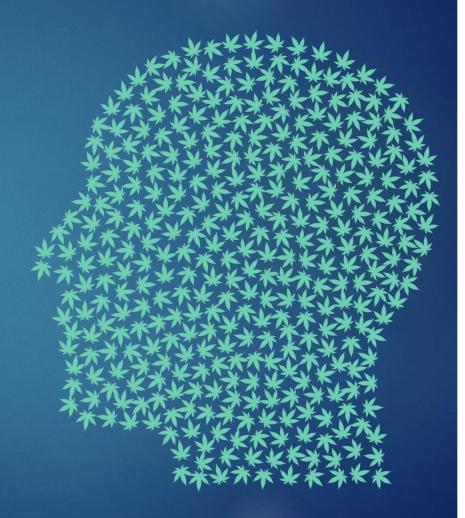
The Norwalk Partnership

PREVENTING SUBSTANCE MISUSE AMONG YOUTH AND YOUNG ADULTS

The "New"
Marijuana &
Today's Youth



U.S. Surgeon General Jerome Adams



"The Doctor is In: Answering Your Marijuana Questions" with Jerome Adams, MD https://youtu.be/OYZvUDbzUk8

We will cover:

- 1. How the "new" marijuana is different from the natural plant
- 2. How marijuana affects the developing brain
- 3. A few myths & facts
- 4. Trends in the perception and use of marijuana, including among Norwalk teens
- 5. A mother's story

Can you define these terms?

CBD vs THC
Wax, dab
Medical vs Recreational Marijuana
Decriminalization vs Legalization
Scromiting? Formication?

https://www.samhsa.gov/marijuana-quiz

1. The New Marijuana



versus



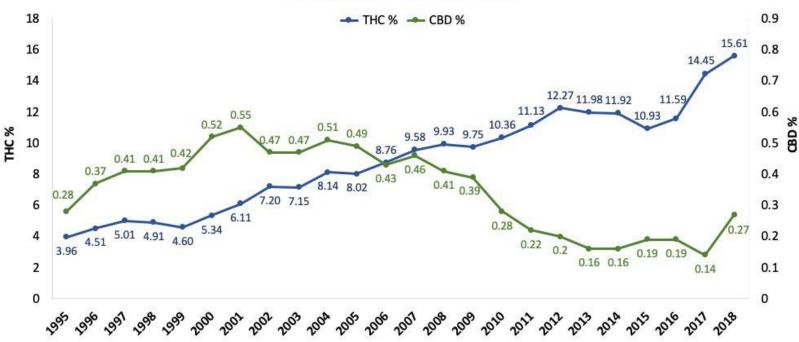
CBD vs THC

CBD is not an intoxicant. THC is the psychoactive ingredient in marijuana.

MARIJUANA		
Flowers and Trim	Cannabidiol (CBD)	
Whole, ground, or turned into a hash or concentrate, and then smoked, vaped, or eaten/drank in pills, edibles, etc. Topical products, too.	Chemical compound found on the leaves and flowers. Can be consumed from smoking flower and trim whole, or extracted and infused into oils, medications, edibles, and topical products.	
Flowers and trim contain tetrahydrocannabinol (THC), the chemical compound that produces a euphoric buzz. Some say there are medicinal and calming qualities, too.	CBD on its own does not make you high (though some say there are medicinal and calming qualities). However, CBD from marijuana often contains THC (the compound that makes you high) because it comes from the same part of the plant.	
Federally, marijuana is a schedule 1 drug. However, it is legal for medicinal use in 33 states and for recreational use in 10 states (as of January 2019).	In the states where marijuana and/or medical marijuana is legal, CBD products can be purchased pursuant to that state's laws.	

