<u>Legal Cannabis in BC</u>: What does it mean for youth on the North Shore?

> Mark Lysyshyn MD MPH FRCPC Medical Health Officer, Vancouver Coastal Health

> > West Vancouver Secondary School October 2018



Outline

- What is Cannabis?
- Cannabis Use in Canada
- Health Effects and Medical Use
- Legalization and Regulation
- Harm Reduction
- Prevention
- Discussion



What is Cannabis?

- Cannabis sativa is one of the oldest cultivated plants
- >100 cannabinoids + other potentially active compounds identified (terpenoids, flavonoids...)
- Δ⁹-tetrahydrocanabinol (THC) acts on cannabinoid receptors in the body and is responsible for most psychoactive effects
- Cannabidiol (CBD) has less effect on cannabinoid receptors but does stimulate serotonin receptors and has anti-oxidant and anti-inflammatory effects



Types of Cannabis





LIGHT GREEN WITH SKINNIER LEAVES
MAINLY AFFECTS THE MIND
EUPHORIC FEELING
UPLIFTING AND ENERGETIC
BEST SUITED FOR DAY USE
Higher in CBD



CANNABIS USE IN CANADA



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



Source: Centre for Addictions and Mental Health

Cannabis Use in Canada over Time





Who is using Cannabis in Canada?





Cannabis Use and Age





Cannabis Use and Gender





Cannabis Use Across Canada

LIFETIME USE - CANNABIS - BY PROVINCE







Cannabis Use Across Canada





Youth Substance use on the North Shore





Patterns of Use

- Among those who used in the last year:
 - 36% used <1 day/month
 - 6% used 1 day/month
 - 13% used 2-3 days/month
 - 11% used 1-2 days/week
 - 9% used 3-4 days/week
 - 6% used 5-6 days/week
 - 18% used daily
- Average amount used on a typical day was ~1gm



Products and Consumption

- Cannabis product forms:
 - Dried flower/leaf (88%)
 - Edibles (32%)
 - Hashish (24%)
- Mode of consumption:
 - Smoking (94%)
 - Eating in food (34%)
 - Vaping using a vape pen (20%) or vaporiser (14%)



Perceived Benefits and Risks

- Positive impact on mental health (55%), quality of life (55%) and social life (47%) with positive effects on mood (51%), anxiety (50%), sleep (49%) and creativity (45%)
- No impact on work/school (72%), home life or marriage (64%) and physical health (60%)
- Negative effects on decision-making (62%), attention (60%), concentration (59%), memory (58%) and motivation (57%) and can be habit-forming (77%)



Health Effects and Medical Use



Short Term Use

- School/work performance
 - Impaired short-term memory
 - Difficulty learning and retaining information
- Mental health
 - May worsen anxiety and depression
 - Paranoia and psychosis (in high doses)
- Substance Use
 - Role as a "gateway" drug not proven



Short Term Use

- Motor-vehicle accidents
 - Impaired motor coordination and driving skills
 - Increased risk of injuries
- Risk-taking
 - Altered judgment and increased risk of sexual behaviors that facilitate the transmission of sexually transmitted diseases
- Unintentional poisoning of infants, children and pets



Long-term or Heavy Use

- Risk of addiction
 - 9% of users overall, 17% of users who begin use in adolescence
 - 25 to 50% of daily users
- Respiratory health
 - Symptoms of chronic bronchitis
 - Risk of lung cancer remains unclear
- Mental health
 - May worsen anxiety and depression
 - Increased risk of psychosis (if predisposed)



Long-term or Heavy Use Early in Adolescence

- Brain development and function
 - Lower IQ among frequent users during adolescence
- School performance and achievement
 - Poor educational outcomes
 - Increased likelihood of dropping out of school
- Lifetime achievement
 - Diminished ratings of life satisfaction and achievement



Second Hand Smoke

- Exposure to second hand smoke leads to measureable THC levels and psychoactive effects
- Depends on amount of smoke, ventilation, air volume, number of joints, number of smokers...
- Long term health effects unclear
- No evidence related to third hand smoke
- Alignment with smoking bylaws is recommended



