# Marijuana Clinical Guidance

Information to guide work with adolescents and adults

# Why Screen for Marijuana

Marijuana is the third most commonly used substance in the U.S. after tobacco and alcohol.

Marijuana use is associated with health and mental health problems.

Adolescents are particularly at risk for developing problems.

Marijuana users who begin using during adolescence have a 1 in 6 chance of developing dependence.

Current research does not provide safe limits of use.

In general, heavier and more frequent use increases health risks and risk of developing a severe cannabis use disorder. However, any use can result in negative consequences.

Use of cannabis is likely to increase risk for developing other substance use problems.

# Recommendations for Screening and Brief Intervention

**Step 1:** Screen adults and adolescents aged 12 and older.

**Recommended screening question:** "In the past year how many times have you used marijuana?"

**Positive score = 1** or more times

**Step 2:** Assess reasons for using, frequency, and quantity of use.

If concerned about problematic use or serious consequences, consider screening for cannabis use disorder. The CUDIT-R screening tool is validated in adults and adolescents.

**Step 3:** Provide brief intervention and consider referral to treatment.

# **CUDIT-R Scoring**

8-11 = offer a brief intervention

12 or more = Provide brief intervention and consider referral to treatment

# **Brief Intervention Key Points**

- Raise the subject (ask permission to discuss marijuana).
- Explore underlying reasons for using marijuana (stress, anxiety, depression, physical symptoms). Explore lifestyle and other alternatives to marijuana for management of symptoms.
- Use reflective listening to understand a person's beliefs about marijuana and reasons for using it.
- Offer feedback (with permission) on short- and long-term health effects of marijuana tailored to the person's age, health, and life circumstances.
- Advise to cut back, or consider abstaining—especially for those experiencing negative health consequences, and with population subgroups such as adolescents or pregnant or breastfeeding women.
- Negotiate and advise to create a plan to decrease or stop use, or prevent potential negative consequences of use. Focus on reducing harm to self and others.
- Offer assistance and referral if needed.
- Follow-up to monitor progress.

# **General Effects of Marijuana**

- Temporarily increases heart rate and blood pressure.
- May cause excessive sedation when combined with perioperative medications. Avoid marijuana if scheduled for surgery in the next two weeks.
- Diminished motor coordination.
- Distorted perception (sights, sounds, time, touch).
- Chronic use of smoked marijuana increases the risk of:
  - Chronic bronchitis
  - Data on lung, head, and neck cancers associated with marijuana is unclear

- Chronic use of marijuana increases the risk of:
  - Impaired cognitive function, memory, and decision-making
  - Depression, anxiety, and panic attacks
  - Suicidal ideation and suicide attempts
  - Psychosis
  - Infertility
  - Cannabinoid Hyperemesis Syndrome

# **Safety Concerns**

- Impaired driving: marijuana is associated with a 2–3 fold increase in motor vehicle crashes (lower risk than alcohol).
- Second-hand smoke exposure.
- Accidental ingestion by young children and pets.

## **Possible Medication Interactions**

#### **Information from the Mayo Clinic**

- Marijuana may increase risk of bleeding when used with aspirin, anticoagulants, antiplatelet drugs, nonsteroidal anti-inflammatory drugs, and ginkgo biloba.
- Marijuana may affect blood sugar; medications for diabetes may need to be adjusted, e.g., metformin or insulin. Use caution if taking herbs and supplements that affect blood sugar.
- Marijuana may lower blood pressure. Use caution with medications, herbs or supplements that lower blood pressure.
- Marijuana may increase drowsiness when used with benzodiazepines, barbiturates, narcotics, some antidepressants, and alcohol.
- Marijuana affects the liver's cytochrome P450 enzyme system (CYP450) and could result in increased blood levels of medications metabolized by CYP450 leading to adverse reactions. Read package inserts or consult with a pharmacist.

**Information on additional interactions:** http://www.mayoclinic.org/drugs-supplements/marijuana/interactions/hrb-20059701

## **Key Points for Population Subgroups**

#### **Older Adults**

- Cannabis and cannabinoids may result in clinically significant pain reduction—however:
  - Smoking associated with chronic cough/phlegm
  - Heavier use may result in panic or anxiety attacks and increase suicidal thoughts
  - May result in medication interactions
  - Temporarily increases heart rate and BP

#### **Adolescents**

- Screen routinely starting by age 12 at every well child visit and whenever concerned.
- Use associated with learning, memory and behavior problems, lower academic performance and lower motivation to meet goals.
- Use associated with long-term neurocognitive deficits and reduced IQ.

