# Regulation of Medical Marijuana Retail Outlets

Public Health Considerations

Vancouver City Council June 10, 2015

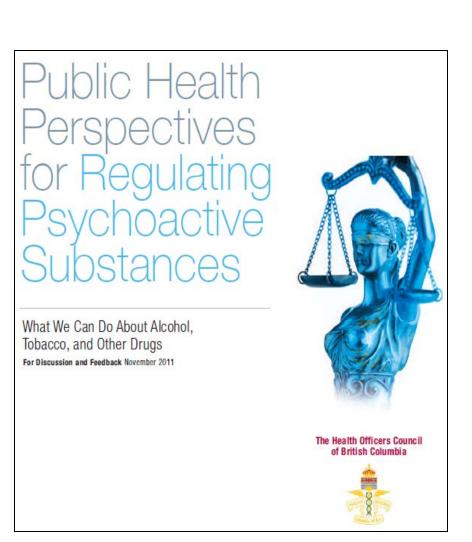
Patricia Daly MD, FRCPC
Chief Medical Health Officer

# Summary

- Regulatory approach to marijuana
   Best way to reduce harm
- 2. Youth restricting access
- 3. Edible marijuana products

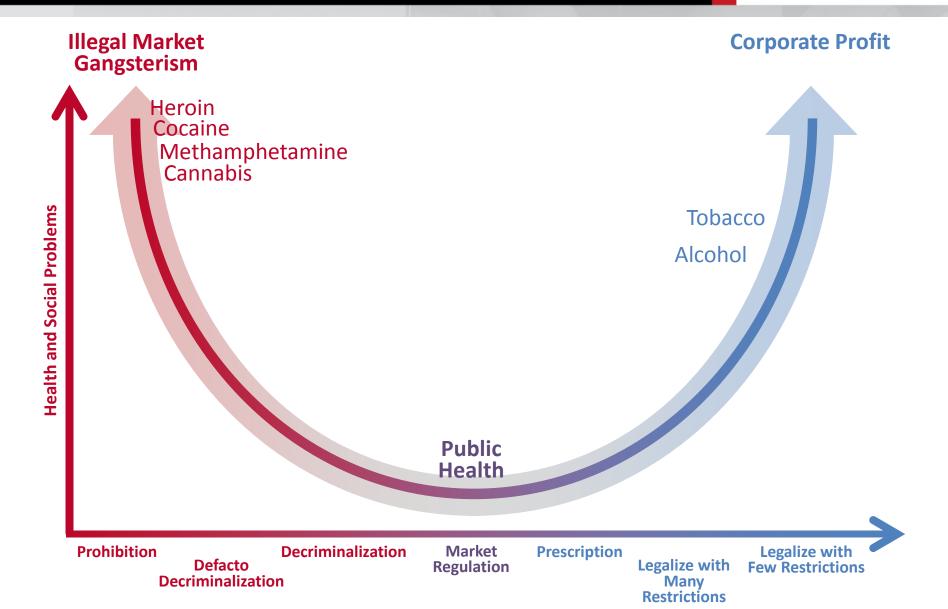
### Public Health Consensus

- Health Officers' Council: Public health physicians across BC
- We are specialists in prevention
- Best way to prevent harms from psychoactive substances: Public health regulation



