Slide 1

Marijuana Misuse, Medicine & Legalization

-- Helping Communities and Clients Sail the Rhetorical Seas

Allan Barger, MSW
KSAODS 2013 - Louisville, KY

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Slide 2

Before we start…
what is the current environment?

1. **What is our role and our message?**
2. **How can we assist change?**

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A New Reason for What You Do !

We want people to find a balanced life of pleasure . Pleasure from

- Loving Relationships;
- Relaxation and Play;
- Productive , Meaningful Work;
- Being Well

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2. How can we assist change?

CHANGE is GOOD!!!

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Client's Tasks of Change

- **Precontemplation**
  - _____
  - _____
- **Contemplation**
  - _____
  - _____

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Client's Tasks of Change

- **Preparation**
  - _____
  - _____
- **Action**
  - _____
  - _____
- **Maintenance**
  - _____

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Defining Our Terms

What does "marijuana" mean?

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Marijuana: Weed, Dabs, Shatter & Vapes,

Slide 9

Weed

"weed" = dried bud of the marijuana plant

sensemilla = growing process - the female plant is not fertilized - no seeds

smoked or heated to inhale the vapor

THC content is variable

Slide 10

Dabs

"Dab" = hash oil/resin obtained with butane extraction (BHO = butane hash oil)

resin is placed on superheated metal and the resulting vapor inhaled

THC concentration is high

Slide 11

Shatter

"Shatter" = hash oil/resin obtained with butane extraction, purified to a waxy, then brittle state

heated to inhale the vapor

concentrated THC content is high

Slide 12

Vapes (e-pipes)

- E-cigarette for THC are portable bongs or pipes
- Use with plant matter, oils, dabs or shatter depending on the brand
- Higher levels of THC delivered

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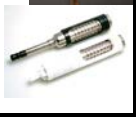
Various preparations and potencies will have different risk profiles in all of the outcomes we are about to study. While there is very little research on these newer preparations, the overall picture suggests the greater the potency or quantity, the greater the risk.



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Cannabis Use – Five Risks

1. Acute Impairment
2. Lingering Effects
3. Dependence & Addiction
4. Diminished Life Outcomes
5. Health Problems

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Risk 1. Impairment

"Getting high is just harmless fun and a great way to relax."

Seed of Truth:

Marijuana can be fun and relaxing.

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Risk 1. Impairment

Research on Cannabis and Driving

- **Past use of THC (24 hours earlier)** – no effect on crash risks
- **Recent use of THC (past 2-4 hours)** - increases risks for motor vehicle accidents
- **THC alone** increases risk
- **Synergistic effect of alcohol & THC** - greater impairment than either alone

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Risk 1. Impairment

Marijuana users do attempt to adjust for impairment

- Slower speeds
- Greater following distance

Marijuana impairs mostly automated driving skills

- Weaving
- Time estimation
- Impaired ability to shift attention

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Risk 1. Impairment

Impact of THC Impairment on Fatal Crashes

- **Any level THC – 2.7 increased odds of causing a fatal crash**
- **$\geq$ 5 ng/ml THC – 6.6 increased odds of causing a fatal crash**

THC mostly impairs automated driving skills.

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Risk 1. Impairment

Effects of Cannabis and Alcohol Combined

- **THC & alcohol vs. same-BAL alcohol only**
  - **2.9 increased odds of causing fatal crash**
- **When both alcohol and THC was present in fatally injured drivers, 95% of those drivers *caused the fatal crash***
- **THC and alcohol combined results in:**
  - **Severe driving impairment**
  - **Sharp increase in the risk of accidents and culpability**

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Risk 1. Impairment

Why Measuring THC Impairment is Complex

State per se THC impairment levels vary

- **None**
- **Any Illegal substance or metabolite in the blood (defined in state code)**
- **Per se THC levels ranging from 1 ng/ml – 10 ng/ml**

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1. Acute Impairment - Legalization

- **Impairment occurs regardless of legal status**
- **Kentucky has no per se law for THC – marijuana is explicitly excluded in state statute**
- **Around 10 states have Zero Tolerance THC laws, including Indiana, Illinois & Georgia**

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Risk 1. Impairment – Are they impaired?