Marijuana has been bred for THC potency over time

Percentage of THC and CBD in Cannabis Samples Seized by the DEA from 1995-2018



https://www.hhs.gov/surgeongeneral/reports-and-publications/addiction-and-substance-misuse/advisory-on-marijuana-use-and-developing-brain/index.html

High-potency marijuana is readily available

- Marijuana dispensaries carry concentrations up to 23% THC
- Concentrates (hash oil, budder, wax, shatter...) can contain 3-5x more THC than the plant itself... up to 76% THC
- In 2020, more than ½ of US high school seniors who used marijuana vaped it in concentrated form





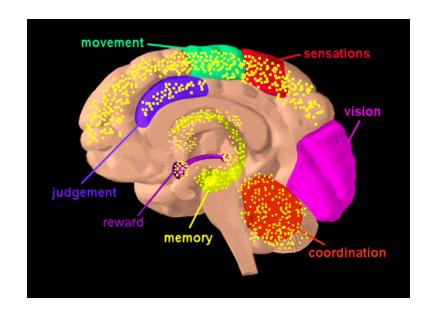
Questions/comments about the "new" product?

3-4 minutes for questions. Feel free to keep discussing in the chat!

- Clarifications?
- What are you seeing in terms of how Norwalk teens are using marijuana currently? (dabbing vs smoking, etc.)
- Anything else?

2. How Marijuana Affects the Developing* Brain

Parts of the brain affected by THC:



Graphic: NIDA

^{*}The human brain is not fully mature until the person is in their mid to late 20s.

Marijuana & the Brain

"Video: Marijuana Risks: Build a Brain" - samhsa.gov



U.S. Surgeon General Warning on Marijuana Use in Adolescence



"Frequent marijuana use during adolescence is associated with changes in the areas of the brain involved in attention, memory, decision-making, and motivation."

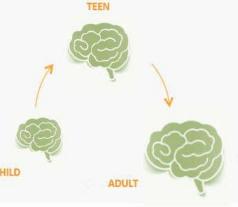
"Earlier initiation of marijuana use is associated with an increased risk of developing addiction."

Jerome Adams, MD, August 30, 2019

Risk of losing IQ points

MARIJUANA MAY HURT THE DEVELOPING TEEN BRAIN

The teen brain is **still developing**and it is especially vulnerable to drug use.





Regular heavy marijuana use by teens can lead to an IQ drop of up to 8 points³

HEAVY MARIJUANA USE BY TEENS IS LINKED TO4:

