

# How Not to Protect Community Health & Safety:

What the  
Government's  
Own Data say  
about the  
Effects of  
Cannabis  
Prohibition



A report by STOP the VIOLENCE BC





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the effects of cannabis prohibition

**Report prepared by the Stop the Violence BC Coalition**

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**Members of the Stop the Violence BC Coalition** (partial listing; see [www.stoptheviolencebc.org](http://www.stoptheviolencebc.org) for complete, updated membership list)

**John Anderson, PhD**  
Former Correctional Officer,  
Nanaimo; Chair, Criminology Dept.,  
Vancouver Island University; Vice-  
President, Law Enforcement Against  
Prohibition (Canada)

**Terri Betts, BScPharm, ACPR**  
Clinical Coordinator, Pharmacy, Lions  
Gate Hospital

**Neil Boyd, LLM**  
Professor & Associate Director,  
School of Criminology, SFU

**David Bratzer**  
Police Officer; Board of Directors,  
Law Enforcement Against Prohibition

**Jane Buxton, MBBS, MRCP, MHSc, FRCPC**  
Associate Professor, School of  
Population & Public Health, UBC

**Vince Cain**  
Retired RCMP Chief Superintendent;  
Former BC Chief Coroner

**Larry Campbell**  
Canadian Senator; Former Mayor of  
Vancouver

**John Carsley, MD, MSc, FRCPC**  
Medical Health Officer; Member,  
Health Officers' Council of BC

**Neil Chantler**  
Barrister & Solicitor, A. Cameron  
Ward & Co.

**John Conroy, QC**  
Barrister & Solicitor, Conroy & Co.,  
President, NORML Canada

**Lawrence Cook, MD**  
Family Physician

**Elizabeth Eakin**  
Health Care Worker, UBC Hospital

**Caroline Ferris, MD, CCFP, FCFP**  
Physician, Creekside Withdrawal  
Management Centre; Clinical  
Instructor, Dept. of Family Practice,  
UBC

**Christian Fibiger, PhD**  
Professor Emeritus, UBC

**Benedikt Fischer, PhD**  
Professor & CIHR/PHAC Applied  
Public Health Chair, Faculty of Health  
Sciences, SFU; Director, Centre for  
Applied Research in Mental Health  
and Addiction

**Tom Foster**  
Social Worker / Therapist

**Gwyllyn Goddard, MD**  
Physician

**Jennifer Godwin-Ellis, BAH, LLB**  
Lawyer

**Mark Haden, MSW**  
Adjunct Professor, School of Nursing,  
UBC

**Michael Harcourt**  
Former Mayor of Vancouver; Former  
Premier of British Columbia

**Paul Hasselback, MD, MSc, FRCPC**  
Medical Health Officer; Member,  
Health Officers' Council of BC; Clinical  
Associate Professor, School of  
Population & Public Health, UBC

**Debra Hay**  
Support Worker, WISH Drop-In Centre  
Society

**Jacob Hunter**  
Policy Director, Beyond Prohibition  
Foundation

**David Kennedy, MD, FCFP**  
Retired Physician

**Thomas Kerr, PhD**  
Director, Urban Health Research  
Initiative, BC Centre for Excellence in  
HIV/AIDS; Associate Professor, Dept.  
of Medicine, UBC

**Douglas C. King, LLB**  
Lawyer, Pivot Legal Society

**Ross Lander**  
Retired Justice, BC Supreme Court

**José Lavoie, PhD**  
Associate Professor, School of Health  
Sciences, UNBC; Assistant Professor,  
Dept. of Community Health Sciences,  
University of Manitoba; Research  
Affiliate, Manitoba First Nations  
Centre for Aboriginal Health Research

**James Leslie**  
Retired Border Service Officer,  
Canadian Border Services Agency;  
Law Enforcement Against Prohibition

**Randie Long**  
Former Federal Prosecutor, Nanaimo

**Donald MacPherson**  
Adjunct Professor, Faculty of Health  
Sciences, SFU; Director, Canadian  
Drug Policy Coalition

**Jolayne Marsh**  
Mental Health Worker, Living Room  
Drop-In

**Richard Mathias, MHSc, MD, FRCPC**  
Professor & Public Health Program  
Head, School of Population & Public  
Health, UBC

