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SBI for marijuana use in Colorado

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SBIRT Colorado

Acknowledgments

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Colorado - USA



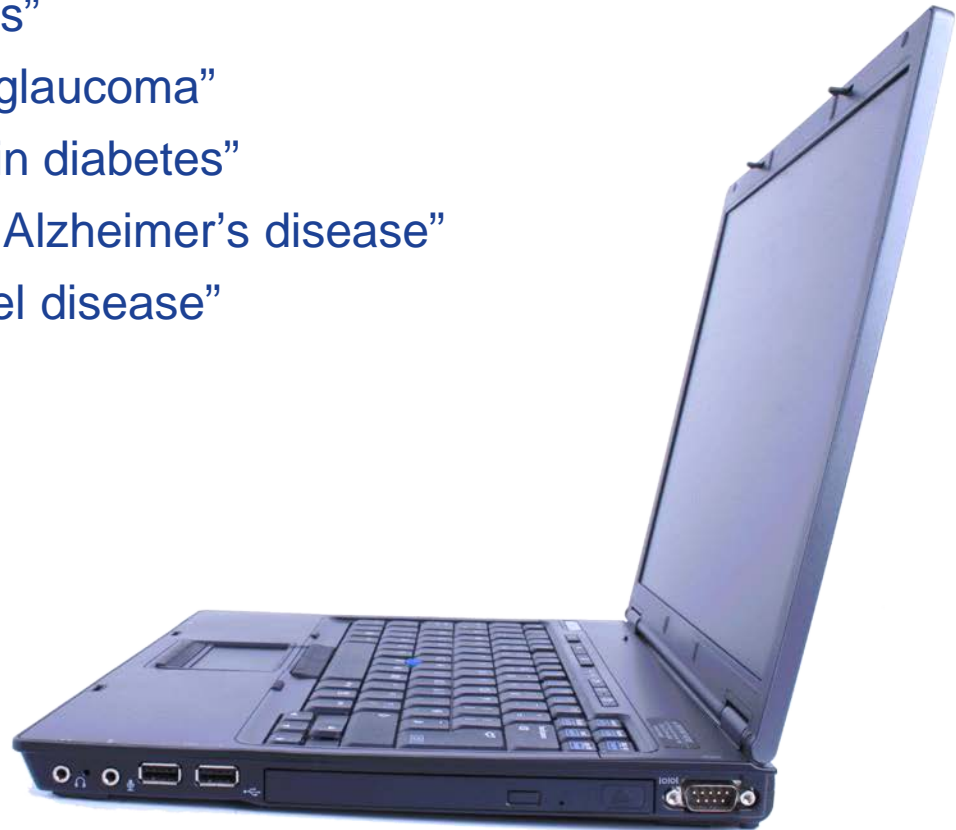
Marijuana in Colorado

- In 2000: voters approved medical marijuana
 - Implemented in 2001
- In 2012: voters approved recreational marijuana
 - Implemented in 2013



Internet search: 'Benefits' of marijuana

- “Stops cancer from spreading”
- “Controls epileptic seizures”
- “Prevents blindness from glaucoma”
- “Decreases insulin levels in diabetes”
- “Slows the progression of Alzheimer’s disease”
- “Treats inflammatory bowel disease”
- “Treats depression”



www.philly.com/10_health_benefits_of_marijuana

SBIRT Colorado Data Collection

- What % of patients screened in SBIRT healthcare settings are using marijuana?
 - 35.3% lifetime use (n=3529)
 - 14.7% past 90 days (n=1470)
 - 10.3% daily or weekly use
- Of those using marijuana, what % has a state-issued medical marijuana card? 308 (3.1%)
 - 8.6% of lifetime users have a card
 - 19.1% of past 90-day users have a card



Variance among past 90-day users

- Cardholders
 - 60.5% daily use
 - Average use: 19.21 days in past 30
- Non-Cardholders
 - 38.7% daily use
 - Average use: 12.91 days in past 30

