

Substance Use Updates in 2024: A Focus on Cannabis

Edward Thomas Lewis III, M.D., F.A.P.A.

Clinical Assistant Professor

Addiction and Forensic Psychiatrist, Institute of Psychiatry

Associate Medical Director of Inpatient Services, Institute of Psychiatry

Program Director, Forensic Psychiatry Fellowship

Associate Dean, Student Progress

College of Medicine

Medical University of South Carolina

Department of Psychiatry and Behavioral Sciences

Division of Community and Public Safety Psychiatry



Goals and Objectives

- Discuss results from the 2023 National Survey on Drug Use and Health
- Review cannabis and concerns related to addiction
- Provide resources for treatment when people need help



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Substance Use in the United States

- Many potential sources of information
- Substance Abuse and Mental Health Services Administration (SAMSHA)
- National Survey on Drug Use and Health (NSDUH)



BEHAVIORAL HEALTH
IS ESSENTIAL TO HEALTH

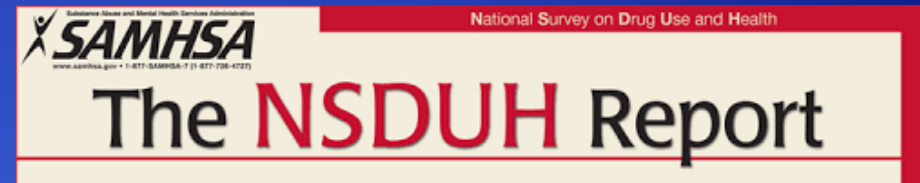
PREVENTION
WORKS

TREATMENT IS
EFFECTIVE

PEOPLE
RECOVER

Background on NSDUH

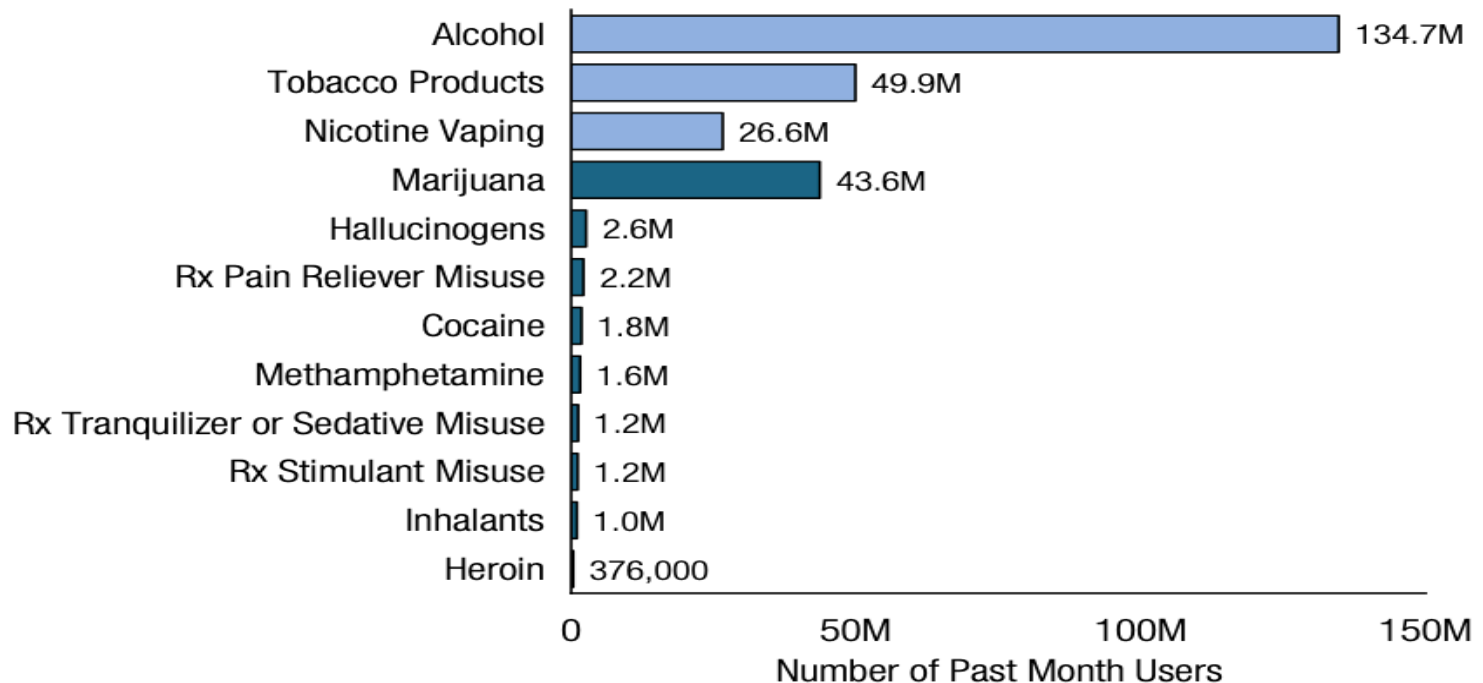
- 67, 679 completed interviews
- Population includes civilian, noninstitutionalized individuals 12 y/o and older



- Notable Exclusions:
 - Individuals with no fixed address
 - Military personnel on active duty
 - Institutionalized Settings
 - Jails, nursing homes, mental institutions, long-term care hospitals

NSDUH 2023 Data

Figure 1. Past Month Substance Use: Among People Aged 12 or Older; 2023

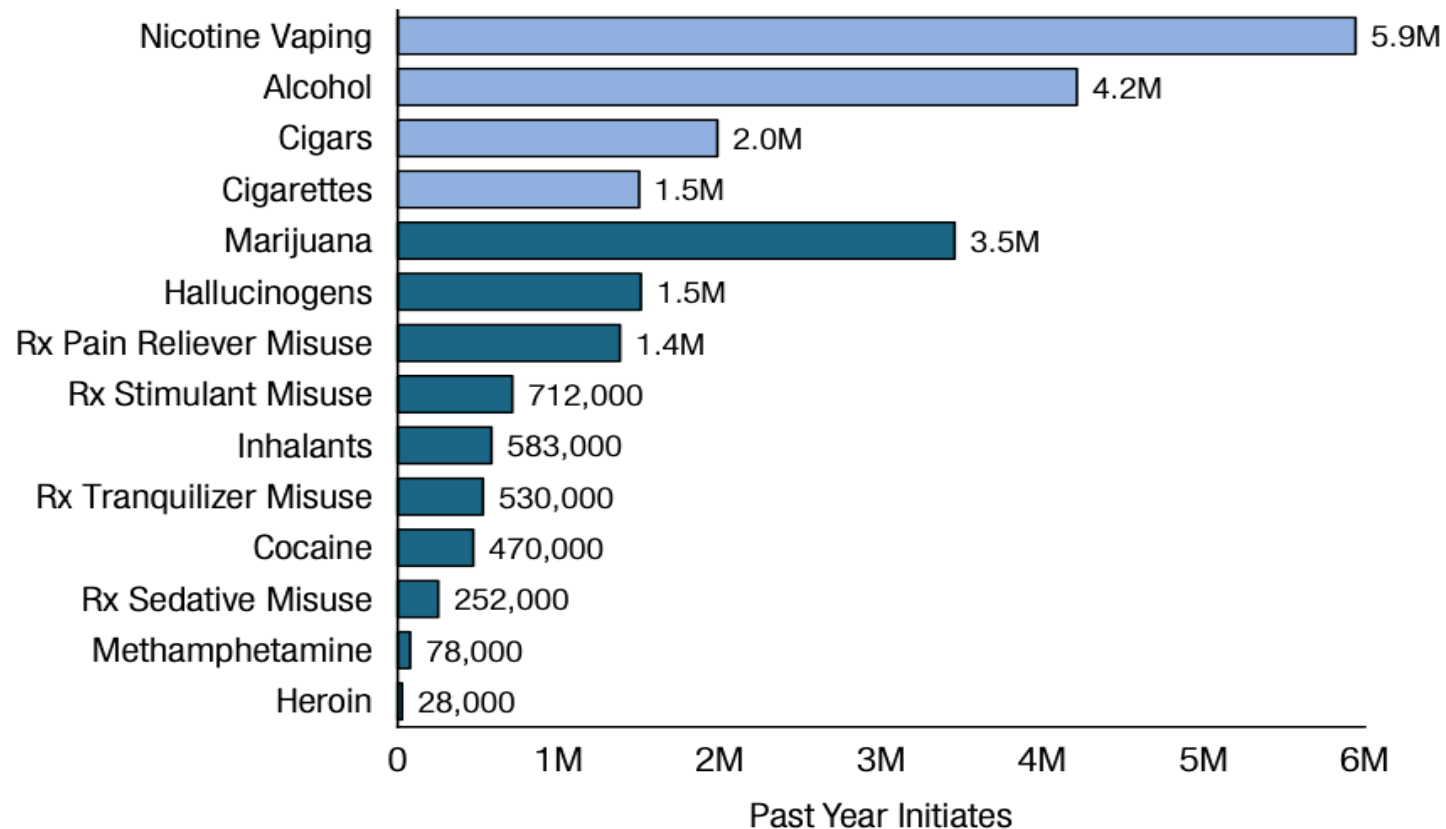


Rx = prescription.