Why Measuring THC Impairment is Complex

- Not like alcohol in its effects
- Unlike alcohol, impairment does not follow blood levels
- We need to know what we're measuring
  - THC, Hydroxy-THC, Carboxy-THC

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Risk 1. Impairment – Are they impaired?

Why Measuring THC Impairment is Complex

- Δ^9-THC (THC) – psychoactive, persists in blood 1-4 hours (linger at low levels in heavy users)
- 11-Hydroxy-Δ^9-THC (hydroxy) psychoactive, persists in blood 2-6 hours
- 11-Nor-9-Carboxy-THC (carboxy) non-psychoactive, persists in blood for a number of days

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Impaired Executive Brain Functions -

- Attention
- Concentration/Persistence to Task
- Decision Making (especially with new information)
- Impulsivity/Inhibition

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Impaired Executive Brain Functions -

- Reaction Time
- Risk Taking
- Verbal fluency
- Working (or Short-term) Memory

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Risk 1. Impairment

While IMPAIRED, multiple studies find deficits in :

- **Attention** (in light but not heavy users)
- **Concentration**
- **Inhibition**
- **Impulsivity**
- **Increased Risk-taking**

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Risk 1 – Impairment

Do cannabis users do better at school or work while using? ***They may!***

- Acute effect is *decreased* ability to shift attention, i.e. more focus on one thing.
- Rebound effect is decreased ability to focus on one thing while not using, increasing the felt need to use to function.
- Rebound effect may increases with duration of use.

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Risk 1. Impairment

The New View

- Those using cannabis do injure themselves and others.
- Cannabis use decreases the ability to shift attention among multiple tasks.
- Impairs impulse control with more impulsive behavior
- Impairs working memory
- Increases risky decision-making

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Impairment can occur

- with medical use
- regardless of legal status

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Risk 2 – Lingering Effects

"It's better than alcohol. I don't have a hangover; I get high, I come down. Everything is fine."

Seed of Truth:

- People don't have obvious hangovers from using marijuana.

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Risk 2 – Lingering Effects

Deficits in:

- Short-term memory
- Attention
- Decision making / Risk Taking
- Verbal Fluency
- Reduced IQ (in those starting in adolescence)

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Risk 2 – Lingering Effects

Executive Brain Functions help us:

- Plan
- Organize new information
- Integrate the info into new approaches
- Persistence to task

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Risk 2 – Lingering Effects – Subclinical Psychosis

Subclinical psychosis can also be a problem:

- **Becoming more asocial**
- **Loss of motivation/energy/concentration**
- **Drop in functioning**
- **Increased suspicion and/or exaggerated beliefs**
- **Odd behaviors**

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Risk 2 – Lingering Effects Summary

The New View

- Cannabis users over time can develop subtle, but significant, cognitive problems including impaired:
  - decision-making,
  - integration and use of new information,
  - Problem solving, and
  - With early onset, a potentially lower IQ
  - Subclinical psychosis

Marijuana is different from alcohol; but that doesn't make it "safe."

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Risk 3 – Dependence & Addiction

"Cannabis is not addictive.

Or if it is, it's so mild it doesn't matter."

Seed of Truth:

- Many people who smoked marijuana were not addicted and quit easily.

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Risk 3 - Dependence & Addiction

Is Marijuana Addictive?

- A New Understanding – Addiction is centered in brain
- Can marijuana use meet criteria for dependence and addiction?
  - Withdrawal
  - Loss of control

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Risk 3 - Dependence & Addiction

What we do know:

- Addiction is **not just defined by physical dependence** leading to withdrawal.
- Medical withdrawal does not lead to loss of control.
- Withdrawal may play a role in continued use and relapse.

