IAPSC

Illinois Association of Problem-Solving Courts Conference

> 8th Annual Meeting October 15 & 16, 2020

General Session

Friday – October 16, 2020 8 A.M. to 9:45 A.M.

Marijuana:
Public Health and
Psychiatric Implications

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Program Description

With the last year's passage of legislation by the State of Illinois the drug of marijuana will now be available to adults for its recreational use. This will make Illinois the 11th state to legalize its use as a recreational drug. There are those proponents who have aggressively advocated for legalization and those who are concerned about the consequences. On the political spectrum, the issue of legalization for recreational use is divisive. Looking at those concerns expressed, this presentation will review and synopsize the public health and public safety impact of marijuana in those ten states that have legalized the drug. There is also a growing body of literature that discusses the bio-psycho-social consequences to the use of high grade grown marijuana which will be included in the presentation.

Program Goals/Objectives

- Discuss the passage of the Illinois legislation which has legalized the production, sale, and use of recreational marijuana.
- Examine the experience of the ten states that have legalized it's use.
- Synopsize both the public health and public safety concerns.
- Assess the growing body of literature that discusses the biopsycho-social consequences to the use of high grade grown marijuana
- Discuss what behavioral health providers must do to address the consequences of marijuana use.

Origin...

- From the cannabis plant that is grown in the United States, along with Central and South America.
- Marijuana is a Spanish term that translates to "hemp" in English.



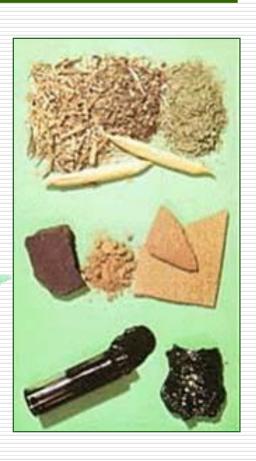


Forms of Use...

* Leaves and Buds

* Hash

*** Hash Oil**



How It's Used...

- Joint (cigarettes)
- Blunts (cigars)
 - * Pipe
 - Water Pipes (bongs)
 - ***** Hookahs
 - Food Stuffs
 - **E-Cigarette (vapors)**





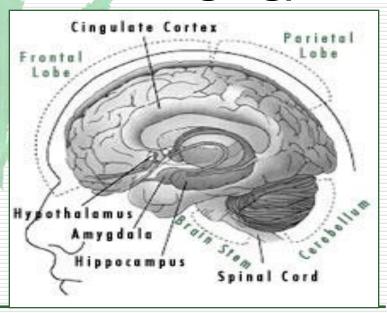






How It Works...

Marijuana Contains Delta-9-Tetrahydrocannabinol (THC), a Psychoactive (Mind-Changing) Drug.



THC Concentrations

- Historically most ordinary marijuana has an average of 3% THC.
 - Sinsemilla (made from the buds and flowering tops) has an average of 7.5%, with a range as high as 24%
 - * Hashish (resin from female flowers) has an average of 3.6%, with a range as high as 28%
 - * Hash Oil (the tar-like liquid distilled from hashish) has an average of 16%, with a range as high as 43%

Cannabis Continues to Get Stronger Since Legalization...

- According to the National Institute on Drug Abuse (NIDA) the average strength of pot doubled from about 8% in the 1990s to 16% in 2013.
- Colorado reported that the average amount of THC in legal marijuana rose from 16% in 2016 to 20% in 2017.
- The products generating the most concern are concentrates in which THC content can exceed 80%.

New Understanding of the Neurological & Pharmacology Impact:

"Some researchers believe that marijuana should now be considered physically addictive because of its effect on the pleasure centers of the brain."

Prevention Forum Fall 1998

Other Ingredients

- Marijuana Also Contains 421 Different Chemical Compounds.
- Sold Marijuana Contains Other Psychoactive Drugs.



Marijuana Mixed Or Laced With

PCP
Formaldehyde
Methanol
Industrial Solvents
The Future? Fentanyl

Street Trend... Mixture of Marijuana & Drugs

Wicky Sticks
Wacky
Crazy Eddie
Amp
Wet Daddy

Illicit Economic Market

- Weight in the Number one cash crop in California.
- Number three cash crop in the United States.
- W Untaxed Dollars







Medical Marijuana Laws in Illinois...