Educational Outcomes



lower

grades and exam scores





less likely to graduate

from HS or college

Life Outcomes



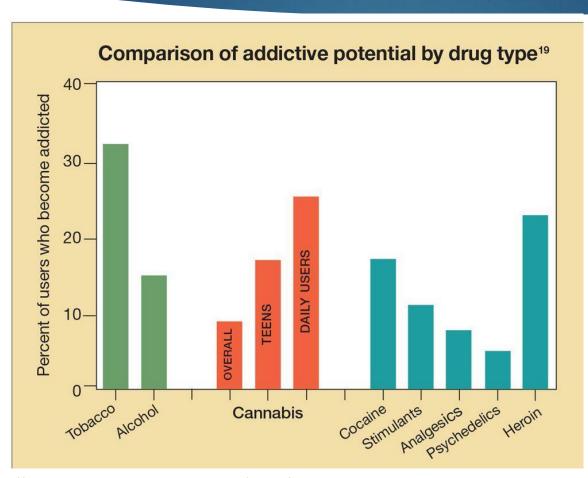






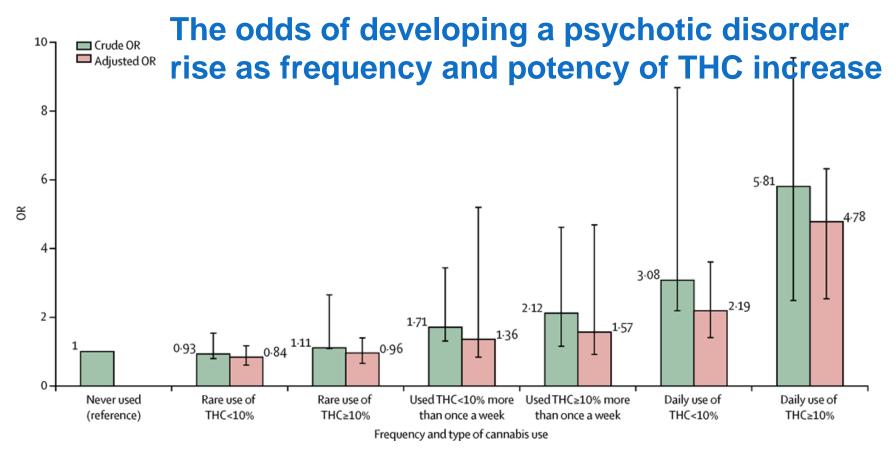


Potential for addiction



- Teens using 4.9% THC → 1.88x risk of use disorder
- Teens using 12.3% THC → 4.85x risk of use disorder

Risk of psychotic disorder



The Lancet, March 19, 2019 https://doi.org/10.1016/S2215-0366(19)30048-3

Questions/comments about the impact of marijuana on the brain?

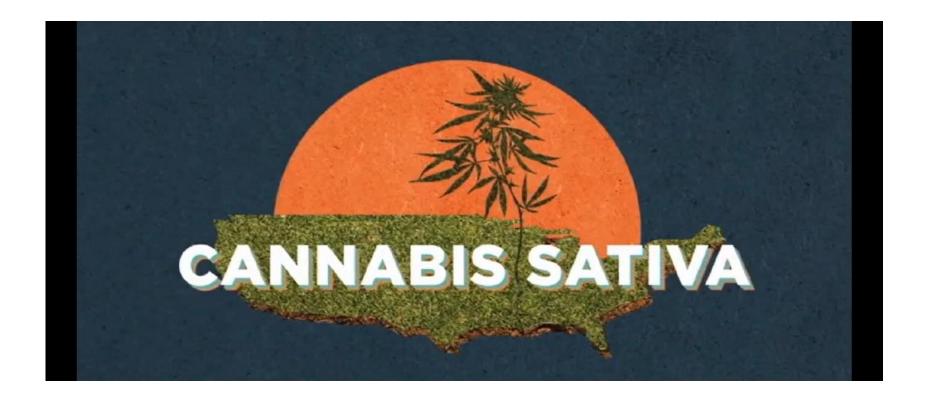
3-4 minutes for questions. Feel free to keep discussing in the chat!

- Clarifications?
- Does anyone have local experiences to share about Norwalk youth experiencing some of these consequences from THC?
- Anything else?

3. Myths & Facts

- "It's natural"
- "It's not addictive"
- "It's legal"
- "I drive better"
- "It can't hurt me to use someone else's weed if it's medical marijuana"
- "I need it to de-stress"

Video: Get the Facts About Marijuana (justthinktwice.gov)



Myths & Facts about Teen Marijuana Use

TABLE.	Myth vs	fact about	marijuana use
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Myth	Fact	What we don't know
Marijuana is not addictive	1 in 6 teenagers becomes addicted, and this addiction—like addiction to alcohol or cigarettes—affects neural mechanisms underlying tolerance, changes the reward system of the brain, and is associated with a withdrawal syndrome	Why some people become addicted while others do not
There are no long-term effects of marijuana use	Marijuana use before age 18 may affect IQ, learning and memory, and brain structure and function years later	How long-lasting these effects are, and whether they resolve after abstinence
Marijuana is a treatment for mental health disorders	The current state of science does not show the benefit of smoked marijuana for psychological conditions; in fact, marijuana use likely worsens symptoms	Whether scientists will someday discover therapeutic components of cannabis that can be extracted and purified
Marijuana is a safe drug for teenagers	Nearly all negative effects of marijuana (eg, brain changes, neurocognitive deficits, addictive potential) are worse in teenage than in adult users	How differences in mental health, level of exposure to marijuana, and use of other substances affect marijuana-related harms

Legal? Medical? Recreational?