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Risk 3 - Dependence & Addiction

One View of Addiction: Same as the eleven DSM-V Substance Use Disorders

- **3 Biological Symptoms**
  1. **Tolerance -** need increased amounts *or* get diminished effect
  2. **Withdrawal**
     1. Typical substance withdrawal syndrome *or*
     2. Substance or analog taken to relieve or avoid withdrawal
  3. **Craving –** strong desire to use a particular substance

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Risk 3 - Dependence & Addiction

One View of Addiction: Same as DSM-V Dependence

- **Eight Behavioral Symptoms**
  - Recurrent use with failure to engage in life roles
  - Recurrent use despite social or interpersonal problems
  - Recurrent use in physically hazardous situations
  - Using more *or* longer than intended
  - Desire or have unsuccessful efforts to cut down/control use
  - Spend a lot of time obtaining, using, or recovering
  - Decrease or give up important activities due to drug
  - Recurrent use despite knowledge of physical or psychological problems caused or made worse

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Risk 3 - Dependence & Addiction

Another View of Addiction: Homeostasis to Allostasis

- High blood pressure is an allostatic state.
- Drug-driven brain changes lead to addiction as the brain tries to maintain stability in the brain's reward systems.
- Persistent vulnerability to relapse and addiction
- **Addiction is an allostatic state characterized by the**
  - Compulsion to seek and take drug
  - Loss of control in limiting intake
  - Emergence of a negative emotional state when access is blocked

Koob & Le Moal, 2008

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Risk 3 - Dependence & Addiction

Addiction - A New Understanding from the Latest Brain Research

- **group of behaviors arising from an altered brain**
- **characterized by**
  - A compulsion to seek and take drug
  - The loss of control in limiting intake
  - The emergence of a negative emotional state when access to the drug is blocked

Koob & Le Moal, 2008

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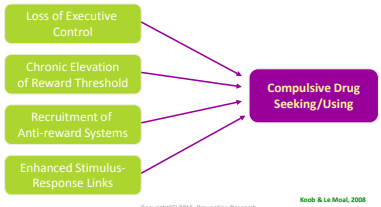
Risk 3 - Dependence & Addiction

Neurobiological View of Addiction



Koob & Le Moal, 2008

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Risk 3 - Dependence & Addiction

Loss of Executive Control

Lingering Deficits in Executive brain functions

- Planning
- Organizing
- Focused attention
- Persistence to task

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Risk 3 - Dependence & Addiction

Loss of Executive Control

Chronic Elevation of Reward Threshold

Let's explore the second brain change…

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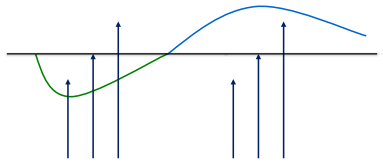
Risk 3 - Dependence & Addiction

Reward Rebound

- While "buzzed," drunk or high, the brain's reward threshold is temporarily **lowered**.
- Following the "high," the reward threshold is temporarily **raised**.



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Risk 3 - Dependence & Addiction

Reward Rebound

What we experience as **euphoria**, the brain and its neurons experience as a **threat**.

- The brain responds to protect itself by making its reward system less sensitive to all reward.
- This is the first reason we have a reward rebound – the brain is acting to protect itself.

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Risk 3 - Dependence & Addiction

Chronic Elevation of Reward Threshold

Recruitment of Anti-reward Systems

The second reason for reward rebound is activation of the anti-reward system.

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Risk 3 - Dependence & Addiction

Reward Rebound

- Many anti-reward chemicals help moderate and shut down the reward system.
- Loss of reward response leads to a:
  - Shift in values
  - Shift in behaviors
- Flip side of reward is stress.

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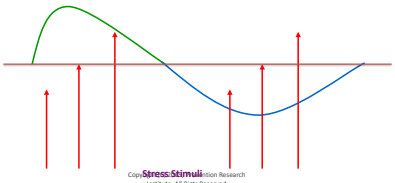
Risk 3 - Dependence & Addiction

- **Reward** – During the early "high," the **stress threshold** is temporarily **raised**
- **Stress Threshold** - As a drug leaves the system, the brain's **stress set point** is temporarily **lowered**.