Note: The estimated numbers of current users of different substances are not mutually exclusive because people could have used more than one type of substance in the past month.

NSDUH 2023 Data

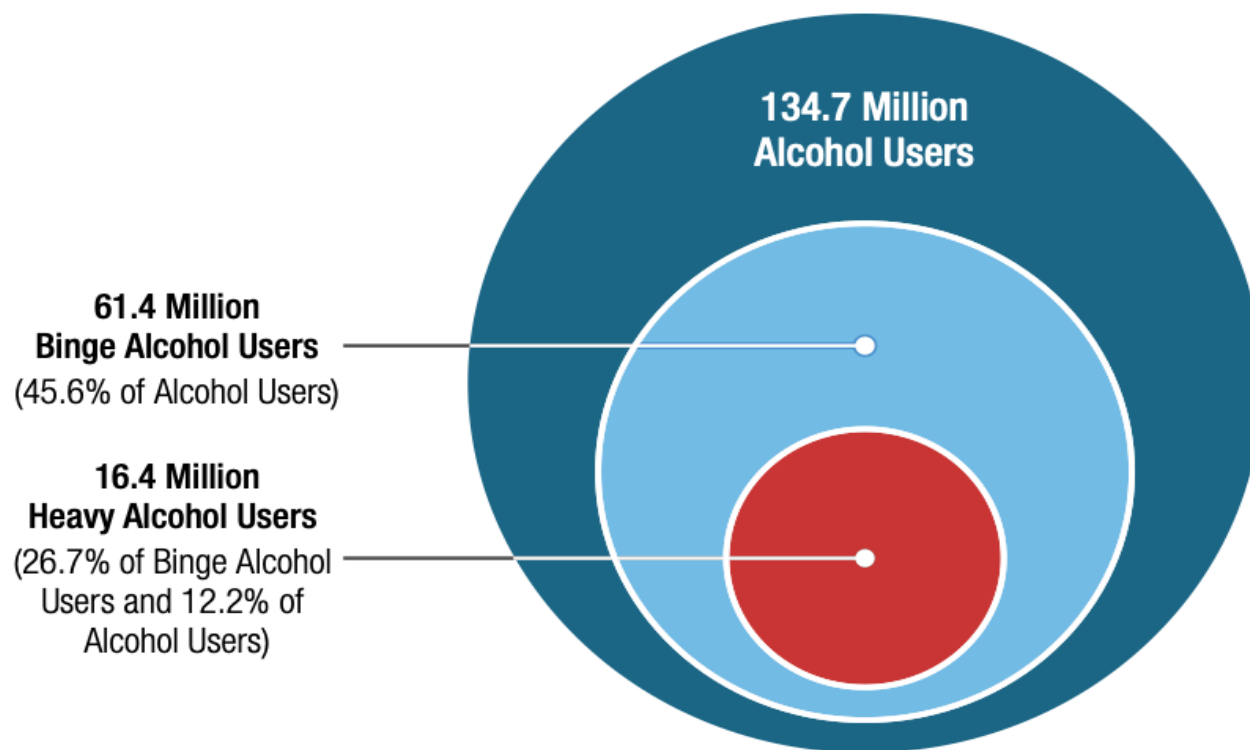
Figure 25. Past Year Initiates of Substances: Among People Aged 12 or Older; 2023



Rx = prescription.

NSDUH 2023 Data

Figure 7. Past Month Alcohol Use, Past Month Binge Alcohol Use, or Past Month Heavy Alcohol Use: Among People Aged 12 or Older; 2023



Note: Binge Alcohol Use is defined as drinking five or more drinks (for males) or four or more drinks (for females) on the same occasion on at least 1 day in the past 30 days. Heavy Alcohol Use is defined as binge drinking on the same occasion on 5 or more days in the past 30 days; all heavy alcohol users are also binge alcohol users.

Alcohol Use and the Legal Profession

- Krill *et al.* set out to study this topic further in 2016
- 19 states
- 15 state bar associations
- Confidential Electronic Survey
- Final sample of 12,825 participants

ORIGINAL RESEARCH

OPEN

The Prevalence of Substance Use and Other Mental Health Concerns Among American Attorneys

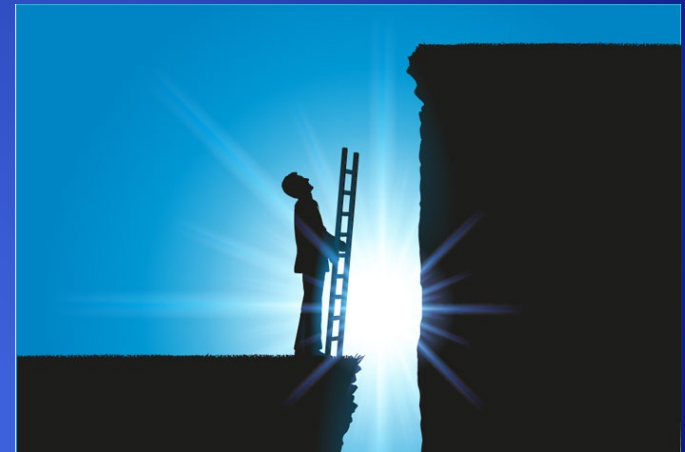
Patrick R. Krill, JD, LL.M., Ryan Johnson, MA, and Linda Albert, MSSW

Alcohol Use and the Legal Profession

- How do the results compare?
 - AUDIT: Positive score among 20.6%
 - Educated workforce results: 11.8%
 - AUDIT-C Subscale: Positive score among 36.4%
 - Same subscale among physicians in a 2012 study found score of 15%
 - Attorneys in the first ten years of practice experience the highest levels of problematic drinking
 - Contrasts findings from 1990 study

Alcohol Use and the Legal Profession

- Barriers to Seeking Substance Use Treatment
 - Not wanting others to find out they needed help
 - Concerns regarding privacy or confidentiality