Medical Use

- Evidence to support the use of cannabis in treating symptoms of :
 - Chemotherapy induced nausea
 - Multiple sclerosis (pain, spasticity, disturbed sleep)
 - Appetite and weight loss associated with HIV
 - Tourette's syndrome
 - Chronic pain in adults
- Role in cancer, epilepsy, movement disorders, inflammatory disease and substance use disorders remains unclear





Legalization and Regulation



Spectrum of Psychoactive Substance Use

Casual/Non-problematic Use

 recreational, casual or other use that has negligible health or social effects

Chronic Dependence

 Use that has become habitual and compulsive despite negative health and social effects

Beneficial Use

- use that has positive health, spiritual or social impact:
- e.g. medical pharmaceuticals; coffee/tea to increase alertness; moderate consumption of red wine; sacramental use of ayahuasca or peyote

Problematic Use

- use that begins to have negative consequences for individual, friends/family, or society
- e.g. impaired driving; binge consumption; harmful routes of administration



The Paradox of Prohibition





The Paradox of Prohibition





Impact of an Unregulated Market



Source: BC Coroner's Service





ESTABLISH A GOVERNMENT MONOPOLY ON SALES

Control boards provide an effective means of controlling consumption.



SET A MINIMUM AGE

Sales or supply of cannabis products to underage individuals should be penalized.



LIMIT AVAILABILITY

Place caps on retail density and limits on hours of sales.



CURB DEMAND THROUGH PRICING

Pricing policy should curb demand while minimizing the continuation of black markets.

CANNABIS

CAMH recommends

legalization with

strict regulation

CAMH offers **10 basic principles** to guide regulation of legal cannabis use.

CURTAIL HIGHER-RISK PRODUCTS AND FORMULATIONS

This would include higher-potency formulations and products designed to appeal to youth.



INVEST IN EDUCATION AND PREVENTION

Need both general and targeted initiatives for specific groups e.g. adolescents, people with a history of mental illness.



PROHIBIT MARKETING, ADVERTISING AND SPONSORSHIP

Products should be sold in plain packaging with warnings about risks of use.

	-	
•	6	_
•	C	

PRODUCT INFORMATION SHOULD BE CLEARLY DISPLAYED

In particular, products should be tested and labelled for THC and CBD content.



ADDRESS & PREVENT CANNABIS-IMPAIRED DRIVING

Develop a comprehensive framework that includes prevention, education and enforcement.



ENHANCE ACCESS TO TREATMENT AND EXPAND TREATMENT OPTIONS

Include a spectrum of options from brief interventions for at-risk users to more intensive interventions.

Federal Cannabis Act

- *Cannabis Act* introduced April 2017
- Adults 18+ can legally buy, possess and grow
- Dried, fresh, oil, seeds and plants (2018)
- Edibles and concentrates (2019)
- Federal government regulates production and product standards
- Promotion/advertising prohibited with limited exceptions
- Provinces to regulate distribution and retail



Federal Regulations

B1.6 Examples



- Child-resistant and tamper-evident
- Single uniform colour packaging (not embossed, shiny or metallic)
- Graphics and images prohibited
- Branding and logos restricted
- All labels must include mandatory health warnings, standardized symbol and CBD and THC content



BC Policy Decisions

- Minimum Age: 19 years of age (chosen to coincide with alcohol and tobacco)
- Personal possession and purchase: Up to 30 grams
- Public Consumption: Allowed where smoking/vaping permitted w/additional restrictions for community beaches, parks & playgrounds and vehicles
- Personal cultivation: Up to four plants per household
 cannot be visible from public space off property



BC Policy Decisions

- Controlled by BC Liquor Distribution Branch
- Mix of government and licensed private retailers and government only online sales
- Cannot be sold with alcohol, tobacco or other products such as food, gas, clothing and lottery (exceptions for rural areas)
- Cannot use business names that would lead people to believe they sell medical cannabis (e.g. pharmacy, apothecary)