**Cardholders used significantly more days
in past 30 than non-cardholders,
 $t(435.73)=7.92, p<.001$**

Risk level among past 90-day users

Cardholders

- Moderate risk: 90%
- Moderate-high to High risk: 3.2%
- Significantly more likely than Non-Cardholders to screen positive for marijuana ($\chi^2(1, N = 1470) = 38.64, p < .001$)

Non-Cardholders

- Moderate risk: 69.6%
- Moderate-high to High risk: 7.1%
- Significantly more likely than Cardholders to screen at Moderate-high to High risk ($\chi^2(1, N = 1470) = 5.91, p < .05$)

Co-occurrence with other substance use

- % of past-90 day marijuana users who screened positive for:
 - Alcohol 43.1%
 - Tobacco 71.9%
 - Stimulants 6.8%
 - Cocaine 7.7%
 - Opioids 5.6%
- **Non-cardholders** were significantly more likely than Cardholders to screen positive for:
 - Alcohol (45.9% vs. 31.7%, $c^2(1, N = 1470) = 18.81, p < .001$)
 - Tobacco (75.9% vs. 54.8%, $c^2(1, N = 1470) = 49.82, p < .001$)
 - Stimulants (7.6% vs. 3.6%, $c^2(1, N = 1470) = 5.77, p < .05$)



Conclusions from data on use

- Medical marijuana cardholders were more likely to be *at risk*, specifically moderate risk, likely due to **frequency** of use.
- Non-cardholders were more likely to screen at *higher risk* for **marijuana** and to screen positive for other substances.



New marijuana question: SBIRT Colorado - October 2013

“In the past year how many times have you used marijuana?”

Any report of more than 1 time will be considered a ‘positive’ brief screen

What we hear about marijuana...

- “It’s legal- what’s the big deal?”
- “It’s all natural.”
- “No one ever overdoses on marijuana.”
- “It’s safer for my lungs than cigarettes.”



- “It’s safer than narcotics for pain.”
- “It treats many serious health problems.”
- “It improves my sleep and anxiety, and helps me handle stress.”
- “It makes me a safer driver...I drive slower.”
- “It’s not harmful.”

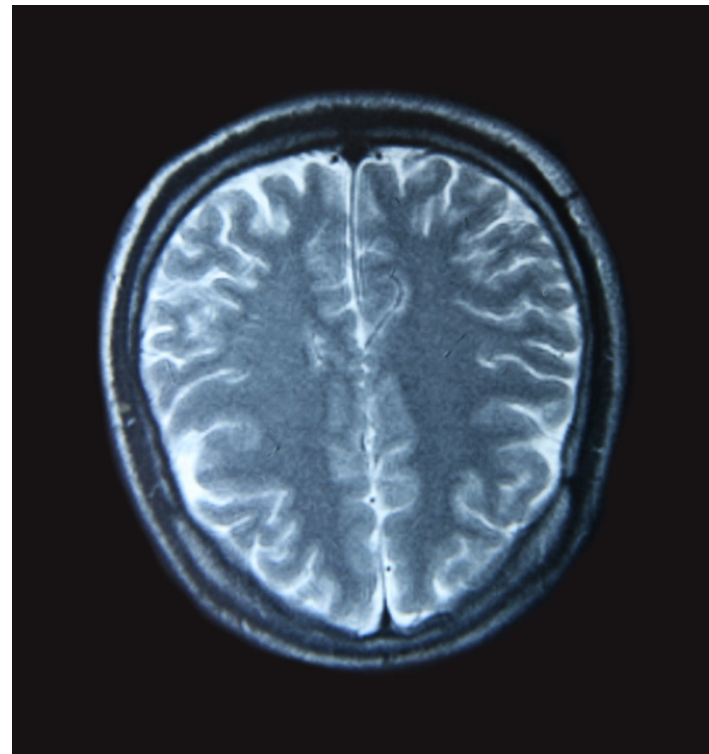
Brief intervention: Priorities

- Prevent use in adolescents and young adults
- Encourage abstinence (in most cases)
- Harm reduction when unwilling to abstain
- Further assessment and treatment for those with possible dependence
- Recovery support services