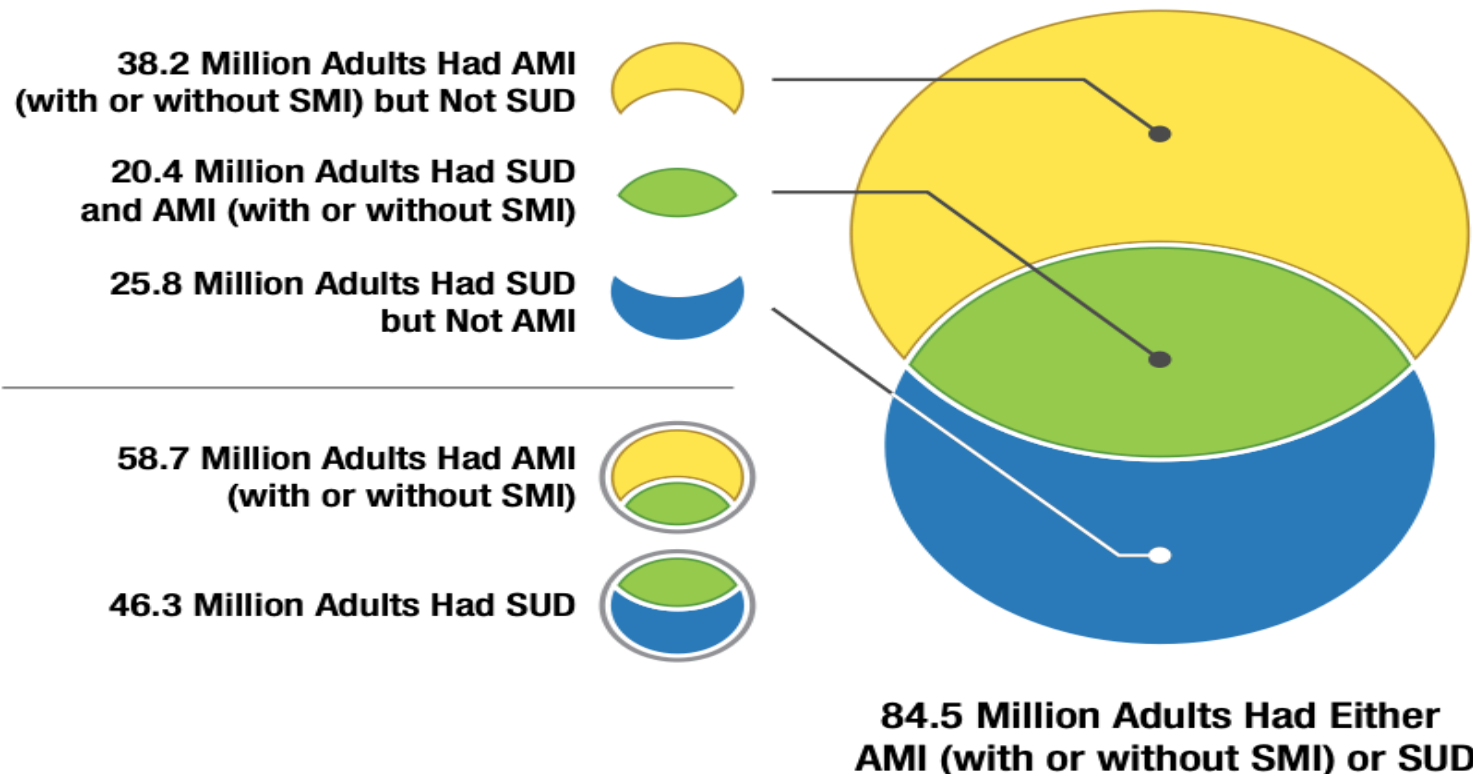


Krill *et al.* Conclusions

- Problematic alcohol use among attorneys is higher than other populations based on current data available
- Depression, anxiety, and stress are significant concerns for the legal profession also
- Critical need for treatment tailored to the legal profession
- More education about lawyer-assistance programs

NSDUH 2023 Data

Figure 43. Any Mental Illness (AMI), Serious Mental Illness (SMI), or Substance Use Disorder (SUD) in the Past Year: Among Adults Aged 18 or Older; 2023



Dual Diagnosis Demographics

- Greater severity of illness
- Worse longitudinal course of illness across multiple domains
- Poorer psychosocial functioning
- Increased risk of psychiatric and substance use relapse



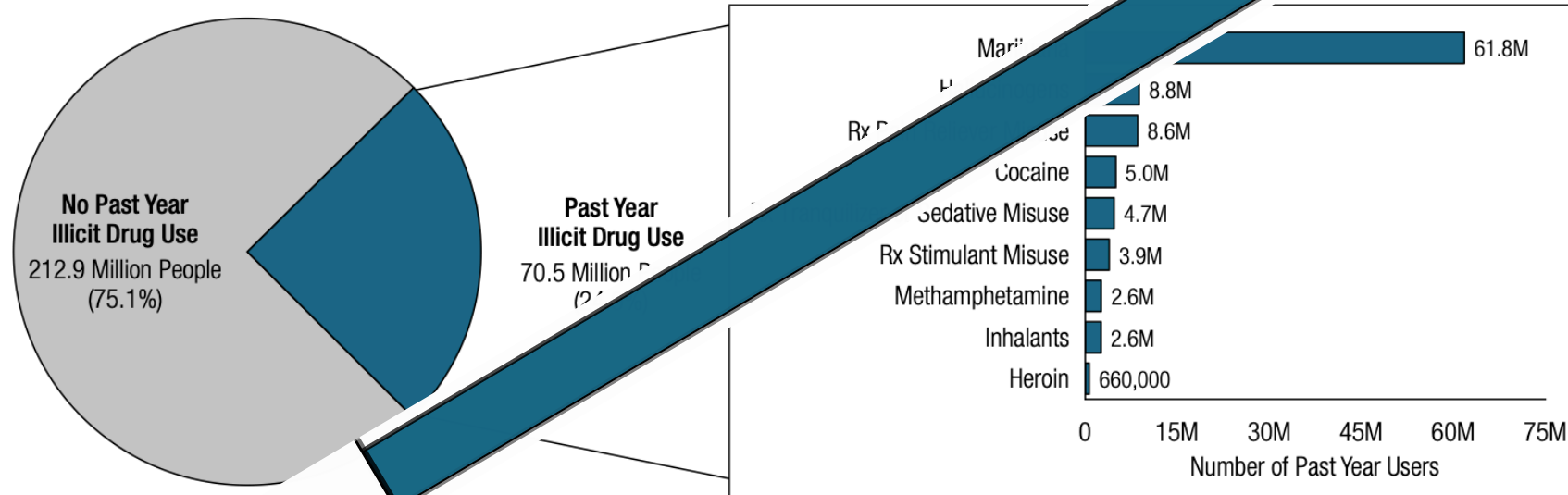
Dual Diagnosis Demographics

- Poorer medication compliance
- Higher rates of:
 - Violence
 - Suicide
 - Legal difficulties
 - Medical comorbidities
 - Family Stress
- Increased utilization of care, including ER visits and inpatient services



NSDUH 2023 Data: Marijuana

Figure 12. Past Year Illicit Drug Use: Among People Aged 12 or Older; 2023



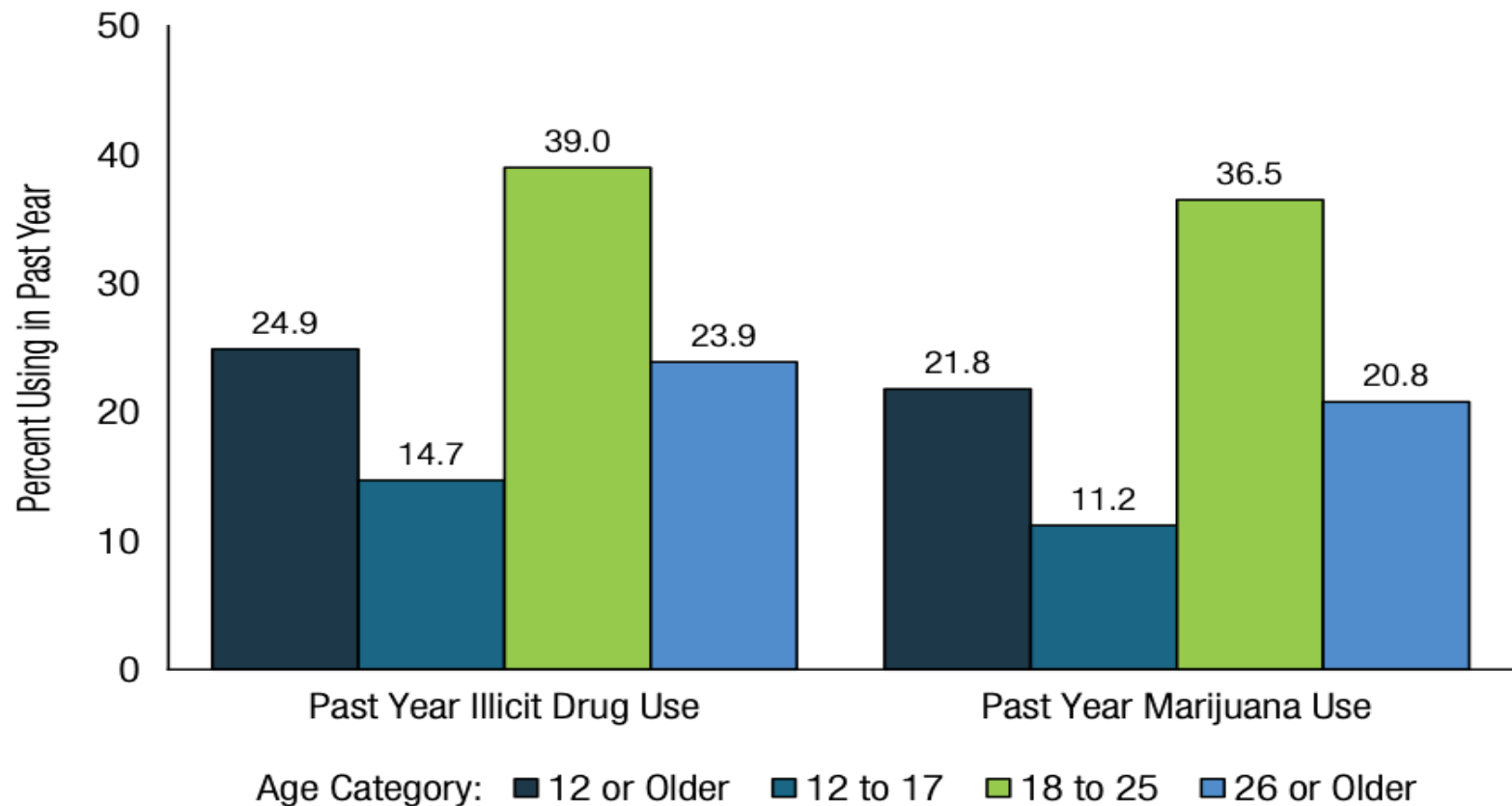
Rx = prescription.