BC Policy Decisions

- Local governments will be able to set additional restrictions, as they do now for alcohol and tobacco
- Landlords and strata councils will be able to restrict or prohibit non-medical cannabis smoking/vaping
- Drug impaired driving: New 90 day administrative driving prohibition for drug-affected driving
- Zero-tolerance for THC in the Graduated Licensing Program (similar to alcohol)



Harm Reduction



Canada's Lower-Risk Cannabis Use Guidelines (LRCUG)



Recommendations

- Cannabis use has health risks best avoided by abstaining •
- Delay taking up cannabis use until later in life
- Identify and choose lower-risk cannabis products .
- Don't use synthetic cannabinoids
- Avoid smoking burnt cannabis—choose safer ways . of using

- If you smoke cannabis, avoid harmful smoking practices
- Limit and reduce how often you use cannabis
- Don't use and drive, or operate other machinery
- Avoid cannabis use altogether if you are at risk for mental health problems or are pregnant
- Avoid combining these risks ٠

The LRCUG are an evidence-based intervention project by the Canadian Research Initiative in Substance Misuse (CRISM).



EN ABUS DE SUBSTANCE

Reference: American Journal of Public Health, 2017

The LRCUG have been endorsed by the following organizations:



Council of Chief Medical Officers of Health (in principle)

Harm Reduction

- Consider your age, body mass, and whether you are a new or experienced user before consuming cannabis
- Use only as much as necessary to achieve desired effects. Start small (two small puffs or one small bite) and go slow
- Wait at least 10 minutes to feel the effect of inhaled cannabis and at least one hour for edible products
- Negative effects of cannabis may be exacerbated by alcohol



Prevention



What causes substance use disorders in children and youth?

- <u>Risk factors</u>:
 - Genetics
 - Brain development
 - Environmental factors such as early childhood experiences, trauma, parenting, peers and society
- <u>Developmental pathways</u>:
 - Externalizing (aggression, risk taking, reward seeking)
 - Internalizing (depression, anxiety, fear avoidance)



The Life Course Perspective



LUaslalnealli

WEST VANCOUVER (SD 45) WAVE 6



WELL-BEING INDEX

OPTIMISM

e.g. I have more good times than bad times.

SELF-ESTEEM

e.g. A lot of things about me are good.

HAPPINESS e.g. I am happy with my life.

ABSENCE OF SADNESS

e.g. I feel unhappy a lot of the time.

GENERAL HEALTH

e.g. How would you describe your health?



High Well-Being (Thriving) Children who are reporting positive responses on at least 4 of the 5 measures of well-being.



Medium to High Well-Being Children who are reporting no negative responses, but fewer than 4 positive responses.





Low Well-Being

Children who are reporting negative responses on at least 1 measure of well-being.

WELL-BEING INDEX



WEST VANCOUVER GRADE 4

ALL PARTICIPATING DISTRICTS GRADE 4





WEST VANCOUVER GRADE 7

ALL PARTICIPATING DISTRICTS GRADE 7





Percentage of children reporting the presence of the following assets in their lives:

Total number of children in district: **422**



ALL PARTICIPATING DISTRICTS

2017/2018 MDI GRADE 4 RESULTS - SD 45 WEST VANCOUVER





Percentage of children reporting the presence of the following assets in their lives:

Total number of children in district: 448

WEST VANCOUVER



2017/2018 MDI GRADE 7 RESULTS - SD 45 WEST VANCOUVER

ALL PARTICIPATING DISTRICTS GRADE 7

iMinds - Promoting Drug Literacy

<u>The 5i model</u>:

- identify
- •investigate
- •interpret
- •imagine

•integrate

Constructivist approach:

- •Stay neutral
- Insist on a non-hostile environment
- •Encourage all students to participate
- •Keep discussion going in a positive direction by questioning and probing for deeper understanding
- Consensus is not necessary
- •Be comfortable with silence



Questions?