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Risk 3 - Dependence & Addiction

Chronic Elevation of Reward Threshold

Recruitment of Anti-reward Systems

Let's see the outcomes of these two chronic brain changes

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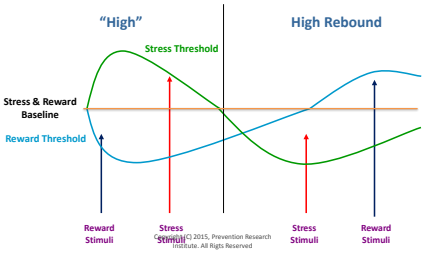
Risk 3 - Dependence & Addiction

During the high and after the "high"



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Risk 3 – Dependence & Addiction

Altered Reward & Stress Systems

- Loss of reward leads to a shift in values and behaviors
  - Less rewarding = less valuable,
  - Less rewarding = less time & energy invested
- Small stressors:
  - have *more* power to trigger our stress responses

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Risk 3 – Dependence & Addiction

Altered Reward & Stress Systems

- Leads to a shift in values and behaviors to
  - *avoid stress*
  - *seek reward*

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Risk 3 – Cannabis Dependence & Addiction

Does marijuana use acutely LOWER reward threshold (more pleasure)?

- Lowered reward threshold by Δ^9-THC has been demonstrated by:
  - Rate-frequency paradigm
  - Reward-threshold paradigm
- Similar to all other abused drugs
- Cannabis produces conditioned place preference in lab animals.
- Self-administration studies find both animals and humans will self administer cannabis.

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Risk 3 – Cannabis Dependence & Addiction

Does marijuana use acutely RAISE stress threshold (reduce stress)?

Multiple studies report:

- Cannabis stimulates the production and release of opioids, calming the brain and reducing pain (emotional or physical).
- Marijuana users state enhanced relaxation as the #1 reason they use.

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Risk 3 – Cannabis Dependence & Addiction

A LOWER stress threshold after a marijuana "high"?

Multiple studies report:

- Irritability (87%)
- Nervousness (80%)
- Depression (76%)
- Restlessness (76%)
- Anger (74%)

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Risk 3 – Cannabis Dependence & Addiction

A LOWER stress threshold after a marijuana "high"?

Multiple studies find:

- More aggressive responses during times of abstinence

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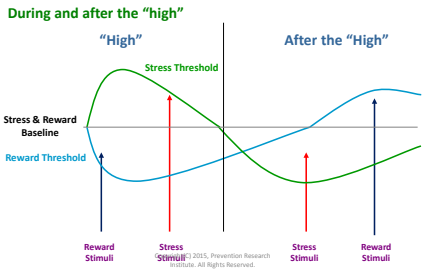
Risk 3 – Cannabis Dependence & Addiction

During and after the "high"



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Risk 3 – Cannabis Dependence & Addiction

Enhanced Stimulus-Response Links

Let's explore the fourth and final criteria

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Risk 3 – Cannabis Dependence & Addiction

Enhance Stimulus Response

- Compared to non-users, cannabis users:
  - More quickly focused on cannabis cues
  - Spent more time looking at those cues
  - Rated the cues as more pleasurable
  - Increased craving increased the stimulus response

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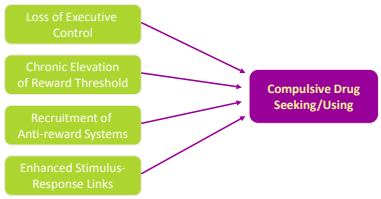
Risk 3 – Cannabis Dependence & Addiction

Neurobiological View of Addiction



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Koob & Le Moal, 2008

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Risk 3 – Cannabis Dependence & Addiction

Symptom prevalence in dependent cannabis users:

- Persistent desire 91%;
- Unintentional use 84%;
- Withdrawal 74%;
- Excessive time obtaining/using 74%;
- Continued use despite health problems 63%;
- Tolerance 21%;
- Social consequences 18%

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Risk 3 – Cannabis Dependence & Addiction

Compared to Dependent Alcohol Users, Dependent Cannabis Users reported:

- Compulsive and out-of-control use more frequently
- Withdrawal similarly
- Tolerance considerably less often

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Risk 4 – Cannabis Dependence & Addiction

Most Powerful Predictive Risk Factor of Dependency at Age 21

- Frequency of cannabis use at age 18
  - Even after controlling for pre-existing psychological or social factors
- Nonusers who began use – 1.8 odds
- Odds nearly double at each level of use.