**Walter McKay**  
Former Police Officer; Consultant,  
WM Consulting; Director of  
International Affairs & Co-Founder,  
Asociación Mexicana de Reducción de  
Riesgos y Daños

**Ian Mitchell, MD**  
Emergency Physician, Royal Inland  
Hospital

**Julio Montaner, MD, FRCPC, FCCP, FACP, FRSC**  
Director, BC Centre for Excellence in  
HIV/AIDS; Immediate Past President,  
International AIDS Society

**Bohdan Nosyk, PhD**  
Health Economist, BC Centre for  
Excellence in HIV/AIDS

**Eugenia Oviedo-Joekes, PhD**  
Assistant Professor, School of  
Population & Public Health, UBC;  
Research Scientist, Centre for Health  
Evaluation & Outcome Sciences

**Philip Owen**  
Former Mayor of Vancouver

**Katrina Pacey, LLB**  
Partner, Ethos Law; Litigation  
Director, Pivot Legal Society

**Heather Peters, MSW**  
Associate Professor, School of Social  
Work, UNBC

**George Plawski**  
Retired Pilot

**Randy Puder**  
Systems Integration; Seascope Multi-  
Media

**Dan Reist**  
Assistant Director, Knowledge  
Exchange, Centre for Addictions  
Research BC

**Judith Renaud**  
Executive Director, Educators  
for Sensible Drug Policy; School  
Administrator (retired)

**Chris Richardson, PhD**  
Assistant Professor & Michael  
Smith Foundation Scholar, School  
of Population & Public Health, UBC;  
Research Scientist, Centre for Health  
Evaluation & Outcome Sciences

**Ted Riecken**  
Professor, Department of Education,  
University of Victoria

**Jean Shoveller, PhD**  
Professor & CIHR/PHAC Applied  
Public Health Chair, School of  
Population & Public Health, UBC;  
Senior Scholar, Michael Smith  
Foundation for Health Research

**Sam Sullivan**  
Former Mayor of Vancouver

**Timothy Temple, MBBS, CCFP, FRSA**  
Physician, Dept. of Family Practice,  
UBC

**Kirk Tousaw, JD, LLM**  
Barrister, Law Office of Kirk  
Tousaw; Executive Director, Beyond  
Prohibition

**Ian Tully-Barr**  
Crown Counsel, Attorney General  
of BC

**Russell Uhler**  
Professor Emeritus, Economics, UBC

**Franklin White, MD, CM, MSc, FRCPC, FFPH**  
President, Pacific Health &  
Development Sciences Inc.

**Ken Wilson**  
Zoologist/Ecologist (retired)

**Evan Wood, MD, PhD, ABIM, FRCPC**  
Director, Urban Health Research  
Initiative, BC Centre for Excellence  
in HIV/AIDS; Professor, Dept. of  
Medicine, UBC

**Cornelia Zeisser, PhD**  
Postdoctoral Fellow, Centre for  
Addictions Research BC

*Serving law enforcement officers who participated in this report did so while off-duty. The opinions and conclusions expressed in this report do not necessarily reflect those of their employers or of the employers of any of the Coalition members.*

**Stop the Violence BC includes experts affiliated with the following organizations:**



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The prohibition of alcohol in the United States from 1920 to 1933 did little to reduce its availability. In this photo, police officers inspect a confiscated shipment of illegal alcohol during a Prohibition raid in Detroit, Michigan, c. 1928. Photo courtesy of the Walter P. Reuther Library.



As was the case with the prohibition of alcohol, the prohibition of cannabis has not eliminated easy availability of the drug. In this photo, North Vancouver RCMP officers pose with seized marijuana plants and elaborate grow operation equipment discovered deep in the woods of Mount Seymour in August 2009. Photo: RCMP handout.

## EXECUTIVE SUMMARY

British Columbia (BC), like other Canadian provinces, is home to a large and burgeoning illegal cannabis industry. While Canadian taxpayers have financed successive local and national law enforcement efforts aiming to address the proliferation of this illegal industry, these strategies are rarely critically evaluated.