Note: The estimates of past year users of different illicit drugs are not mutually exclusive because people could have used more than one type of illicit drug in the past year.

Marijuana

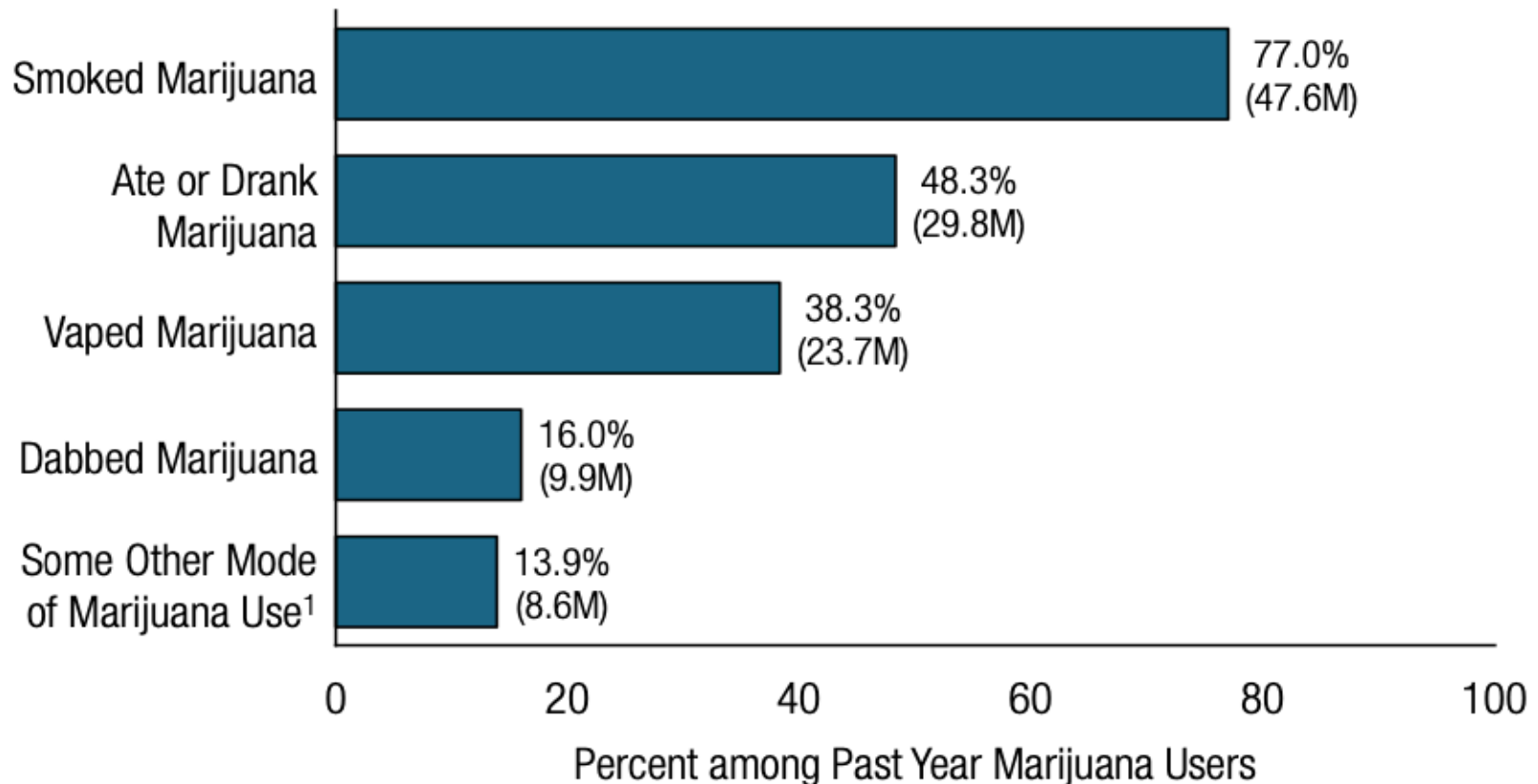
NSDUH 2023 Data: Marijuana

Figure 13. Past Year Illicit Drug Use or Past Year Marijuana Use: Among People Aged 12 or Older; 2023



NSDUH 2023 Data: Marijuana

Figure 16. Modes of Past Year Marijuana Use: Among People Aged 12 or Older Who Used Marijuana in the Past Year; 2023



Cannabis, Hemp, Marijuana???

- Cannabis Sativa Plant
 - Dried leaves, flowers, stems, seeds
- At least 125 cannabinoids
 - Intoxicating
 - Delta-9 tetrahydrocannabinol (THC)
 - Non-intoxicating
 - Cannabidiol (CBD)



Cannabis, Hemp, Marijuana???

HEMP vs MARIJUANA

HEMP AND MARIJUANA BOTH DERIVE FROM THE CANNABIS SATIVA FAMILY, THEY DO SHARE CERTAIN SIMILARITIES, HOWEVER, DUE TO EACH PLANT'S BIOLOGICAL STRUCTURE, THEY HAVE SEVERAL VERY DISTINCT AND CRUCIAL DIFFERENCES.

HEMP



Product

- CBD oil
- Hemp oil
- Cannabis oil (made from hemp)

Contains

- 0.3 % or less of tetrahydrocannabinol (THC)

Characteristic

- Hemp and industry hemp refer to the strain of cannabis plant that is grown for agricultural products such as textiles, seeds and oils.
- Can grow in most climates, bunched together with other plants, requires little care.
- Can grow as high as 20 feet with leaves bunched near the top of stem.
- No psychoactive properties

MARIJUANA



Product

- THC oil
- Marijuana oil
- Cannabis oil (made from marijuana)

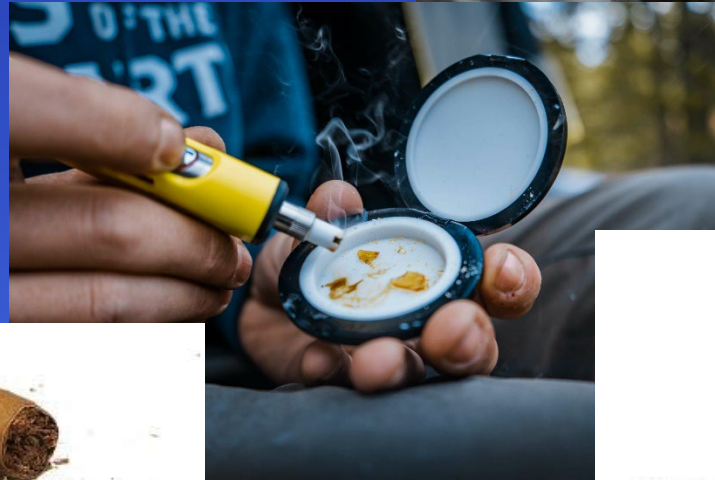
Contains

- 15 - 20 % of tetrahydrocannabinol (THC)

Characteristic

- Marijuana is known for its flowering tops of the plant. The flowers are typically bared to have a high THC.
- Growth is carefully monitored, controlled in an isolated, warm, humid area to maximize psychoactive uses. Cross-pollination can ruin THC content.
- Shorter, resembles a bush, with more leaves and buds surrounding the plant's body
- Psychoactive side effects.

Cannabis, Hemp, Marijuana???



- Smoking
 - Joints
 - Blunts
 - Pipes/bongs
- Oils and concentrates
 - E-cigarettes
 - Wax/shatter
 - Dabbing

Cannabis, Hemp, Marijuana???

- Edibles

- Baked goods
- Candies
- Gummies
- Drinks



- Tinctures

- Infused oils or alcohols consumed in small amounts



- Lotions and balms

Cannabis, Hemp, Marijuana???

- Cannabis products are getting stronger
 - From 1995-2022, delta-9 THC potency rose from 3.96%→16.14%
- Delta-8 THC
 - Cannabinoid with psychoactive effects
 - Urine Drug Screen



Cannabis, Hemp, Marijuana???

- CBD

- Supplements, foods, oils, lotions
- Not intoxicating like THC
- Some CBD products have THC



- Synthetic Cannabinoids

- Spice, K2

- JWH-018 (John William Huffman), Organic Chemistry Professor at Clemson
- Developed over 400 synthetic cannabinoids
- "I think this was something that was more or less inevitable. It bothers me that people are so stupid as to use this stuff."



