

420 ADVISORY MANAGEMENT

THE CANNABIS ACT: WHAT DOES IT MEAN FOR CANADIANS?



420 CLINIC, LTD.

OBJECTIVES

At the end of the session, you will be able to:

- 1) Understand the ramifications of recreational cannabis legalization
- 2) Understand the statistics, studies and sociology of cannabis legalization
- 3) Dispel commonly held myths in regards to cannabis

OBJECTIVES

At the end of the session, you will be able to:

4) Understand the social and economic upsides of cannabis legalization.

CANNABIS USE IN CANADA



40%

OF CANADIANS HAVE USED CANNABIS



10%

OF CANADIANS HAVE USED CANNABIS IN THE PAST YEAR



20%

OF CANADIANS AGED 15-24 YEARS USED CANNABIS IN THE PAST YEAR



70%

OF CANADIAN CANNABIS USERS ARE AGE 25 OR OLDER

Canada has one of the highest rates of cannabis use in the world.

MEDICAL CANNABIS USERS IN CANADA 2016

Age (Years)	(%)
18-30	24%
31-40	26%
41-50	23%
51+	27%

Fig. 1. Demographic characteristics of patients seeking first-time certification for marihuana for medical purposes in Canada in 2016

It should also be noted that the number of people age 65+ who said they use marijuana grew 250% between 2006 and 2013. The fastest demographic.

WHY IS CANNABIS USED MEDICALLY?

SEDATING RELAXING

- BROAD
- SHORT
- BUSHY



CANNABIS – TAXONOMY

VARY IN:
CANNABINOIDS
FLAVINOIDS
TERPENES



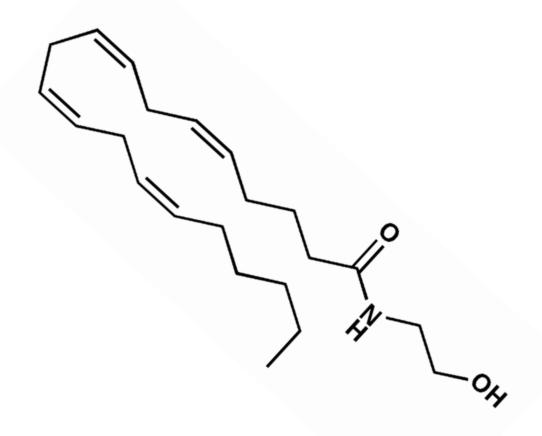
- THIN
- TALL
- SPARSE

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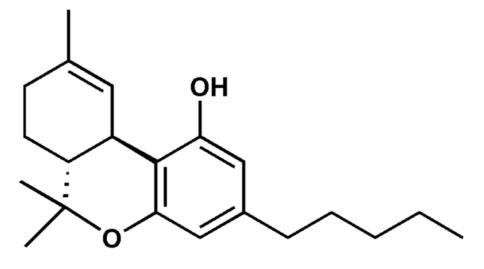
WHAT ARE CANNABINOIDS?

Compounds that modulate the release and balance of neurotransmitters and cellular processes through our endocannabinoid system.

This is **Anandamide**, which can regulate things such as gustatory sensations, feeding behavior, analgesia, elements of mood and innate immunity.

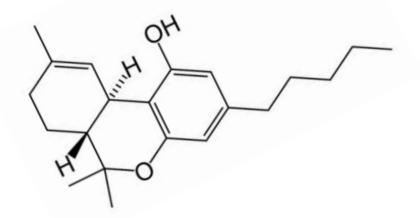


This is **THC**, an example of a phytocannabinoid that is created in the trichomes of a female cannabis plant.



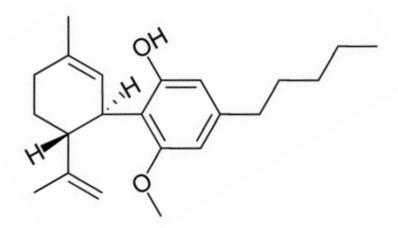
 Δ^9 -Tetrahydrocannabinol (THC)

N-Arachidonoylethanolamine (Anandamide, AEA)



THC

High with consumption over 2mg of THC (Euphoric)



CBD

No High Involved in consumption (Non-Euphoric)

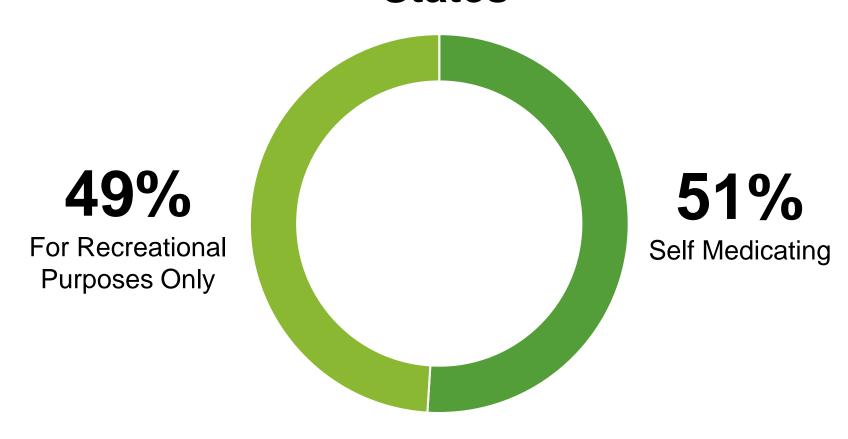
SYMPTOMATIC INDICATIONS OF SCE

THC CBD

- Pain
- Neuropathy
- Nausea and Vomiting
- Insomnia
- Disordered Eating

- Inflammatory conditions
- Muscle Spasticity
- Reduced Seizure Threshold
- Anxiety