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Risk 3 – Cannabis Dependence & Addiction

Summary

Marijuana has the ability to create:

- **Social dependence**
- **Psychological dependence**
- **Physical dependence**
- **Behavioral Loss of Control**

Marijuana is addictive, characterized by:

- **A compulsion to seek & take drug**
- **Loss of control in limiting intake**
- **The emergence of a negative emotional state when access to the drug is blocked**

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Risk 4 – Life Outcomes

"People smoking marijuana do just as well in life as those who don't."

Seed of Truth:

- Many people who use marijuana have functional lives.

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Risk 4 – Life Outcomes

Life Outcomes of Cannabis Users Ages 24-37

- **Multiple studies of users vs. non-using peers found among cannabis users:**
  - **More with only a high school education or less**
  - **More who are unemployed**
  - **More with lower income**
- **More episodes of use predict greater risk of these outcomes**

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Risk 4 – Life Outcomes

Life Outcomes of Cannabis Users Ages 24-37

- **Multiple studies of users vs. non-using peers found among cannabis users:**
  - **More who never married or are divorced**
  - **More who are disabled**
  - **More who use alcohol, tobacco, or other drugs**
- **More episodes of use predict greater risk of these outcomes**

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Risk 4 – Life Outcomes

Are other drugs the real problem?

- **Cannabis-only dependent users in treatment vs. other drug-dependent users in treatment**
  - Cannabis users had **more**:
    - Depression
    - Personality disorders
    - Psychosis/schizophreniform disorders

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Risk 4 – Life Outcomes Summary

The New View - As a group, marijuana users report

- Poorer quality of life than nonusers, even after controlling for many background factors and other drug use
  - Lower educational levels
  - Less employment / lower income
  - More never married or divorced
  - Less overall life satisfaction
- Marijuana does not contribute to improved quality of life.

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Risk 5 – Health Problems

1. **Acute Cardiac Problems & Heart Attack**

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Risk 5.1 – Heart Disease and Death

The research says:

- Marijuana use increases heart rate by 30-100% of normal (up to 160 beats per minute)
- Supine hypertension, orthostatic hypotension & fainting
- 4.8x increased risk of myocardial infarction (heart attack) in the first hour after smoking
- Reduced experience of angina (12% vs 25%)

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Risk 5.1 – Heart Disease and Death

The research says:

- **Among young users there are occasional sudden heart problems**
  - **Atrial fibrillation**
  - **Ventral fibrillation (more serious)**

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Risk 5.1 – Heart Disease and Death

The research says:

- **There were two recent fatalities reported in young men using cannabis**
- **Concern that the problem is under-recognized and reported, especially as the population ages**

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Risk 5.1 – Heart Disease and Death

The *prospective* research says:

Comparing marijuana users to nonusers in those with *known* heart disease :

- **Doubled (1.9x) increased risk of fatal heart attack in 4 years with any use**
- **2.5x increased risk for less than weekly users**
- **4.9x increased risk for weekly or more users**

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Risk 5.1 – Heart Disease and Death

Researchers share concerns:

- The problem is seldom recognized and may be unreported
- Physicians should inquire about marijuana use particularly in heart problems in young adults
- As the population ages, use the marijuana may be contraindicated in those with heart disease

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Risk 5 – Health Problems

1. Acute Cardiac Problems & Heart Attack
2. **Schizophrenia or Other Psychosis Disorder**

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Risk 5.2 – Schizophrenia (rare but devastating)

Studies show cannabis use linked to development of schizophrenia

- **Swedish conscript study** (n=50,087 males)
  - Cannabis use associated with dose-response curve
  - Persisted after controlling for stimulant use

Cannabis Use	Dose-Response Curve and % Developing Schizophrenia	Odds Ratios
5-10 times	1.1% Developed Schizophrenia	
11-50 times	1.9% Developed Schizophrenia	2.2 increased odds
> 50 times	3.8% Developed Schizophrenia	3.1 increased odds

- Similar findings from other research

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Risk 5.2 – Schizophrenia (rare but devastating)

- Most people using marijuana will not develop a psychosis disorder, but risk is there for some.
- Long-term or high-potency use may cause subthreshold psychosis symptoms.
- Predictors of psychosis disorders:
  - family history of psychosis,
  - daily use in adolescence
  - personal history of high-potency marijuana use
  - episodes of toxic psychosis

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Risk 5 – Health Problems

1. Acute Cardiac Problems & Heart Attack
2. Schizophrenia or Other Psychosis Disorder
3. Cancer - the pros and cons

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Risk 5.3 – Cancer – Is THC a Cure?