Cannabis Use

- Intoxication

- Happy or relaxed state
- Alter time perception
- Impair memory, thinking, body movement
- Irritable, restless



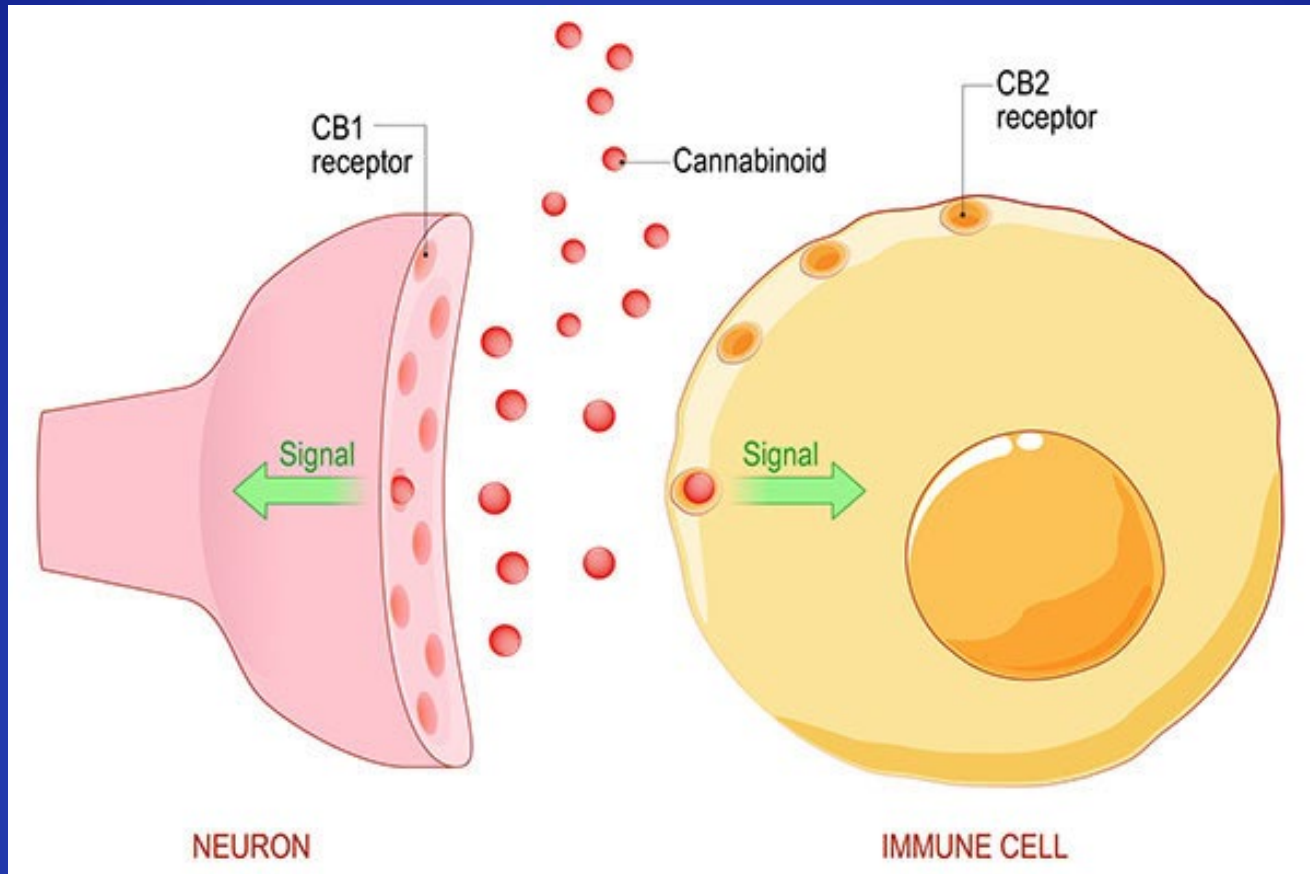
- Anxiety, Fear, Distrust, Panic, Hallucinations

- Large amounts, more potent THC content, less experienced with use

- Physical Side Effects

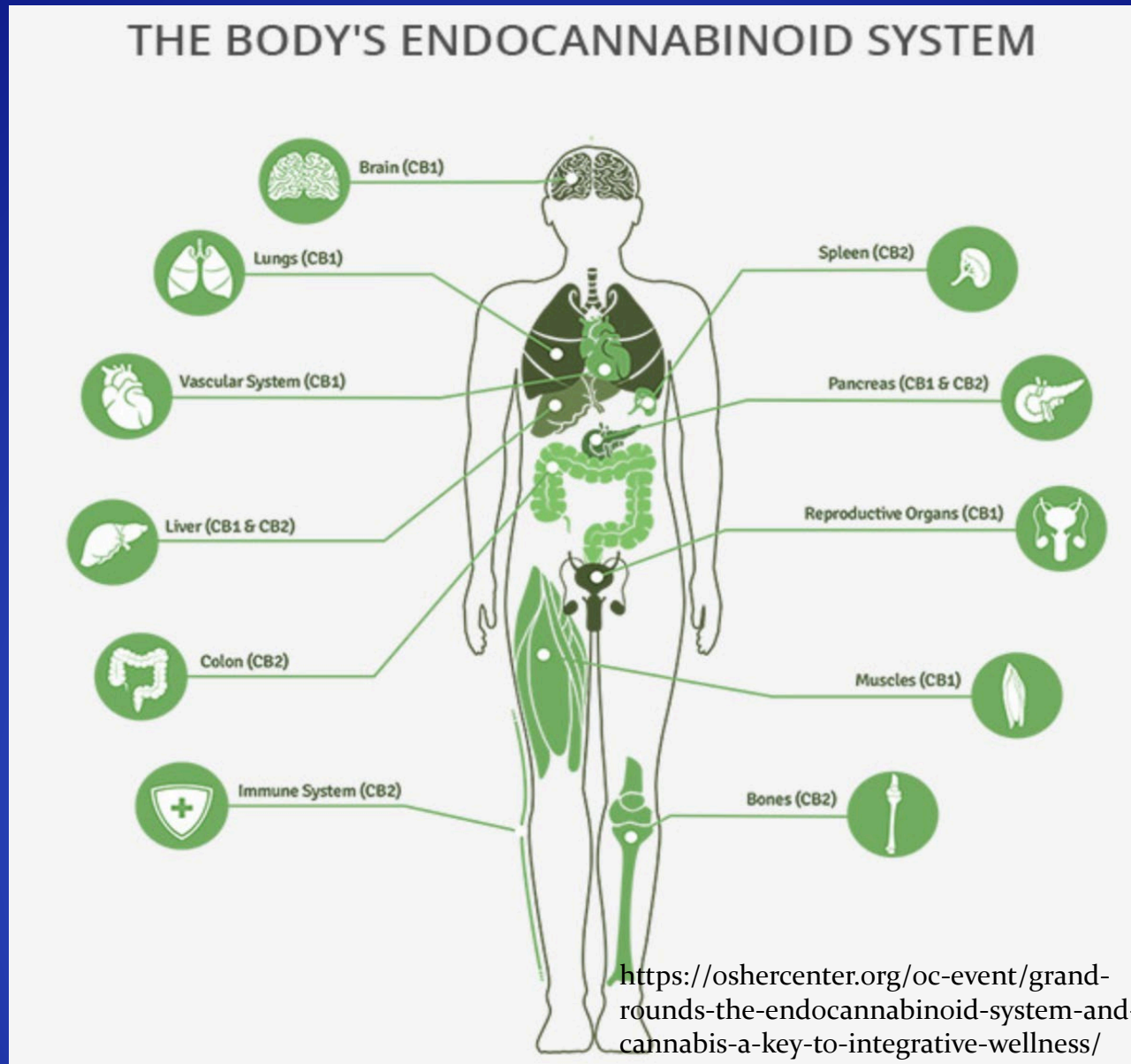
- Increased appetite, reduction in nausea/vomiting
- Increased heart rate
- Respiratory issues