Intention of Marijuana Use in the United States



BILL C-45

"THE CANNABIS ACT"

The Cannabis Act provides legal access to cannabis and controls and regulates its production, distribution and sale.

The objectives of the Act are to:

- 1) To prevent young persons from accessing cannabis.
- 2) To protect public health and public safety
- 3) To deter criminal activity by imposing serious criminal penalties for those operating outside the legal framework.

OBSTACLES & CHALLENGES

The objectives of the Act were to:

1) To prevent young persons from accessing cannabis.

Obstacle: What is the legal age to purchase cannabis?

2) To protect public health and public safety

 Obstacle: To what extent can cannabis be used in public? What should dispensaries be separated from?

3) To deter criminal activity

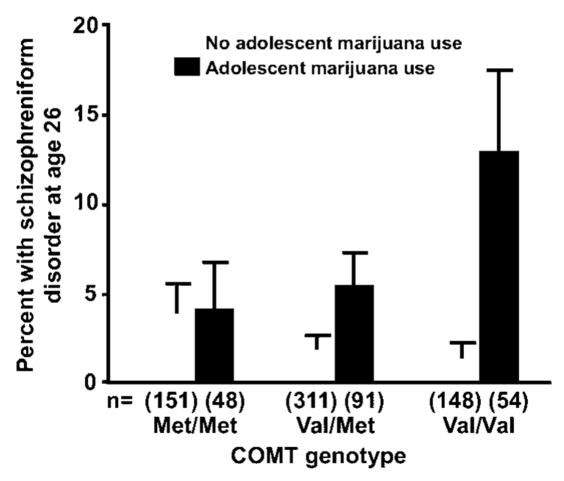
 Obstacle: How can we ensure cannabis is accessible through appropriate Provincial retail strategies and pricing?

What is the minimum legal age to purchase cannabis?

Considerations:

1)What about adolescent brain development?

Genetic Variations in COMT Influences the Harmful Effects of Abused Drugs



Moore, et al, Lancet (2007) 370: 319-28

PSYCHOSIS AND CANNABIS: WHAT DOES IT MEAN?

This means that the link is far more complex and may not simply mean that:

CANNABIS + ADOLESCENCE ≠ PSYCHOSIS

A combination of genetic and environmental influences are the determining factors. What is the minimum legal age to purchase cannabis?

Considerations:

2) What is the legal age to purchase other regulated substances (tobacco, alcohol, etc.)

What is the minimum legal age to purchase cannabis?

Considerations:

3) Not giving the black market a foothold by having a cohort of adult users that cannot access cannabis. This would allow the black market to target more effectively and flourish within a certain age group.

The minimum age to purchase was decided as 19 years in the majority of provinces.

Alberta and Quebec have made the minimum age 18 years.



DISCREET PROMOTION & PACKAGING

Licensed Producers and companies will be permitted to brand their products.

But the following are prohibited:

- Images that may attract youth
- × Cartoon characters
- × Animals
- × Celebrity endorsements
- Event sponsorships are restricted



Cannabis products must have/be:

- Plain packaging
- Child-proof
- Odor-proof
- Cannabinoid levels
- Company name
- Brand Name
- Health risks
- Expiry dates



Example of **FRONT (principal display panel)** with white/plain background and brand/producer name



Example of BACK (secondary display panel) with white/plain background

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- Cannabis cannot be consumed in places of sale or inside apartments or rental properties.
- Some provinces like Quebec have made provisions for consumption on the street but public consumption and intoxication is illegal in most provinces.
- To avoid penalties discreet consumption methods such as edibles will be used but are not permitted until Bill C-46 is enacted.



5-10 min for effects Effects last 4-6 hrs





THC AND CBD
Enter the bloodstream
via the lungs



325 - 400°F

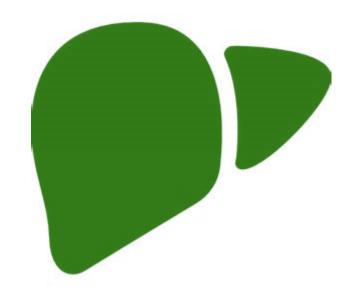
BENZOPYRENE Is absent in vaporizing

Heated plant particulates are <u>absent</u> during vaporizing

- No interference with the P53 oncogene
 - No risk of acute bronchospasm



30-60 min for effects Effects last 6-8 hrs





THC AND CBD

Enter after

First-Pass Metabolism

Delta-9-THC converts to 11-OH-THC with increased potency.