Prevention

- Prevent diversion to youth
 - Effects of legalization on patterns of use in youth are not fully understood at this time
- De-normalize use in adolescents and young adults.
- Educate parents and youth:
 - Brain development
 - Short and longer-term memory impairment
 - Depression and other mental health concerns
 - Other health effects
 - *May be associated with other substance use*



Safety and health concerns

- Accidental ingestion by children and pets
 - Discuss safeguarding and safe disposal
- Driving while under the influence
- Cardiovascular effects – especially in those already at higher risk
- Mental health effects – especially in those already at higher risk
- Fertility – pregnancy- breastfeeding
- Cannabinoid Hyperemesis Syndrome



Medication interactions

- Major:
 - Barbiturates (marijuana may potentiate)
 - CNS depressants (marijuana may potentiate)
 - Theophylline (marijuana may attenuate)
- Other possible interactions:
 - Fluoxetine (interaction may lead to hypomania)
 - Warfarin (marijuana may potentiate)



Brief intervention key points

- Find out what the person knows and believes about marijuana. *Reflective listening.*
- Provide information about health and safety risks. *Offer information and feedback with permission.*
- Express concern about lack of standardized potency and dosing. *Offer information with permission.*
- Express concern about self-medicating to treat serious health conditions. *Offer advice with permission.*



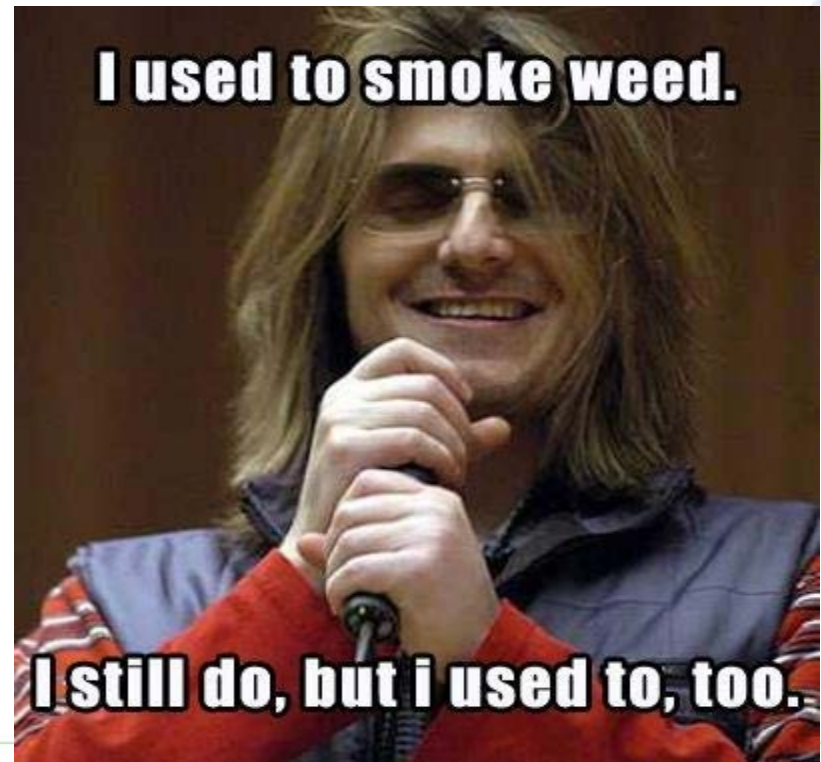
More on brief interventions

- Explore the relationship between marijuana and other substance use. *Enhance motivation.*
- Explore underlying stress, depression, anxiety and alternatives to managing. *Reflective listening to promote insight and explore options.*
- Explore other possible reasons to change marijuana use (e.g., cost, role model for kids). *Enhance motivation.*



Benefits of cessation (or decreased use)

- Improved mental clarity
- Improved motivation
- Money saved
- Protect brain, heart, lungs, and other organs
- Decreased chance fertility problems
- Healthy pregnancy
- Safer breastfeeding
- A good role model for children





Goals:

- Promote SBIRT screening that detects any marijuana use in adolescents and adults
- Offer effective brief interventions to prevent use and reduce harm among users

Other Resources (all available at healthteamworks.org):

- SBIRT Guideline
- Adult and adolescent screening tools
- Information on brief interventions and motivational interviewing
- DSMV diagnostic criteria

Things to Consider

- Users who begin in adolescence have a 1 in 6 chance of developing dependence¹
- Potential increased risk in pregnant women, people taking certain medications, and people with certain health conditions

SBIRT For Marijuana Use

- Begin routine screening for marijuana use in all patients by age 12
- Screen for any use of marijuana. Recommended question: *"In the past year have you used marijuana?"*
- Assess for risky behaviors related to use
- Assess for cannabis use disorder (mild, moderate, severe)
- Offer brief intervention
- Provide follow-up care and resources (if needed)

Background

- In Colorado:
 - Effective June 1, 2001: medical cannabis use was permitted for approved patients ages 21 and older.
 - Effective 2013: recreational cannabis (1 oz. or less) was legal to possess and consume in private residences for individuals ages 21 and older.
- Marijuana is the third most commonly used substance after tobacco and alcohol in the U.S., Australia and Europe
- Psychological/emotional dependence may suggest other issues that need to be addressed

Strains

1. Cannabis indica

- Has larger amounts of Cannabidiol (CBD)
- Is known for relaxation and is commonly used to relieve inflammations, glaucoma, arthritis and muscle tension.²

2. Cannabis sativa

- Has larger amounts of Tetrahydrocannabinol (THC)
- Is known to be more energizing, and can reduce headaches, pain and nausea and stimulate appetite.²

- Sativa also exhibits a higher tendency to induce anxiety or paranoia³
- 3. CBD by itself, lacks noticeable psychoactive effects³

For More Information:

- National Institute on Drug Abuse
 - For Adults: drugabuse.gov/drugs-abuse/marijuana
 - For Teens: teen.drugabuse.gov/drug-facts/marijuana

Conditions approved for Medical Marijuana use in Colorado

- Cancer
- Cachexia
- Epilepsy
- Glaucoma
- HIV/AIDS
- Multiple
- Sclerosis (MS)
- Muscle Spasms
- Severe Pain
- Severe Nausea
- Seizures

Discussion with Parents about Children Using Marijuana

Risk Factors:

- Early aggressive behavior
- Lack of parental supervision
- Substance abuse
- Drug availability
- Poverty

Source: NIDA, drugabuse.gov

Protective Factors:

- Impulse control
- Parental monitoring
- Academic competence
- Antidrug use policies
- Strong neighborhood attachment

Source: NIDA, drugabuse.gov

Things parents should consider:

- Communicate a "no-use" expectation
- Be flexible on when to talk about drugs, not whether
- Take advantage of everyday "teachable moments"
- Share stories of people in recovery
- Use blocks of time (on the way to school, after dinner, etc.)
- Talk about a recent drug- or alcohol-related incident in your neighborhood/community

Source: NIDA, drugabuse.gov

Effects of Prenatal Exposure to Marijuana

Preconception Counseling Points to Consider

- THC crosses the placental barrier and accumulates in fetal tissue
- Increases risk of anencephaly, interferes with immune system development
- Increased risk of miscarriage
- Use while breastfeeding can cause irritability in infant, and is considered a form of exposure

	Effects of Prenatal Exposure to Marijuana
Infants	<ul style="list-style-type: none"> • Visual behavior disturbances • Poor sleep • Mental, motor and neurobehavioral deficiencies • Aggressive behavior • Attention problems • Poor sleep
Children (Ages 1-10)	<ul style="list-style-type: none"> • Lower scores in verbal and memory domains • Lower intelligence test scores • Social behavioral disorders • Decrease in learning abilities • Decrease in academic achievement • Neuropsychological problems • ADHD • Depressive symptoms • Poor sleep
Adolescents	<ul style="list-style-type: none"> • Increase in conduct problems and delinquent behavior • Deficits in attention