The Endocannabinoid System



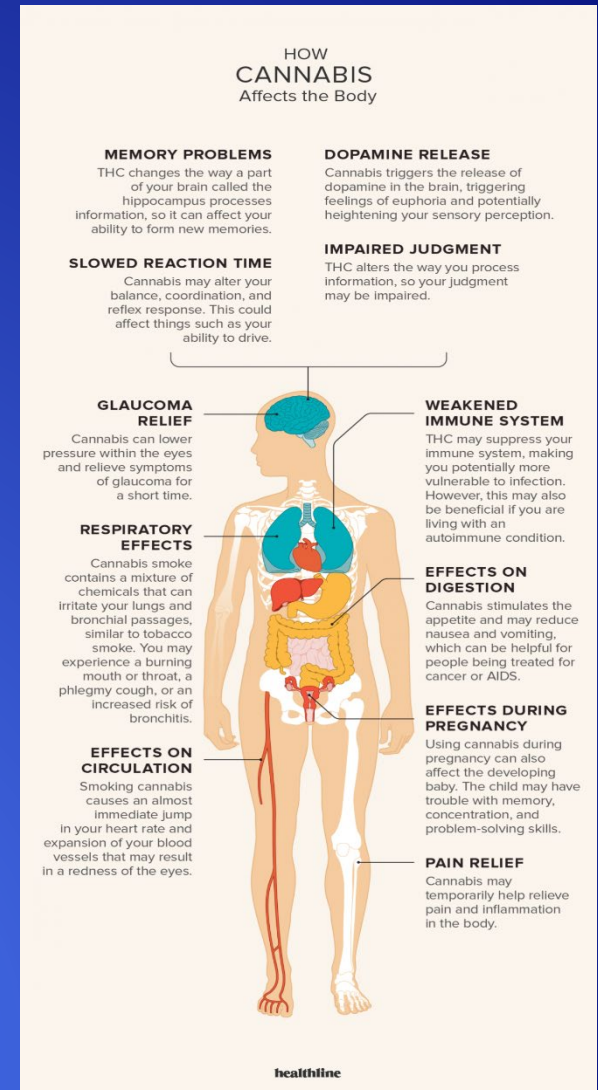
<https://www.health.harvard.edu/blog/the-endocannabinoid-system-essential-and-mysterious-202108112569>

The Endocannabinoid System



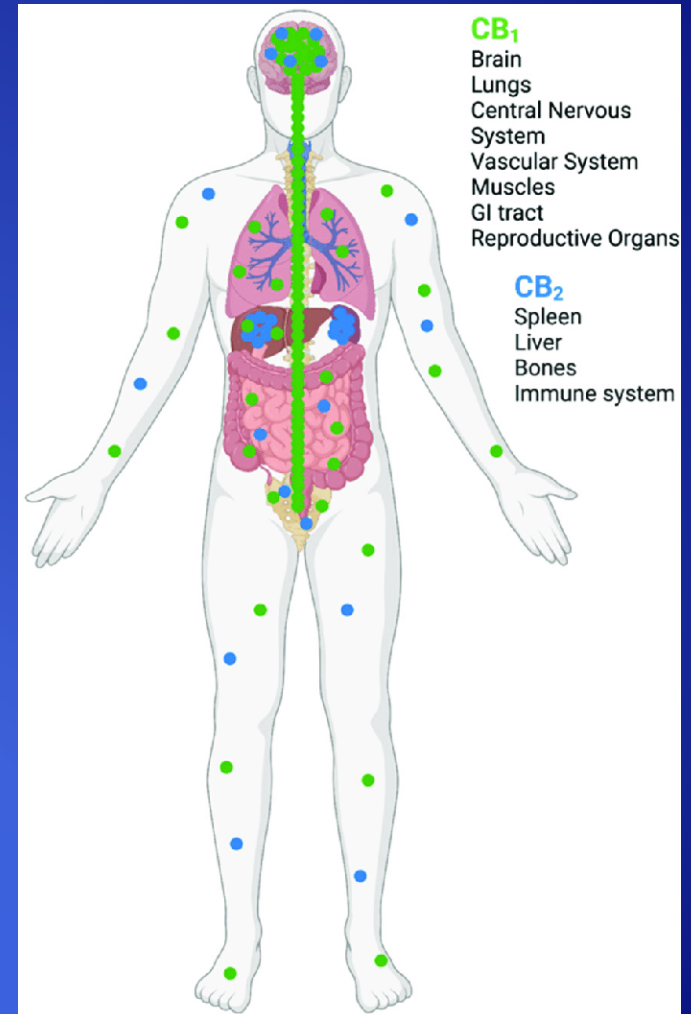
Cannabis Use

- Lungs
 - Direct harm to lung tissue
- Cardiovascular
 - Increased heart rate and blood pressure
- Gastrointestinal
 - Cannabinoid Hyperemesis Syndrome
 - GERD
- Cancer
 - Linkage to head, neck, and throat cancers



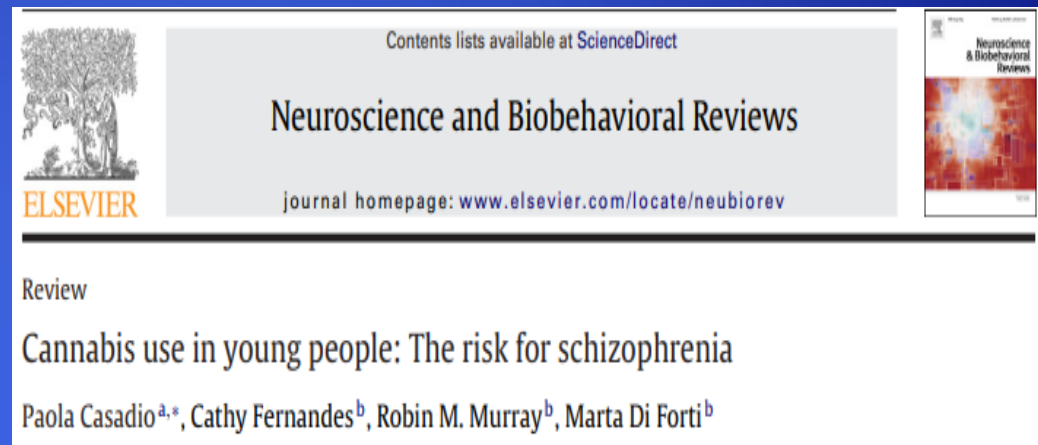
Cannabis Use and Mental Health

- Frequent or heavy cannabis use has been linked to cognitive issues related to learning, memory, attention, processing speed, motor function, and language
- “Clinical effects can range from euphoria and relaxation to panic, anxiety, and psychosis.” (Lowe *et al.*, 2018)



Cannabis Use and Psychosis

- Since the 1990's, we have noted increased cannabis use among those with schizophrenia and worse outcomes associated with this factor
- A minority of cannabis users will go on to develop psychosis
 - Degree of exposure
 - Genetics
 - Environmental risk factors
 - Trauma



Cannabis Use and Psychosis

- Age of starting cannabis use appears to be a key factor re: vulnerability of the negative effects of cannabis
 - Those who are using at younger ages have higher propensity to develop psychotic illness
 - Higher cumulative exposure
 - Increased vulnerability to THC during critical phases of brain development
- Immature animal studies
 - Further support a causal link



Cannabis and FDA

- “U.S. Food and Drug Administration (FDA) has not approved any product containing whole cannabis plant for any purpose, even though cannabis and cannabinoid products are marketed for various therapeutic uses and are available in many states from medical cannabis dispensaries.”
-NIDA



- Dronabinol

- Nabilone

- Epidiolex



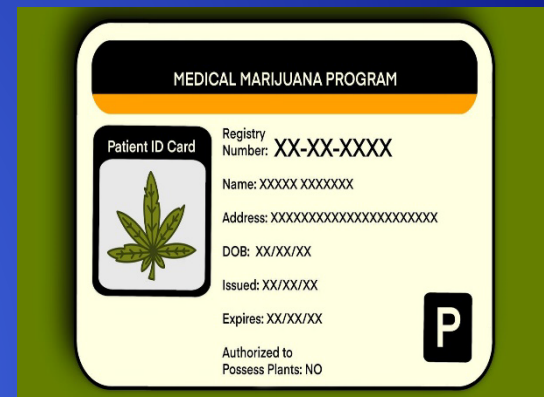
Cannabis: Good or Bad?