- State Opioid Helpline reports that marijuana is the third most called about primary drug.
- 2013 Medical marijuana was legalized.
- Fifty-one (51) approved medical conditions (September 2019)
- Forty six thousand (46,000) Statewide Patients (October 2018)
- Allowed up to 68 grams (2.5 ounces) every 14 days which can be anywhere from 70 to 140 joints.
- Annual Illinois retail sales of \$221 million.

DuPage County Health Department

<u>Marijuana Policy Issues</u> (September 19, 2019)

11th State to legalize Marijuana

- * #1. California
 - * #2. Oregon
 - * #3. Alaska
 - * #4. Washington
 - * #5. Nevada
 - **#** #6. Maine
 - **#** #7. Maryland
 - * #8. New Mexico
 - **#** #9. Connecticut
 - **#** #10. New Hampshire
 - **# #11. Illinois**

Coming to Illinois January 1, 2020



Usage Linked to Psychosis...

- The link between THC potency and psychosis has generated increase concern among psychiatrists and researchers.
 - Multiple studies have shown a persistent link associated between marijuana use and psychosis, including schizophrenia, with symptoms such as paranoia and hallucinations.
 - The British medical journal Lancet found that daily cannabis use was associated with first episodes of a psychotic disorder.
 - A 2018 study in the Netherlands found that when potency went up more people sought drug treatment.
 - A Yale University comprehensive review reported that "cannabis may be a component cause in the emergence of psychosis, and this warrants serious consideration from the point of view of public health policy.
 - * The Illinois State Medical Society is calling for per-serving limits on THC, strong warning labels, and a ban on claims of health benefits.

Continued...

The Illinois Medical Society President Paul Pedersen said that he's heard from psychiatrists in the state reporting:

"That there has been a noticeable increase of youths coming into emergency departments with acute psychosis from marijuana in the past few years."

Continued...

In Massachusetts, which recently legalized cannabis, a group of doctors and scientists recently called for strict THC potency limits and warnings on packages to include:

Increased risk of serious mental illness including psychosis, paranoia, suicidal thoughts and depression"

Continued...

Paul Armentano, the Deputy Director for the advocacy group NORML, acknowledge in an email that:

"Marijuana use carries risk particularly for young people and those with a family history of mental illness."

Health Impacts of Cannabis

- U.S. Surgeon General's Advisory: MarijuanaUse and the Developing Brain:
- Some state's laws on marijuana have changed, but the science has not and federal law has not.
 - Marijuana is an addictive drug.
 - Between 2002 and 2017, marijuana use doubled in the last month among pregnant women.

U.S. Surgeon General's Advisory...

- In 2017, more than 9 million youth reported marijuana use in the prior month.
- The science indicates the higher the THC concentration, the higher the risk.
- No amount of marijuana use during pregnancy or adolescence is known to be safe.

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

Center for Disease Control (CDC)

- **Health Impacts of Cannabis:**
- Difficulty, thinking, making decisions and solving problems.
- W Distorted Perceptions
- Impaired Balance and Coordination
 - Problems with Learning and Memory
 - Irregular Heart Rhythms
 - Respiratory Problems and Greater Risk of Lung Infections

Center for Disease Control...

- ***** Paranoia
- Acute Psychosis
- * Hallucinations, Delusions, and Loss of Identity

Centers for Disease Control and Prevention.

Marijuana and Public Health - Health Effects.

www.cdc.gov/marijuana/health-effects.html

National Academies of Science, Engineering, and Medicine...

Health Impacts of Cannabis Report:

Concluded that there is moderate to substantial evidence of a statistical association between cannabis use and...

- Worse respiratory symptoms and more frequent bronchitis episodes.
- Low birth weight.
- Development of schizophrenia or other psychosis.
- Increased motor vehicle crashes.

Health Impacts of Cannabis Report...

- Increased risk of overdose injuries, including respiratory distress, among pediatric populations in U.S. States where cannabis is legal.
- Impairment to learning, memory, and attention.
- Increased symptoms in individuals diagnosed with bipolar disorders.
- Increased suicidal thoughts and suicide attempts with a higher incidence among heavier users.
- Increased Suicides
- Increased incidence of social anxiety disorder.

Health Impacts of Cannabis Report...