Marijuana is:

- Illegal according to US federal law.
- Legal according to CT law for qualifying people who obtain a Medical Marijuana <u>certificate</u>.*
- Decriminalized (no jail time for possession of <1/2oz)
- Recreational (aka retail) in NJ and MA, not currently in NY or CT.

Questions/comments about the myths & facts?

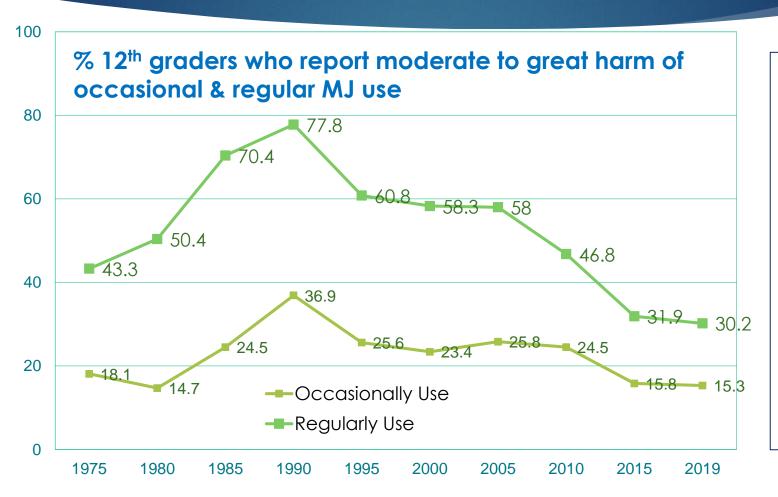
3-4 minutes for questions. Feel free to keep discussing in the chat!

- Clarifications?
- Any comments on the impact of <u>medical</u> marijuana on youth in our community?
- Anything else?

4. Trends in Perception of Harm from Marijuana & in Teen Use



Perceived harm of marijuana use has steadily decreased since 1991



In Norwalk teens perceive marijuana to be **less** risky than use of alcohol & tobacco, or abuse of prescription drugs.

Teen marijuana use was increasing, both nationally and in CT, prior to COVID

% high school youth who currently used marijuana,* 1991-2019 -US -CT 80 60 40 23.2 21.8 24.1 20.4 20.4 26.7 26.2 20 23.1 22.4 21.7 20.8 20.2 19.7 17.7 14.7

1997

1999

2001

2003

2005

2007

1995

1993

Percent

0

1991

2015

2017

2013

2009

2011

Which teens are reporting higher use rates of Marijuana?

In Connecticut and the US, current marijuana use rates are reported at 21.7% (among 9th – 12th graders)

Higher use rates are reported among:

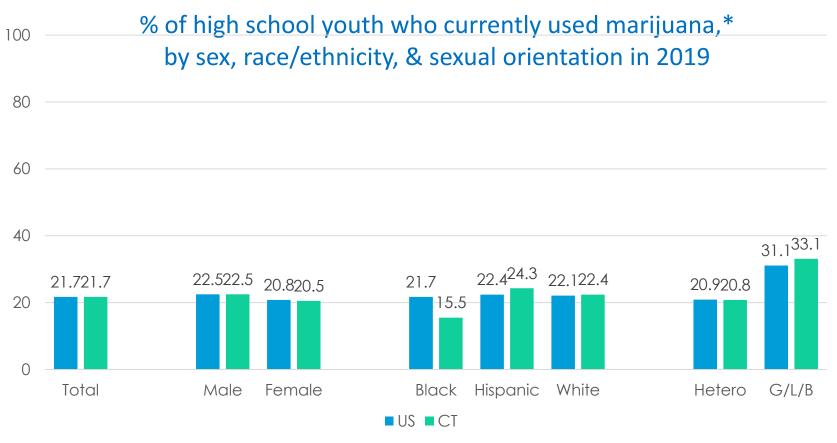
- Boys
- Hispanic and White youth
- Gay, Lesbian, Bisexual youth

In Norwalk, current marijuana use rates are reported at 14.0% (among 9th & 11th graders)

Higher use rates are reported among:

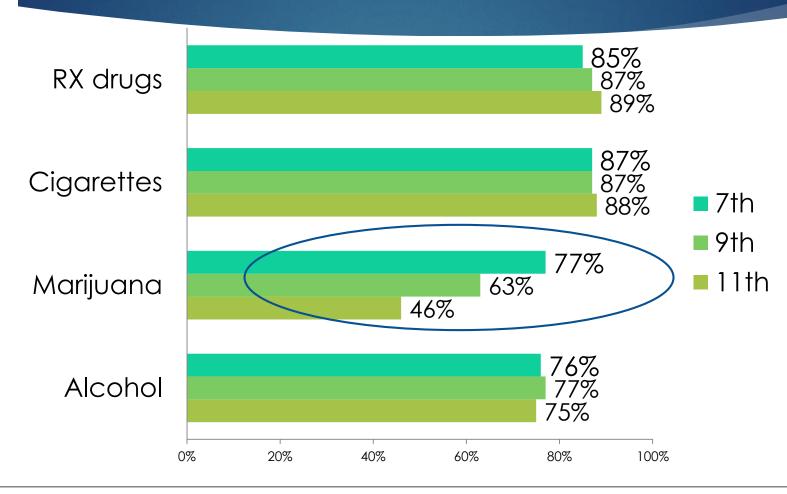
- Boys
- Black youth
- Gay, Lesbian, Bisexual youth
- Youth reporting mental health struggles
- Youth reporting antisocial behaviors

In CT and US, **higher use rates** are reported among male, Hispanic, white & LGB teens

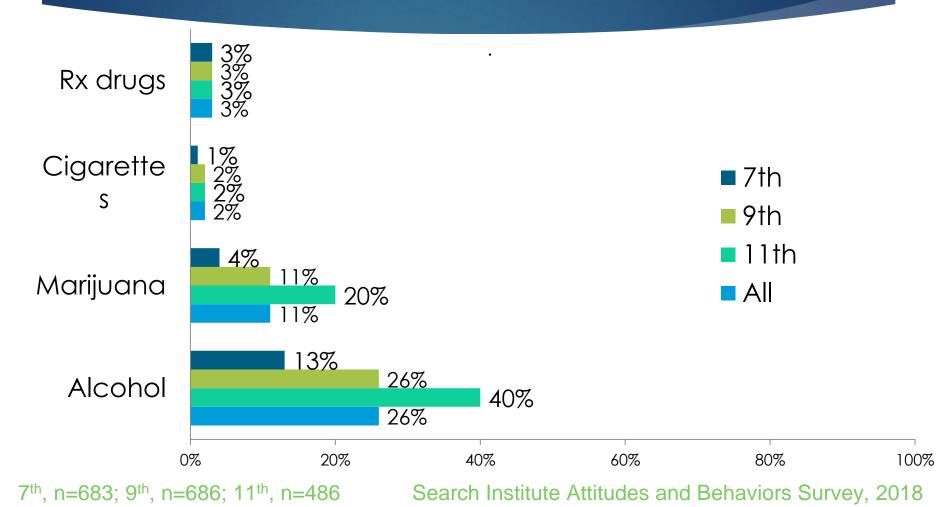


^{*}One or more times during the 30 days before the survey

In Norwalk, teens perceive marijuana to be less risky than other substances



In Norwalk, 1 in 5 11th graders reported regular use of marijuana



In Norwalk, some teens reported higher use rates of Marijuana (cont'd)

Overall rate of current marijuana use among Norwalk 7th, 9th, 11th graders in 2018: 11.0%