- Emerging evidence for certain forms of pain
- Challenges related to states laws
 - FDA permits study of cannabis products with precise information about manufacturing
 - This is not required for dispensaries
- “We’re so woefully behind in determining what might be useful. One million studies need to done.” Margaret Haney, Ph.D., Professor of Neurobiology and director of Cannabis Research Lab at Columbia University



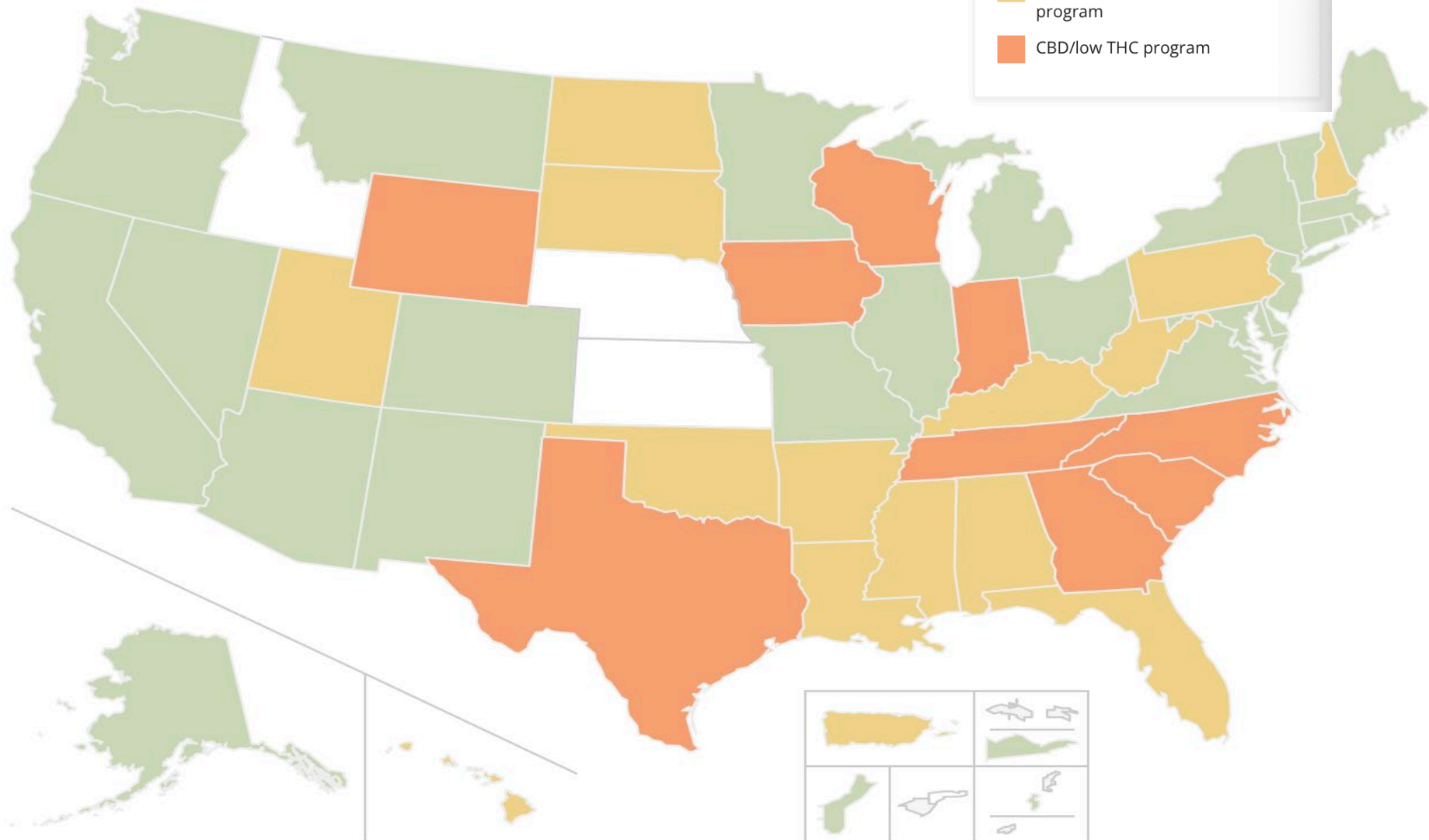
Cannabis: A Legislative Approach

- Medical Use of Cannabis
 - California Prop 215
- At the federal level, cannabis is a Schedule I substance under the Controlled Substances Act
 - High potential for dependency
 - No accepted medical use
- Medical cannabis legislation at the state level varies, and USDOJ has released multiple memos over the years to provide clarity



State Regulated Cannabis Programs

-  No public cannabis access program
-  Adult & medical use regulated program
-  Adult use only, no medical regulated program
-  Comprehensive medical cannabis program
-  CBD/low THC program



Cannabis in South Carolina

- Medical and recreational use of cannabis is illegal in South Carolina
 - South Carolina Compassionate Care Act
 - Would create a medical marijuana program for medical cannabis to be used for hepatitis C, glaucoma, cancer, PTSD, and medical conditions that cause debilitating pain, seizures, or severe nausea
 - Has passed twice in the Senate, but died in the House
- 2014, the Senate unanimously passed Julian's Law to legalize low-THC CBD oil for severe forms of epilepsy
 - Certification required from a licensed physician



FEBRUARY 7, 2024

MEDICAL CANNABIS

LEGISLATIVE ALERT!

SOUTH CAROLINIANS

CALL YOUR STATE SENATORS TODAY!

ACTION: URGE THEM TO SUPPORT THE COMPASSIONATE CARE ACT

FIND YOUR SENATOR HERE

WWW.SCSTATEHOUSE.GOV/LEGISLATORSSEARCH.PHP

More info @ www.SafeAccessNow.org/blog

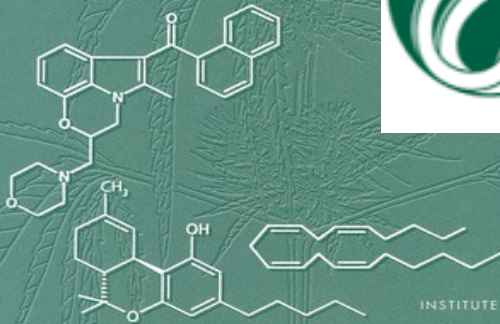
SC Compassionate Care Act

Cannabis: Good or Bad?

267 Pages

MARIJUANA AND MEDICINE

Assessing the Science Base



INSTITUTE OF MEDICINE

OF THE NATIONAL ACADEMIES

INSTITUTE OF MEDICINE

Marijuana and Medicine Report

- Physiologic effects of cannabinoids are important considerations and require further research
- Clinical trials should focus on symptom management and developing safe delivery systems
- Psychological effects of cannabinoids such as anxiety reduction and sedation, which can influence medical benefits, should be evaluated in clinical trials
- We need to better understand the individual health risks of marijuana use



Marijuana and Medicine Report

- Clinical trials for marijuana use for medical purposes should be conducted under limited circumstances
- Short-term (<6mos) use of smoked marijuana for patients with debilitating symptoms must meet the following conditions:
 - Failure of all approved meds
 - Symptoms can reasonably be expected to be relieved
 - Treatment is administered under medical supervision
 - Involves an oversight strategy



American Medical Association

- Cannabis for medicinal use should not be legalized through the state legislative, ballot initiative, or referendum process.
- AMA encourages hospitals and health systems to:
 - Not recommend patient use of non-FDA approved cannabis or cannabis derived products within healthcare facilities until such time as federal laws or regulations permit its use.
 - Educate medical staffs on cannabis use, effects and cannabis withdrawal syndrome



American Psychiatric Association

- Position Statement in Opposition to Cannabis as Medicine
- No scientific evidence that cannabis is in any way beneficial for the treatment of any psychiatric disorder
- If scientific evidence supports the use of cannabis derived substances to treat specific conditions, the medication should be subject to the approval process of the FDA



American Psychiatric Association

- Medical treatment should be evidence-based and determined by professional standards of care; it should not be authorized by ballot initiatives
- No medication approved by the FDA is smoked
- Multiple points related to potency, consistency, and reliability of the products
- “The APA does not endorse cannabis as medicine.”