- It is suggested the marijuana cures cancer.
- It is implied from this that smoked or inhaled marijuana will cure cancer.
- Pure THC and some other cannabinoids applied directly to some tumor cells reduce the size of the tumors

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Risk 5.3 – Cancer – Is THC a Cure?

- This is a promising area that should be pursued
- Other evidence suggests marijuana may impair immune response to tumors
- At this time, the data is mixed, but no research shows smoked or inhaled marijuana prevents or cures cancer.

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Risk 7 – Testicular Cancer (rare but devastating)

- Three independent studies implicate marijuana use as a risk factor for a particular form of testicular cancer (Testicular germ cell tumor or TGCT)
- Most commonly occurring in young adults aged 18 to 45
- Doubled the risk (1.7 to 2.2 increased odds)

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Overall Research Conclusions

1. Acute impairment is hazardous.
2. Lingering effects do happen.
3. Dependence and addiction happen and quantity/frequency of use predict it.
4. Life outcomes are not improved by the use of cannabis

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Overall Research Conclusions

5. There is increased risk for heart disease for some
6. Marijuana seems to be an environmental risk factor for schizophrenia
7. Marijuana use, particularly daily use, may increase risk for testicular cancer in young men

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PRI Research Analyst

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Medical Marijuana & Legalization Issues

Allan Barger, MSW
PRI Research Analyst

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What is the Issue?

1. What the public largely hears are the potential benefits, but almost no one is talking about the risks of using.
2. This intrudes into prevention and treatment.
   a) People feel informed
   b) People have good intentions
   c) Clients hear another viewpoint and struggle to even believe it, let alone act upon it.

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Tackling Medical Marijuana

The lay of the land…

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Defining Our Terms

What is a "medicine"?

"A substance taken for the prevention or treatment of a disease."

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Is Marijuana a Medicine?

- Marijuana contains compounds that can treat some diseases. In that sense, it is a medicine.
- Willow bark – the original source of aspirin is also a medicine in this sense.

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Is Marijuana a Medicine?

- It is a crude medicine, only used because a better refined, pharmaceutical version of its compounds are not readily available.

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Proposed Medical Compounds found in Marijuana and Potential Effects

- Δ^9-THC – anti-nausea, sedative, appetite enhancement, slows tumor growth
- Δ^8-THC - anti-nausea, anti-emitic, slows tumor growth
- Cannabidiol – anti-nausea, anti-spasmotic, anti-seizure

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Proposed Medical Compounds found in Marijuana and Potential Effects

- Cannabinol – analgesic, lowers intra-ocular pressure (glaucoma preventative)
- Cannibichromene – sedative, analgesic
- Cannibigerol – sedative, anti-inflammatory, lowers intra-ocular pressure
- Δ^9-THCV – antagonist effects on CB receptors

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Why Address Medical Marijuana?

- It is important to understand as a "wedge" issue for legalization

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Why Address Medical Marijuana?

- It is important to understand as a "wedge" issue for legalization
- The medical issue is currently tied to recreational use

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Currently, medical use of cannabis is tied to recreational use

"The vast majority of so-called "medical marijuana patients" I witnessed during my years in the movement were simply seeking a way to obtain and smoke marijuana unmolested."

Nicholas Thimmesch II (former Director of Communications, NORML)

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Why Address Medical Marijuana?

Singer/Songwriter, Alanis Morrisette

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Why Address Medical Marijuana?