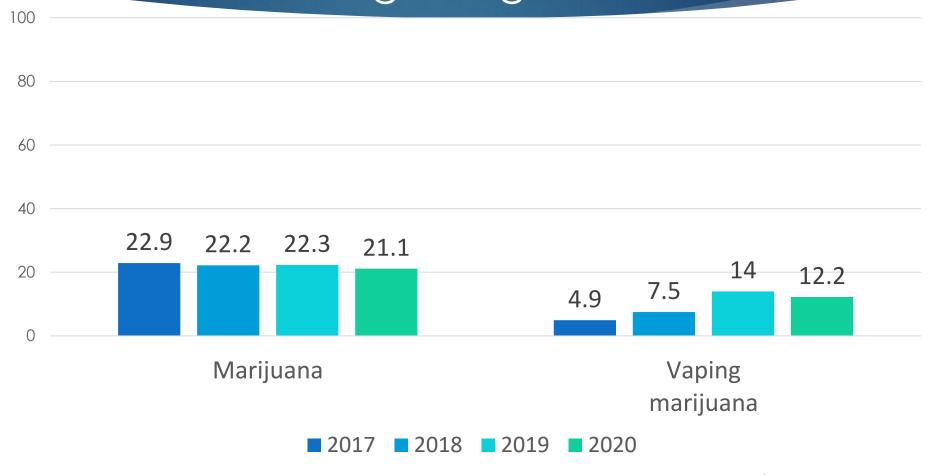
Other groups who used marijuana at higher rates:

- Those reporting mental health struggles:
 - 16.8% of Norwalk youth reporting signs of depression
 - 16.9% reporting disordered eating
 - 17.6% of those reporting past suicide attempt
- Those reporting antisocial activity:
 - 19.4% of Norwalk youth reporting hitting
 - 27.5% of youth reporting stealing
 - 30% of youth reporting vandalism

Has anything changed during COVID?



National data collected in 2020 shows a **small decrease** in marijuana use among 12th graders



Findings from State-wide Focus Groups in December 2020

USE

Overall perception that use among some teens has increased during COVID due to increased anxiety

ACCESS

- Widely and easily accessible
- Access via social media sites (Snapchat) has increased during COVID; school-based access has decreased

PERCEPTION OF HARM

Sense that marijuana use is safe, and a common means to reduce stress

FAMILY NORMS

Some permissive parents, more conversations around alcohol use, lower perception of harm

Questions/comments about the trend data?

3-4 minutes for questions. Feel free to keep discussing in the chat!

- Clarifications?
- What do you hear Norwalk teens saying about marijuana these days?
- Anything else?

5. A Mother's Story

Ginger Katz, founder of the Courage to Speak Foundation

Where do we go from here?

- Review this entire Powerpoint as there is more information included that we did not have time to review. It will be posted on <u>www.thenorwalkpartnership.org/marijuana</u>
- Join our next Alcohol and Marijuana Workgroup meeting where we can have additional discussions and start to develop next steps. Wednesday, February 10th, 3pm on Zoom. RSVP to mwatt@positivedirections.org

Resources

Information for parents:

Drugfree.org toolkit: Talk to your Kids

about MJ-

https://drugfree.org/wp-

content/uploads/2017/02/Marijuana T

<u>alk Kit.pdf</u>

Drugfreect.org

Information for teens:

Justthinktwice.gov SAMHSA.gov/marijuana

Health information:

cdc.gov Drugabuse.gov

CT Access Line for drug treatment:

1-800-563-4086

Treatment in Norwalk:

Thenorwalkpartnership.org/get-help

Recovery support for teens:

Turningpointct.org/smart Alateen Norwalk Norwalk SMART Recovery teens

Smart Approaches to Marijuana one-page factsheets:

https://learnaboutsam.org/toolkit/

Learn More:
Research
Studies on
the Health
Effects of
Marijuana

Exposure to high concentrations of THC increases risks of physical dependence, addiction, and other negative consequences...

The younger a child is, the greater the risks.