Effects in Adolescents Who Use Marijuana

- Problems with learning and memory
- Distorted perception (sights, sounds, time, touch)
- Increased heart rate
- Diminished motor coordination
- Risk of psychosis & long-term neurocognitive deficits/reductions in IQ

Effects In Adults Who Use Marijuana

Physical Risks

General Effects:

- Temporarily increases blood pressure and heart rate
- Quadruples risk of heart attack
- Increased stroke risk
- Cognitive and memory issues
- Smoking increases risk for:
 - Oral cancer
 - Chronic bronchitis
 - Frequent chest colds
 - Pneumonia

- Increased incidences of motor vehicle crashes
- Cannabinoid hyperemesis syndrome
 - Especially seen in adolescents/young adult users
 - Results from chronic use
 - Relatively rare

Long-term Effects:

- Weakened immune system
- Infertility in both men and women
- Miscarriages or brain damage to fetus
- Testicular cancer

Mental Health Risks

- Psychomotor symptoms include:
 - Euphoria
 - Changes in sensory perception
 - Impairment in memory and cognition
- Correlation between marijuana and depression, suicide and schizophrenia
- Use may be suggestive of maladaptive coping skills
- Co-occurring use is higher in individuals with a mental health diagnosis
- Use may increase risk of new onset mental illness including anxiety or psychosis

Avoid, Especially When:

- "You are pregnant or breastfeeding"
- "You have heart problems or hypertension"
- "You have lung problems"
- "You have immune system problems"
- "You are scheduled for surgery in the next 2 weeks. (marijuana may cause excessive sedation if combined w/ medications used during and after surgery.)"

Source: NDA.drugbaiz.gov

Safety Concerns for Marijuana Users:

- Can cause dry mouth, nausea, vomiting, red eyes, heart and blood pressure problems, lung problems, impaired mental functioning, panic reactions, hallucinations, flashbacks, depression, and sexual problems
- Driving and impairment

Source: NDA.drugbaiz.gov

Safety Concerns for Others Related to Marijuana Use:

- Avoid second-hand smoke exposure
- Discuss safe disposal
- Particularly safeguard edibles and all forms of marijuana from young children and pets

Issues that may arise in conversations with patients about marijuana:

- Marijuana is all natural
- Marijuana is safer than tobacco
- Marijuana is safer than alcohol
- No one has ever died from a marijuana overdose
- Marijuana is not addictive
- Marijuana is an effective treatment for serious medical conditions including cancer, epilepsy, diabetes, Alzheimers Disease, glaucoma, migraines and others
- It's legal! So why quit now or how could it be a problem?
- It's better/safer than using narcotic pain medications
- It's more effective than other pain medications
- It helps with stress and anxiety
- Safer than smoking (tobacco) during pregnancy

Brief Intervention Key Points

- Important: Use reflective listening to show that you want to understand the patient's beliefs about marijuana
- It may be difficult to know and/or control the strength or dose of marijuana being ingested or smoked
- Consider possible contamination of marijuana
- Serious health conditions should be managed by a qualified health professional. There may be risks associated with self-treatment or with augmenting conventional medical treatments with marijuana.
- Heavier users may experience improvement in mental clarity and motivation when they abstain or cut back on use

To identify treatment support and recovery services, please visit www.linkcare.org

References:

1. Wagner, F. A. & Anthony, J. C. (2002). From first drug use to drug dependence: developmental periods of risk for dependence upon marijuana, cocaine, and alcohol. *Neuropsychopharmacology*, 26, 479-488.
2. United Nations Office on Drugs and Crime (2009, June 29). Why Does Cannabis Potency Matter? Retrieved August 27, 2013 from <http://www.unodc.org/unodc/en/frontpage/2009/June/why-does-cannabis-potency-matter.html>

This guideline is designed to assist clinicians with Marijuana supplemental information to implement for management. It is not intended to replace a clinician's judgment or establish a protocol for all patients. For copies of the supplement, go to www.healthteamworks.org or call (303) 446-7200. This guideline was supported with funds from SBIRT Colorado.

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Thank you very much!

**For more information:
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