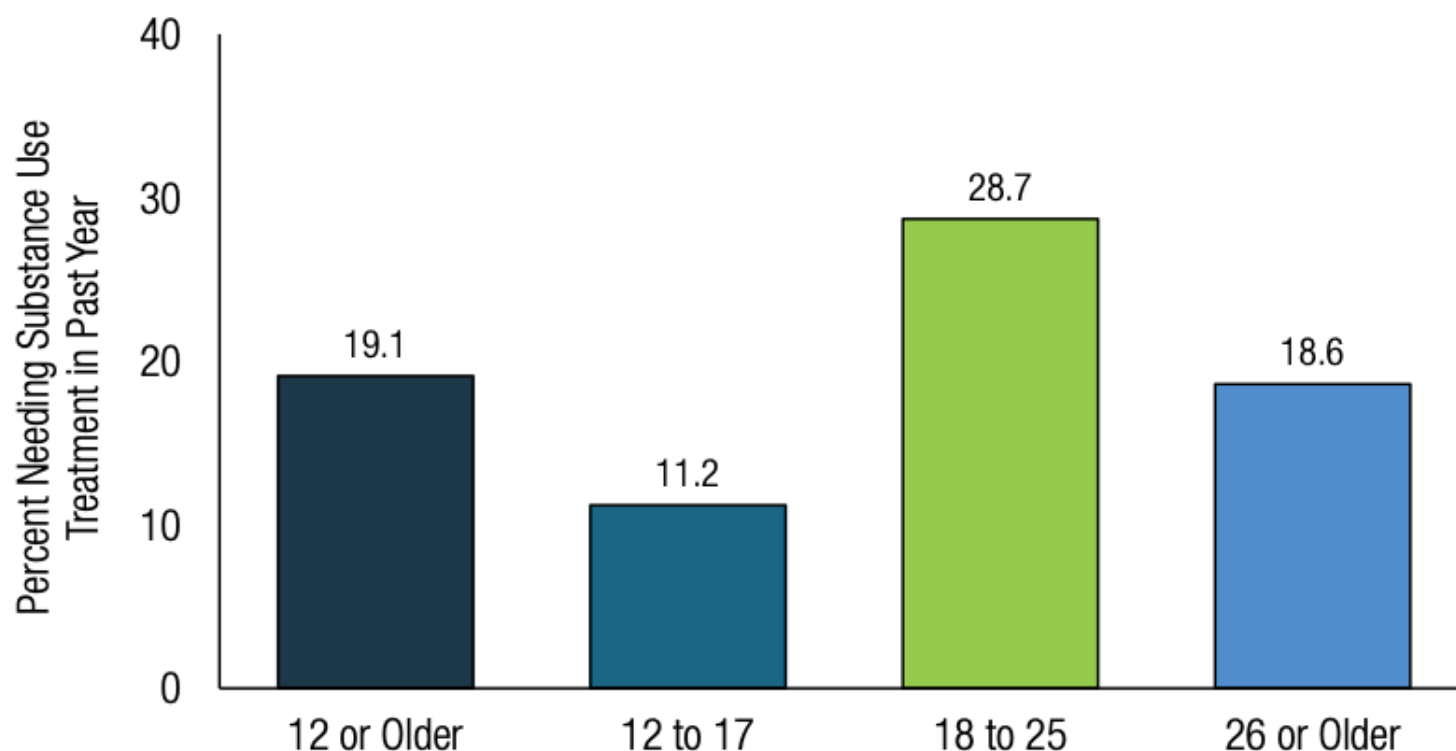
Cannabis: My Thoughts

- There is limited evidence to support cannabis use in a medical context
- Legislative process has resulted in legalization and medicalization of cannabis across various states and is confusing for everyday Americans
- CBD products can contain levels of THC sufficient to result in a positive drug screen
- Cannabis is more potent today than it used to be, this potency can cause psychiatric concerns
- Cannabis impacts the developing brain
- There is no such thing as zero risk substance use



Substance Use Treatment

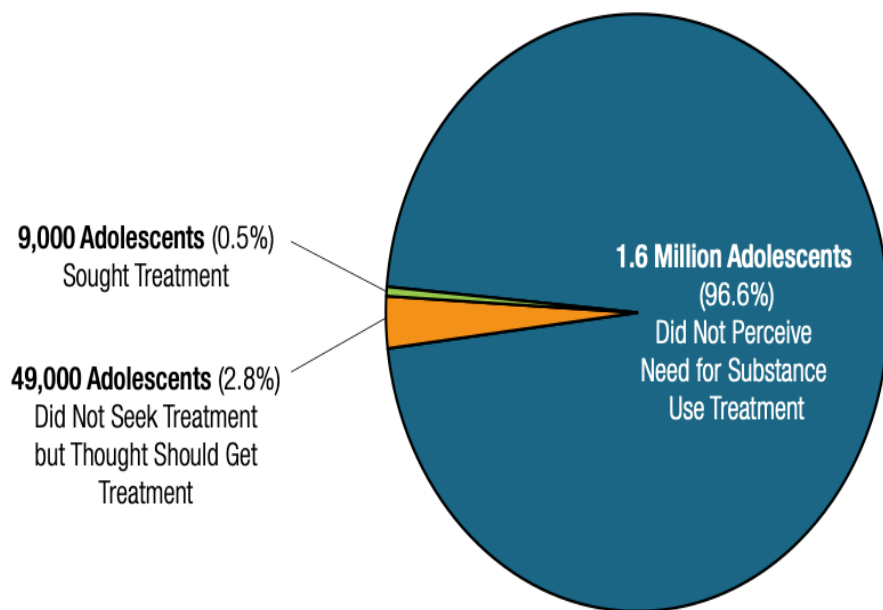
**Figure 50. Need for Substance Use Treatment in the Past Year:
Among People Aged 12 or Older; 2023**



Note: Need for Substance Use Treatment is defined as having a substance use disorder in the past year or receiving substance use treatment in the past year.

Substance Use Treatment

Figure 54. Perceptions of Need for Substance Use Treatment: Among Adolescents Aged 12 to 17 with a Past Year Substance Use Disorder Who Did Not Receive Substance Use Treatment in the Past Year; 2023

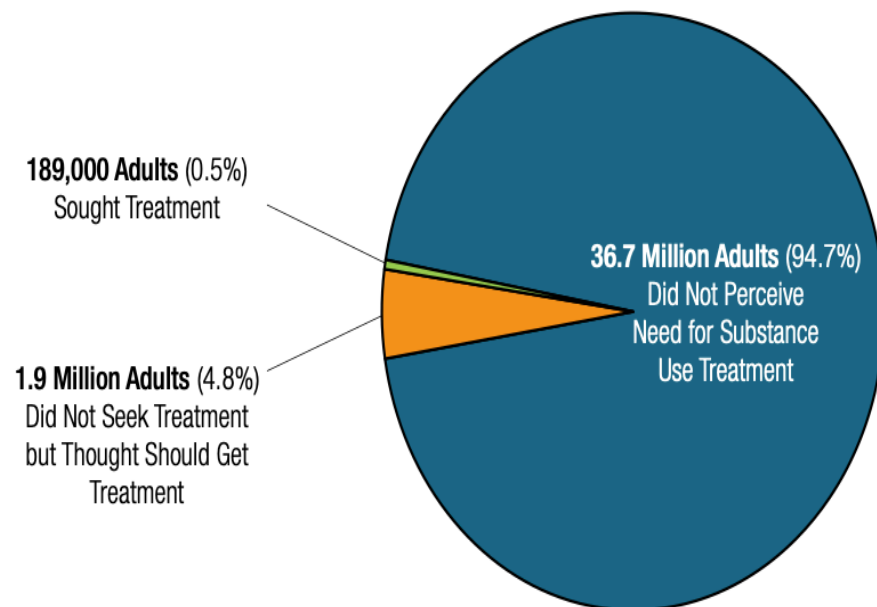


1.8 Million Adolescents with a Substance Use Disorder Who Did Not Receive Substance Use Treatment

Note: The percentages may not add to 100 percent due to rounding.

Note: Adolescents with unknown information for perceptions of need for substance use treatment were excluded.

Figure 55. Perceptions of Need for Substance Use Treatment: Among Adults Aged 18 or Older with a Past Year Substance Use Disorder Who Did Not Receive Substance Use Treatment in the Past Year; 2023



39.6 Million Adults with a Substance Use Disorder Who Did Not Receive Substance Use Treatment

Note: Adults with unknown information for perceptions of need for substance use treatment were excluded.

Treatment of Substance Use Disorders

- Medications
 - Naltrexone, Vivitrol
 - Suboxone (Buprenorphine - Naloxone), Methadone
- Therapy
 - Cognitive Behavioral Therapy
 - Motivational Interviewing
- 12-Step Community Treatment



Treatment of Substance Use Disorders: Medications

- Opioid Use Disorder
 - Naltrexone: Opioid antagonist
 - Suboxone: Partial opioid agonist
 - Methadone: Opioid agonist



- Alcohol Use Disorder
 - Naltrexone: Reduces rewarding effects of alcohol
 - Acamprosate: Helps restore GABA/Glutamate balance
 - Antabuse: Causes build-up of acetaldehyde

Is There Effective Treatment?

- Medications for Opioid Use Disorder are effective!
 - Buprenorphine and Methadone are “essential medicines” according to World Health Organization
 - Equal effectiveness among medication options
 - Meds need to be combined with counseling
- Medication assisted treatment (MAT) decreases opioid use, opioid-related overdose deaths, criminal activity, and infectious disease transmission
 - Heroin overdoses decreased by 37% in Baltimore after Buprenorphine became available



Is There Effective Treatment?

- Medications are not widely used
 - Less than ½ of privately funded treatment programs offer MAT
 - Most states do not have sufficient treatment capacity
- Methadone and Buprenorphine are not trading one addiction for another
 - Stigma, feedback from certain 12-step communities
- Diversion of Buprenorphine is uncommon
 - In 2014, Buprenorphine diversion made up less than one percent of all reported diverted drugs in the US



Where to Get Help?

- South Carolina Department of Alcohol and Other Drug Abuse Services (DAODAS)
 - <https://www.daodas.sc.gov/>
- Medical University of South Carolina
 - Center for Drug and Alcohol Programs
 - <https://muschealth.org/medical-services/psychiatry/cdap>
- Seek recovery resources that are offering evidenced based treatment
- Lawyers Helping Lawyers
 - Access to help 24/7



Questions?



Contact: Lewiset@musc.edu