- It is important to understand as a "wedge" issue for legalization
- The medical issue is currently tied to recreational use
- There is a lot more *said* about medical marijuana than is *accurate*

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Why Address Medical Marijuana

These arguments have been persuasive

- Marijuana treats many illnesses
- Many people do not respond well to traditional medicines
- Marijuana is as safe or safer than many prescription medications
- People are suffering
- It is unfair to make people suffer when marijuana can treat their condition.
- The National Institute of Medicine (IOM) has endorsed the medical use of marijuana.

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Why Address Medical Marijuana

These arguments are accurate

- Marijuana components treat some illnesses
- A minority of people do not respond well to traditional medicines
- Marijuana is as safe or safer than some prescription medications
- People are suffering
- It is unfair to make people suffer when marijuana can treat their condition.
- The National Institute of Medicine (IOM) has endorsed the medical use of marijuana.

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Medical Marijuana
1999 Institute of Medicine

Pro	Con
• Not completely benign but can be used	• Smoking is a crude delivery system
• Assess case by case who will benefit	• Respiratory disease is linked to cannabis use
• *May* help nausea, pain and AIDS wasting	• May lead to infections with AIDS patients
• Short-term use (6 months or less)	• Studies suggest it may increase cancer risk
• Research on risks and benefits should continue	• It is not indicated for treating glaucoma

Marijuana and Medicine: Assessing the Science Base, 1999, IOM

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Medical Marijuana

1999 Report

Conditions of Use

1. ***Short term use*** **– no more than six months duration**
2. ***Reasonable expectation*** **use improves symptoms**
3. ***Documented failure*** **of all approved medications**
4. **Treatment is done under *ongoing medical supervision***
5. ***Physician routinely monitors*** **treatment effectiveness**
6. ***Physicians refer to a review board,*** **similar to an IRB, to provide guidance within 24 hours for a physician request to prescribe marijuana**

Marijuana and Medicine: Assessing the Science Base, 1999, IOM

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Proponents of medical marijuana use are increasingly mainstream

"It [marijuana] doesn't have a high potential for abuse, and there are very legitimate medical applications. In fact, sometimes marijuana is the only thing that works." Dr. Sanjay Gupta

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Journal of the American Medical Association (JAMA) on Medical Marijuana

"**Conclusions and Relevance :**
There was moderate-quality evidence to support the use of **cannabinoids** for the treatment of chronic pain and spasticity. There was low-quality evidence … cannabinoids were associated with improvements in nausea and vomiting due to chemotherapy, weight gain in HIV infection, sleep disorders, and Tourette syndrome. *Cannabinoids were associated with an increased risk of short-term AEs."*
Jama. June 2015 [Adverse Events a.k.a unwanted outcomes]

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Why Address Medical Marijuana?

- It is important to understand as a "wedge" issue for legalization
- The medical issue is currently tied to recreational use
- There is a lot more *said* about medical marijuana than is *accurate*
- Our field (prevention & treatment) made a mistake

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Four Reasons the Drug Abuse Field Addresses Medical Marijuana

1. To divorce medical and recreational use.

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Four Reasons the Drug Abuse Field Addresses Medical Marijuana

1. To divorce medical and recreational use
2. To allow for compassionate use under IOM Guidelines for those in true medical need
   a) We made a mistake. We need to fix it.
   b) We should press the medical research establishment o explore and define the medical uses and conditions that contraindicate its use.
   c) We should press the government to make medical research on cannabinoids a priority.

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Five Reasons the Drug Abuse Field Addresses Medical Marijuana

1. To divorce medical and recreational use.
2. To allow for compassionate use under IOM Guidelines for those in true medical need.
3. To suggest we should not be doing drug approval by public referendum.

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Four Reasons the Drug Abuse Field Addresses Medical Marijuana

1. To divorce medical and recreational use.
2. To allow for compassionate use under IOM Guidelines for those in true medical need.
3. To suggest we should not be doing drug approval by public referendum.
4. To teach the public *and our clients* :
   a) to view medical marijuana as subject to diversion as any other prescription.
   b) if marijuana is a potent medicine, it has risks.