Risks of adolescent marijuana use

- Marijuana use is linked to earlier onset of psychosis in youth known to be at risk for psychotic illness. (McHugh et al, 2017)
- Exposure to marijuana in adolescence is associated with an increased risk for later psychotic disorder in adulthood. (D'Souza et al, 2016)
- Higher rates of school suspensions and expulsions (Colorado and Washington State, 2018)
- Higher rates of car crashes (Colorado and Washington State, 2018)

Risks of adolescent marijuana use

- Chronic use is linked to declines in IQ, poor school performance, and increased drop-out rates that jeopardize professional and social achievements, and life satisfaction. (Meier et al, 2012)
- Adolescent marijuana use is associated with other substance use and with abuse of prescription pain medications. (Jones and McCance-Katz, 2018; Olfson et al, 2017)
- People using marijuana before age 18 are 4-7x more likely to develop cannabis use disorder than adults. (Winters and Lee, 2008)

ER visits related to marijuana use increased in Colorado

From 2012 to 2016, 2,567 emergency visits at a Denver hospital were caused by marijuana.

- 17% of visits for uncontrolled bouts of vomiting, most often from inhaled marijuana.
- 12% for acute psychosis, where people without a history of mental disorders lose touch with reality. More frequently seen with edibles.

Teen Mortality and Marijuana Use

"Cannabis Use Disorder is significantly associated with an increased risk of nonfatal self-harm, all-cause mortality, and death by unintentional overdose and homicide."

(Fontanella et al, 2021)

In Colorado...

 MJ was the most common substance present in suicides among adolescents aged 10-19. It was present in 30.6% of suicides, compared to 9.7% for alcohol

Source: Roberts, B.A. (2019 June 3). Legalized cannabis in Colorado emergency departments: A cautionary review of negative health and safety effects. Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health.

Studies on impact of cannabisuse continue in 2021.

January 19, 2021, Association of Cannabis Use With Self-harm and Mortality Risk Among Youths With Mood Disorders

This population-based cohort study of Medicaid-enrolled youths with mood disorders found that the presence of cannabis use disorder was significantly associated with an increased risk of nonfatal self-harm, all-cause mortality, and death by unintentional overdose and homicide.

Cannabis use disorder is common among adolescents and young adults with mood disorders and is associated with an elevated risk of self-harm, overall mortality, and death by unintentional overdose and homicide in this already vulnerable population. https://jamanetwork.com/journals/jamapediatrics/article-abstract/2775255

January 11, 2021. Toxins in marijuana smoke may be harmful to health, study finds. https://www.cnn.com/2021/01/11/health/weed-marijuana-smokers-toxins-wellness/index.html

January 5, 2021, Progression of cannabis withdrawal symptoms in people using medical cannabis for chronic pain

Research from cohorts of individuals with recreational cannabis use indicates that cannabis withdrawal symptoms are reported by more than 40% of those using regularly. Withdrawal symptoms are not well understood in those who use cannabis for medical purposes. Therefore, we prospectively examined the stability of withdrawal symptoms in individuals using cannabis to manage chronic pain. https://onlinelibrary.wiley.com/doi/10.1111/add.15370

More reports and studies...

Rocky Mountain High Intensity Drug Trafficking Area, "The Legalization of Marijuana in Colorado: The Impact", Vol 7, September 2020

Tracks Traffic fatalities & Impaired Driving, Marijuana use rates, public health, black market and societal impact. https://www.rmhidta.org/reports

March 21, 2019, A Yale Doctor Warns of Dangers of Pot Legalization

In testimony before the legislature and in his role as a member of the state medical marijuana program's board of physicians, an advisory group for lawmakers, D'Souza has laid out what he says are the dangers of legalization. His four areas of concern are the impact on young people and the developing brain; the anticipated increase in cannabis use disorder; the negative impact on people with serious mental illness; and increased motor vehicle accidents.

https://www.connecticutmag.com/health-and-science/a-yale-doctor-warns-of-dangers-of-pot-legalization/article_00f4fdb0-49be-11e9-9a8b-e38ab4226045.html

January 14, 2019, Teen brain volume changes with small amount of cannabis use, study finds
At a time when several states are moving to legalize recreational use of marijuana, new research shows that concerns about the drug's impact on teens may be warranted. The study shows that even a small amount of cannabis use by teenagers is linked to differences in their brains.

https://www.sciencedaily.com/releases/2019/01/190114130855.htm