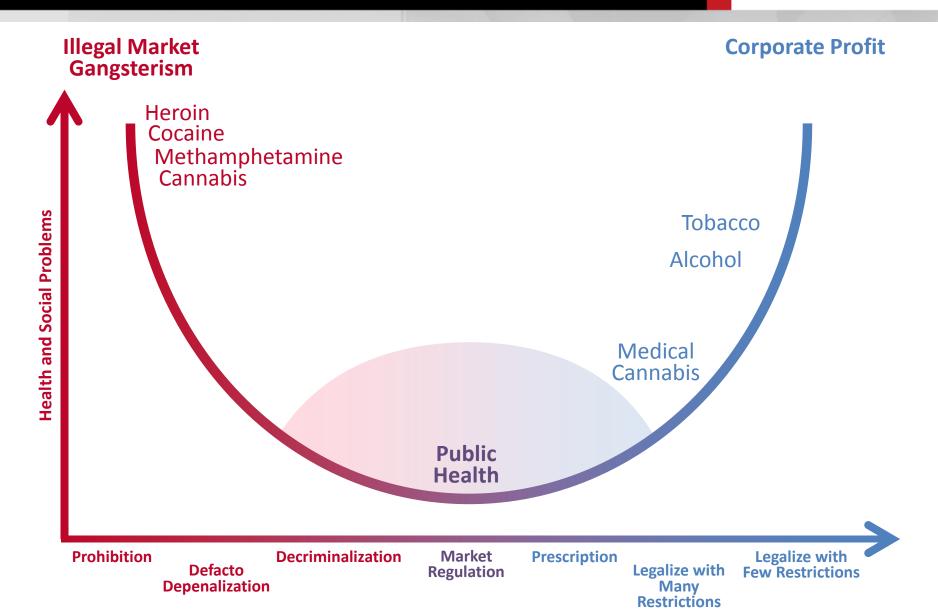
#### The Paradox of Prohibition





#### The Paradox of Prohibition





### Youth

- Brain development begins prenatally, continues through adolescence until the early 20s
- Marijuana affects brain development if used in adolescence, in a dose-dependent fashion:
  - Affects some areas of the brain more than others
  - Cognitive impairment, lower IQ found among frequent users in adolescence
  - Impairs memory, ability to learn
  - Poor educational outcome

### Youth

- Addiction/dependency:
  - 9% of marijuana users considered dependent; risk higher for users who start in adolescence
- Associated with schizophrenia/psychosis
  - Causation unclear; it may result in earlier onset in those with genetic predisposition
  - Higher risk with exposure at a younger age
- Impairs driving ability

### Youth

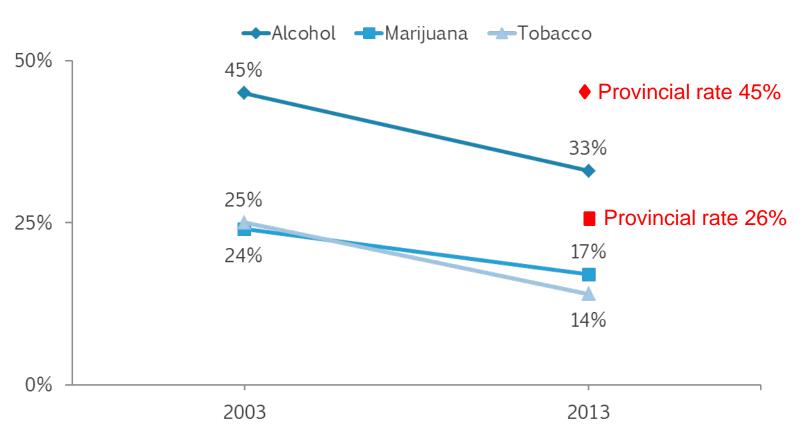
#### **Public health recommendations:**

- Restrict access to retail outlets to those 19 years and older (i.e. align with alcohol)
- 2. Provide funding, from license fees to support adolescent education:
  - SACY School Age Children and Youth substance use prevention initiative
  - www.vsb.bc.ca/sacy

# 2013 BC Adolescent Health Survey – Grades 7-12 McCreary Centre Society

#### Decreases in substance use

Youth who had ever tried different substances - Vancouver



# Edible Marijuana Products



The NEW ENGLAND JOURNAL of MEDICINE

Perspective

#### Half-Baked — The Retail Promotion of Marijuana Edibles

Robert J. MacCoun, Ph.D., and Michelle M. Mello, J.D., Ph.D.

A striking feature of the rollout of state-legalized retail sales of marijuana has been the tremendous popularity of edible marijuana products. Marijuana brownies have long been a staple of cannabis coffee

shops in the Netherlands, but the new products that are available in the United States are quite different. They are skillfully produced legalization proposals forward, developments that may amplify the problem.

Marijuana is associated with a

serious anxiety attacks and psychotic-like symptoms. This problem is augmented by differences in the pharmacokinetic and metabolic effects of marijuana when it is ingested rather than smoked.<sup>1</sup> In addition, case reports document respiratory insufficiency in young children who have ingested marijuana.<sup>2</sup>

# Edible Marijuana Products

- Edible products (candies, baked goods) appeal to children; rising reports of poisonings
- Pharmacokinetics differ if marijuana ingested rather than smoked:
  - Delay in peak psychoactive effects (up to 4 hours versus seconds or minutes if inhaled)
  - Greater individual variability in effect
- Form of marketing appeals to youth
  - Similar to flavoured tobacco

### St. Paul's Hospital – April 20/21, 2015

- 63 Emergency patients with marijuana intoxication
- Age range 15-64 years
- 54 with known route of exposure recorded:
  - 36 edibles
  - > 13 smoked

76% edibles

> 5 - both



# Edible Marijuana Products

#### **Public health recommendations:**

- Permit sale of dried marijuana and marijuana oil only no other edible products
- 2. Require labelling and child-resistant packaging

### **Final Public Health Recommendations**

- Best approach to medical and non-medical marijuana: Legalize with <u>strict regulation</u>
  - Remember lessons learned from big tobacco
- Regulation and prevention of harms should be funded by business license fees
  - Require educational materials, produced by Public Health, to be available in all outlets
  - Adolescent education
- 3. Do not permit advertising or promotion; plain storefronts and regulated signage