 As a result, citizens will be using illegal, and potentially mislabeled edible products. The metabolism of edibles causes a more pronounced "high" for a longer duration.

 There is also a greater risk for dysphoria and negative effects with edible products.

 This could potentially put increased stress on emergency services and law enforcement.

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WHAT ABOUT THE PRICE?

- Statistics Canada shows a downward trend in cannabis prices in the pre-legalization months.
- The Province of Ontario was considering pricing dried cannabis at \$10 per gram.
- The type, THC level, branding and quality will play into the price point but such a high price may allow black market influence.
- Illicit marijuana's average price was \$8.32 per gram as of March 2017 and the average price from Licensed producers was \$9.12 per gram*

THE SOCIAL UPSIDE

RISK OF DEPENDENCY

Rates of substance abuse disorder for individuals between the ages of 15 and 64:

Nicotine: 32%

• Opiates: 23%

Cocaine: 17%

Alcohol: 15%

• THC: ?

Joy, J.E., et al. Marijuana and Medicine: Assessing the Science Base, National Academy Press, 1999

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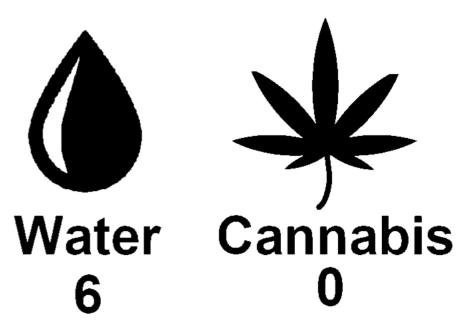
Joy, J.E., et al. Marijuana and Medicine: Assessing the Science Base, National Academy Press, 1999

Annual Fatalities from acute overdose in Canada









CANADA'S DEMOGRAPHICS FOR PAIN (2014-2015)

- 20 per 100,000 Seniors were hospitalized for opioid overdose
- The largest demographic
- Youth (15-24) at 10 per 100,000
- The fastest growing demographic.

States with medical cannabis avenues found an average

24.8% decrease in fatal overdose.

Journal of American Medicine (2014)

THE ECONOMIC UPSIDE

- 78% of those surveyed are aware that medical marijuana can replace certain types of medication.
- 24% of current and potential users say they will replace <u>alcohol</u> with cannabis.





COMMON CONVERSATION

COMPARÉ AND CONTRAST (MEDICAL VS. RECREATIONAL)

Medical Marijuana

- Grown in 60-90 days
- Must be cured and dried
- Screened with points of control for adulterants, mold, heavy metals and pesticides
- Can be inhaled or ingested
- Bred to produce specific cannabinoids for its effects
- Contain a specific combination of THC and CBD

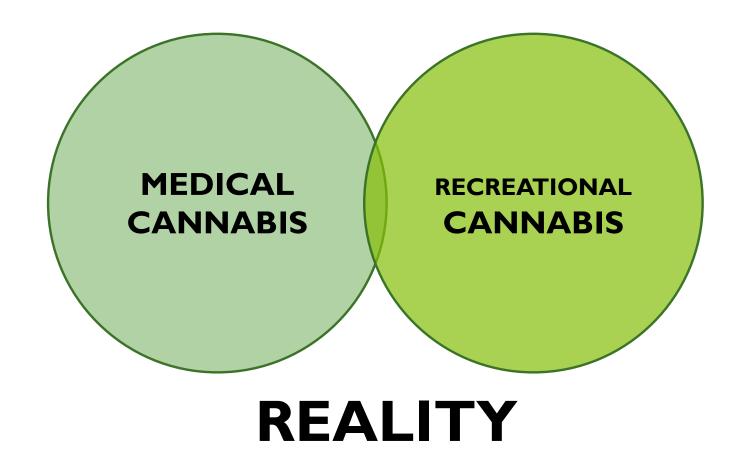
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Recreational Marijuana

- Grown in 60-90 days
- Must be cured and dried
- Screened with points of control for adulterants, mold, heavy metals and pesticides
- Can be inhaled or ingested
- Bred to produce specific cannabinoids for its effects
- Contain a specific combination of THC and CBD



 The province of Ontario has announced an expected \$100 million in tax revenue from recreational marijuana in the first legalization year.

 The Federal Government estimates the total tax revenue from marijuana sales could reach \$1 billion per year.

 Other economic analysts have looked at the positive influence of marijuana in other contexts including the base and ancillary markets.





Population of Adult Consumers



Annual Consumption Volume in Grams per Consumer



Price per Gram of Marijuana = \$4.9B to \$8.7B

> Base Retail Market Value

Ancillary Market



Growers



Infused Product Makers



Testing Labs



Security

= \$12.7B to = \$22.6B

Potential upside is greater than 208

With Ancillary Multiplier

Potential Upside



Tourism Revenue



Business Taxes



License Fees



Paraphernalia

= > \$22.6B

Total Market Size Potential

CLOSING THOUGHTS



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