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Tackling Legalization

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Four Reasons to Legalize Marijuana

1. Alcohol is legal – marijuana should be too.
2. Marijuana is already so widely available, why not legalize it and get the tax revenue?
3. People are being unjustly imprisoned.
4. Tax Revenues will fill state coffers and alleviate state budget problems.

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1. Alcohol is legal - marijuana is no worse

The False Analogy

1. Equating alcohol and marijuana effects
   a) Alcohol can be used as a beverage and usually is
   b) Marijuana is used exclusively for getting high
2. There are statistically no differences in overall life outcomes among alcohol abstainers and drinkers who use low-risk amounts (except drinkers live a little bit longer)
3. The real question is: "Is marijuana risky compared to not using at all?"

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2. It is already available - what's the difference?

The False Assumption

Confuses
availability
with
acceptability

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3. People are being imprisoned unjustly

Inmates in state prison for marijuana offenses (1997)

- **Drug possession offenses - 5.6% of all state inmates**
- **First time drug offenders - 3.6% of all state inmates**
- **Offenses involving marijuana - 2.7% of all state inmates**
- **Held for marijuana *only* - 1.6% of all state inmates**
- **Held for marijuana *possession* only – 0.7% of all state inmates**
- **First time offenders held only for marijuana possession (any amount) - 0.3% of all state inmates**

Who's *Really* in Prison for Marijuana? - ONDCP
http://www.ncjrs.gov/ondcppubs/publications/pdf/whos_in_prison_for_marij.pdf

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3. People are being imprisoned unjustly

Marijuana offenders sentenced in federal courts (2001)

- **Drug offenders sentenced in federal court 24,299**
- **Drug offenders sentenced for marijuana 7,991**
- **Marijuana offenders sentenced for trafficking 7,805 (97.7%)**
- **Marijuana offenders sentenced for possession 186 (2.3%)**
- **Marijuana offenders sentenced to prison for possession 63**

Who's *Really* in Prison for Marijuana? - ONDCP
http://www.ncjrs.gov/ondcppubs/publications/pdf/whos_in_prison_for_marij.pdf

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3. People are being imprisoned unjustly

There is a prison problem:

- **Race**
- **Class**
- **"School to prison" pipeline**
- **Psychiatric issues**
- **We need alternative sentencing for non-violent offenders**

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4. Tax revenue will fill state coffers

The Argument

- **Less enforcement needed**
- **Less spent on court costs**
- **Less spent on prison costs**
- **Increased tax revenue**

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4. Tax revenue will fill state coffers

- 90% in prison for drug use are using cocaine, heroin, or meth.
- 6% for marijuana only
- 0.1%-0.2% total prison population
- Most have other offenses, usually drug trafficking, often with multiple drugs including some they do not use.

The Argument

- Less enforcement needed
- Less spent on court costs
- Less spent on prison costs

Authors' conclusion: "decriminalization of marijuana would have almost no impact on prison populations"

Caulkins, J., & Sevigny, E. (2005). How many people does the U.S. imprison for drug use, and who are they? *Contemporary Drug Problems, 32, 405 - 428*

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4. Tax revenue will fill state coffers

Not the whole picture:

- **Competition will causes prices to plummet**
- **New bureaucracy, regulation & enforcement**
- **Enforce tax collection on a cottage industry?**
- **Organized Crime will not disappear**
- **Colorado projected 1st fiscal year revenues to be $33.5 million**
- **They actually collected $12 million**

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4. Tax revenue will fill state coffers

Exploring legalization in California – Rand Drug Policy Institute estimated legalization would create:

- a 25% increase in adult use
- more new initiates
- using more frequently,
- using in more settings,
- using for longer periods of time

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4. Tax revenue will fill state coffers

This is likely to result in:

- More healthcare costs
- Including Treatment
- DUI costs likely to increase

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Summary: Legalize Marijuana

1. Alcohol is legal – marijuana should be too.

-False analogy.

2. Marijuana is already so widely available, why not legalize it and get the tax revenue?

False assumption

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Summary: Legalize Marijuana

3. People are being unjustly imprisoned.

-Sometimes true, but are drugs the real reason?

4. Tax Revenues will fill state coffers and alleviate state budget problems.

-Overestimated value that does not include added costs, either financial or social

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