#### **Pregnancy and Breastfeeding**

- Use by pregnant women is increasing. Screen at each trimester during pregnancy.
- Women who use marijuana before pregnancy often continue while pregnant. Women may use due to perceived anti-emetic effects.
- THC crosses the placenta and exposes the fetus.
- Marijuana use may increase the risk of miscarriage, low-birth weight, and NICU placement.
- Prenatal exposure is associated with long-term motor, mental health, and neurobehavioral problems including problems with learning and attention.
- THC is present in breast milk often at higher concentration than mother's blood level.

Clinical guidelines for addressing marijuana in adolescents, and in pregnant and breastfeeding women:

Colorado.gov/cdphe/marijuana-clinical-guidelines

# **Suggestions For Addressing Common Assumptions About Marijuana**

#### Marijuana is natural

Marijuana may contain harmful contaminants. Many natural substances harm human health.

#### It's legal. How could it be a problem?

Other legal substances such as tobacco, alcohol, and prescription drugs cause significant harm. Marijuana can lead to serious, long-term negative health effects. Heavier and more frequent use generally increases risk. Marijuana is still illegal at the federal level.

#### Marijuana helps with stress and anxiety

It is important to identify underlying causes of stress and anxiety. Explore alternatives to marijuana. Quitting marijuana may improve mental clarity and motivation to pursue other lifestyle interventions.

# Marijuana is an effective treatment for serious medical conditions such as: cancer, epilepsy, depression

Serious medical conditions should be managed by a qualified health professional. Self-treatment or augmenting conventional treatments with marijuana could cause harm.

#### Marijuana is not addictive

Marijuana can be addictive. Overall, ~9% of users will become addicted; of those who start young, ~17%; and 25-50% of daily users.

#### Marijuana is safer than tobacco or alcohol

Similar to alcohol or tobacco, chronic use of marijuana may harm health and other areas of a person's life. Marijuana may especially be harmful in adolescents, and pregnant and breastfeeding women.

# Marijuana is safer than smoking tobacco during pregnancy

Tobacco and marijuana can harm the developing fetus in different ways. The effects of marijuana on fetal development may be long-term and include problems with learning and behavior.

# No one has ever died from a marijuana overdose

In Colorado, emergency room visits are increasing related to marijuana induced delirium, cyclic vomiting, and overdoses. Potency has increased over the years. Edibles may deliver very high doses.

#### **Discussion with Parents**

#### **Key factors to prevent use:**

- Parental involvement and monitoring
- Engagement in school
- Healthy, strong neighborhood attachments
- Positive parent/caregiver role-models

#### Important things parents need to know:

- Use of marijuana can be especially harmful to adolescents because the brain is still developing.
- Be non-judgmental and offer opportunities for the young person to disclose use.
- Communicate a "no-use" expectation.
- Share stories of drug incidents and people in recovery.

# **Policy History**

- 2001: medical cannabis use was legalized
- 2013: recreational cannabis (1 oz. or less) was legalized to possess and consume in private residencies for individuals ages 21 and older.
- 2014: retail industry launched
- Some evidence supports cannabinoid use in certain clinical populations. Consult Colorado Department of Public Health and Environment for approved medical uses.

Currently approved uses of medical marijuana per the Colorado Constitution:

> Cancer — Glaucoma — HIV positive or AIDS OR

The patient has a chronic or debilitating disease or medical condition that produces one or more of the following and which, in the physician's professional opinion, may be alleviated by the medical use of marijuana:

Cachexia — Persistent muscle spasms Seizures — Severe nausea — Severe pain

## **Strains**

- Cannabis indica
  - Larger amounts of Cannabidiol
  - Known for relaxation, commonly used to relieve inflammation, and glaucoma.
- Cannabis sativa
  - Larger amounts of Tetrahydrocannabinol
  - Known to be more energizing; can reduce headaches, pain and nausea and stimulate appetite.
  - Sativa has higher tendency to induce anxiety or paranoia
- Cannabidiol by itself, lacks noticeable psychoactive effects
- Potency of most currently available marijuana is substantially higher than the marijuana of earlier decades.
- Edibles produce a delayed high.
- Marijuana may be detected in urine for days and up to about one month depending on frequency and intensity of use.

# **Cannabis-Related Disorders**

- Consult DSM-5 for diagnostic criteria.
- CUDIT-R screening tool validated in adults and adolescents.
- Indicated by a problematic pattern of marijuana use leading to clinically significant impairment or distress manifested by at least two of the criteria for a substance use disorder. For example:
  - -Recurrent use resulting in a failure to fulfill major role obligations at work, school, or home
  - -Continued use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by marijuana
  - -Tolerance
  - -Withdrawal

in Colorado at www.colorado.gov/ladders

Identify treatment and recovery support services Learn more about marijuana laws, general information and prevention resources at responsibilitygrowshere.com



