or news as a starting point.
- Conversation will become as awkward as you make it.
- Listen!!!!!



3. Communication

Be a good listener

Acknowledge their point of view

Use open-ended questions

Be clear about your expectation

Avoid "lecture mode" and judgmental comments



#### 4. Monitor

Keep the topic going

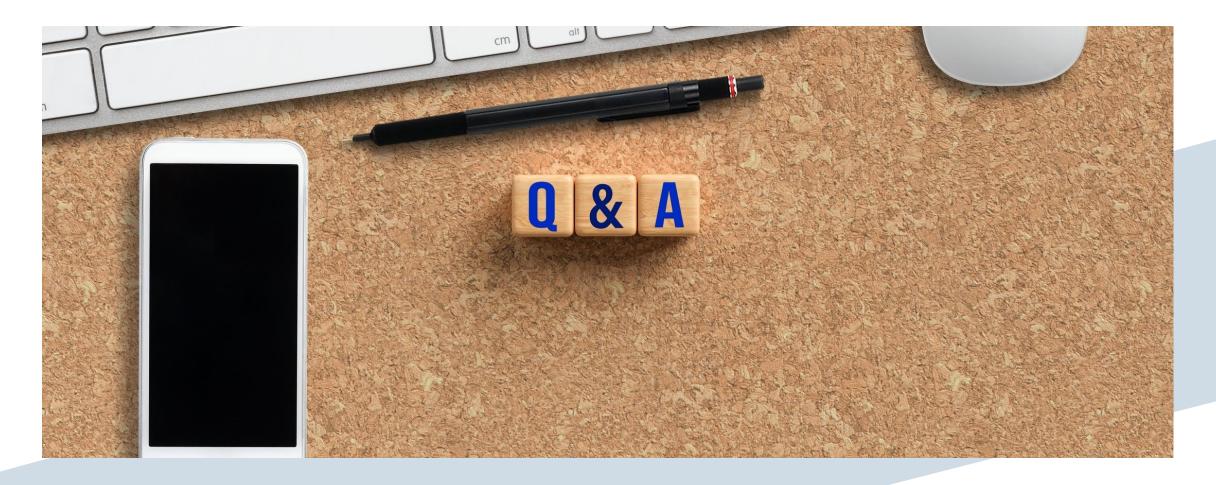
Observations are key!!!

Stay up-todate





- Set rules and consequences.
- Encourage honesty.
- State concerns clearly.
- Offer support.
- Set a good example.
- Be consistent.
- Spend more time with them.
- Monitor behavior/emotions.
- Seek professional help.
- Promoting protective factors is one of the most recommended strategies for the management of substance use in young people.



### **THANK YOU!!!**





#### References

Substance Abuse Center for Behavioral Health Statistics and Quality. Results from the 2018 National Survey on Drug Use and Health: Detailed Tables. SAMHSA. <a href="https://www.samhsa.gov/data/report/2018-nsduh-detailed-tables">https://www.samhsa.gov/data/report/2018-nsduh-detailed-tables</a> Accessed December 2019.

Meier MH, Caspi A, Ambler A, et al. Persistent cannabis users show neuropsychological decline from childhood to midlife. *Proc Natl Acad Sci U S A.* 2012;109(40):E2657-E2664. doi:10.1073/pnas.1206820109

Young-Wolff KC, Tucker L-Y, Alexeeff S, et al. Trends in Self-reported and Biochemically Tested Marijuana Use Among Pregnant Females in California From 2009-2016. *JAMA*. 2017;318(24):2490. doi:10.1001/jama.2017.17225



#### References

https://www.forbes.com/sites/ajherrington/2023/01/20/us-virgin-islands-passes-cannabis-legalization-bill/?sh=11410f5a2a54

https://www.samhsa.gov/atod/cannabis

https://nida.nih.gov/publications/research-reports/marijuana/marijuana-safe-effective-medicine

https://www.heretohelp.bc.ca/workbook/cannabis-use-and-youth-a-parents-guide

https://www.cdc.gov/marijuana/faqs.htm









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