- Development of Substance dependence and/or substance abuse disorder.
- National Academies of Science, Engineering, and Medicine (2017)
 - The Health Effects of Cannabis and Cannabinoids
 - www.Nationalacademies.org/CannabisHealthEffects

Effect of Cannabis as Opioid Alternative

- No evidence that cannabis reduced pain severity.
- No evidence that cannabis reduced use of opioids.
- Cannabis use appears to increase rather than decrease the risk of developing nonmedical prescription opioid use and opioid use disorder.

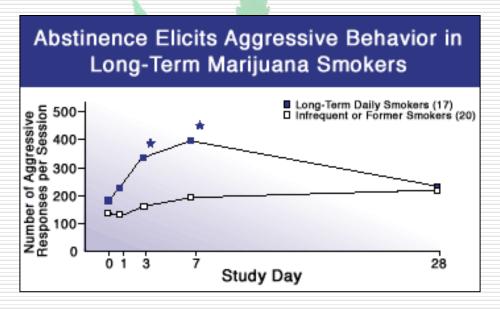
Effect of Cannabis as Opioid Alternative...

- * The opioid crisis is worsening where cannabis has been legalized, despite fewer prescriptions.
- Effects of Cannabis use in people with chronic non-cancer pain prescribed opioids: findings from a 4-year prospective cohort study Lancet Public Health 2018; 3: e341-50
 - Cannabis Use and Risk of Prescription Opioid Use in the United States

 American Journal of Psychiatry in Advance (2017)
 - Opioid Death Rate Acceleration in Jurisdictions Legalizing Marijuana
 Use
 - JAMA Internal Medicine, September 2018, vol 178, No.9, P 1281

Myth: "It's Not Addictive"

Reality: Marijuana Causes Psychological Dependence and Physical Withdrawal Symptoms



NIDA Notes: Marijuana Research, March 2000

Lessons Learned from Colorado

Colorado's former U.S. Attorney Bob Troyer wrote an Opinion Piece for the Denver Post entitled: "Its time we took a breath from Marijuana Commercialization" (September 2018)

Reported Findings:

- Colorado's youth use marijuana at a rate 85% higher than the national average.
- Marijuana-related traffic fatalities are up by 151%.
- Colorado has issued over 40 little-publized recalls of retail marijuana laced with pesticides and mold.
- Colorado's black market has actually exploded after commercialization: "we have become a source state, a theater of operation for sophisticated international drug trafficking and money-laundering organizations from Cuba, China, Mexico, and elsewhere".

Lessons Learned...

- Production is not more-controled, as the legalizers promised.
 - Last year alone the regulated industry produced 6.4 metric tons of unaccounted-for marijuana.
 - * 80,000 black market plants were found on Colorado's federal lands.
 - Colorado's alcohol consumption has steadily climbed since marijuana commercialization.
 - There are claims from the industry that marijuana will cure opioid addiction. The British Lancet study (July 2018) found that heavy marijuana users end up with more pain and are more likely to abuse opioids.
 - Former U.S. Attorney Bob Troyer is urging everyone to "Just Say Know". He further states that we should educate ourselves about the impact of commercialization and have a say on our health, safety, and environment.

Lessons Learned...

- For every dollar in tax revenue Colorado gains from reactional marijuana purchases, an additional \$4.50 is being spent to combat public health and safety issues.
 - https://www.denverpost.com/2018/09/28/colorado-marijuana-commericalization/
- The Legalization of Marijuana in Colorado
 - This Impact Volume 5
- Rock Mountain High Intensity Drug Trafficking Area (September 2018)
- https://rmhidta.org/files/D@DF/FINAL-%205%20UPDATE%202018.pdf
 - Economic and Social Costs of Legalized Marijuana (November 15, 2019)
 - **Centennial Institute**
 - **Colorado Christian University**

Lessons Learned...

Colorado Marijuana Hospital Visits <u>Percent increase in Marijuana Hospitalizations</u>

- * 2009 (after medical marijuana legalized) by 46%
- 2013 (after commercialization of medical marijuana) by 150%
- * 2015 (after retail marijuana legalized) by 340%

Marijuana Policy Issues (September 10, 2019)

DuPage County Health Department

Booker T. Washington

"A lie doesn't become truth, wrong doesn't become right, and evil doesn't become good, just because it's accepted by a majority."