This report draws on available North American data on the impact of funding for drug law enforcement on cannabis availability, potency, price and use. The report specifically tests the assumption that increased funding for the enforcement of cannabis prohibition decreases cannabis availability, reduces potency, increases cannabis price and reduces rates of cannabis use.

In the last several decades, there has been a remarkable increase in funding for anti-drug efforts in both Canada and the United States (US). In Canada, the National Anti-Drug Strategy has received at least C\$260 million in government funding since 2007, the majority of which has been allocated for drug law enforcement. In the US, the annual overall budget for the federal Office of National Drug Control Policy increased by more than 600% (inflation adjusted) over two decades, from approximately US\$1.5 billion in 1981 to more than US\$18 billion in 2002 (the last year the budget was consistently reported). While not all of the US anti-drug budget-funded programs are specific to the enforcement of cannabis prohibition, increased funding for anti-drug initiatives coincided with a 160% increase in cannabis-related arrests and a 420% increase in cannabis-related seizures between 1990 and 2009. Similarly, Canada has seen a 70% increase in the annual number of cannabis arrests, from roughly 39,000 in 1990 to more than 65,000 in 2009.

Government-funded surveillance data, however, do not demonstrate the various positive impacts that might be expected to arise from these investments. For instance, in the US, surveillance data show an estimated increase of 145% in cannabis delta-9-tetrahydrocannabinol (THC) potency between 1990 and 2007, despite increases in anti-drug law enforcement funding. During this same period, the US retail price of cannabis also decreased by approximately 58% (inflation-adjusted). Although similar longitudinal detailed surveillance data are not routinely collected in Canada, reports from the Royal Canadian Mounted Police (RCMP) demonstrate similar trends.

Furthermore, rates of cannabis use among North American youth have not decreased during periods when levels of funding for cannabis prohibition have increased. Instead, despite the dramatic increases in anti-drug funding, the estimated annual prevalence of cannabis use rose from 27% in 1990 to 35% in 2010 among American grade 12 students. The 2009 Canadian Alcohol and Drug Use Monitoring Survey also reported that 27% of youth in BC aged 15-24 used cannabis at least once in the previous year, while data collected by the Ontario Student Drug Use and Health Survey demonstrate that the prevalence of annual cannabis use among Ontario high school students has doubled since the early 1990s, from under 10% in 1991 to over 20% in 2009, while the level of annual use among grade 11 students has increased from 23% at the start of 1990 to 39% in 2009. In terms of cannabis availability, according to the US National Institute on Drug Abuse, over the last 30 years of cannabis prohibition the drug has remained “almost universally available to American 12th graders,” with approximately 80–90% saying the drug is “very easy” or “fairly easy” to obtain.

The unmistakable interpretation of these government surveillance data is that, while increased funding for anti-cannabis law enforcement does increase cannabis seizures and arrests, the assumption that this approach reduces cannabis potency, increases price or meaningfully reduces cannabis availability and use is inconsistent with virtually all available data.

In addition to not achieving its objectives, the prohibition of cannabis has created a lucrative opportunity for organized crime that in turn fuels other criminal activity and gang violence. For instance, economists have estimated BC's cannabis industry to be worth up to C\$7 billion. These huge revenues are known to fuel organized crime and related gang violence, and it

is noteworthy that, according to RCMP data from BC, levels of gang-related homicides have steadily increased from 25 reported in 1997 to 43 in 2009. Similarly, the proportion of all homicides in BC attributable to gangs also increased from 21% in 1997 to 34% in 2009.

A recognition of the clear failure and direct harms of cannabis prohibition demonstrates the urgent need for alternative policy approaches. This report concludes by describing various regulatory measures that have been successfully employed in the areas of tobacco and alcohol control that should be considered in order to mitigate cannabis-related harm in light of the ineffectiveness of current policy approaches.



## INTRODUCTION

An estimated 155 to 250 million people worldwide use illegal substances annually, and of these cannabis is by far the most commonly used drug.<sup>1</sup> Canadians use cannabis at high levels, with the 2009 Canadian Alcohol and Other Drug Use Monitoring Survey (CADUMS) reporting that 42% of the general population have ever used cannabis, while over 10%, or over 2.7 million, have used cannabis in the past year.<sup>2</sup> The 2009 CADUMS also reported that British Columbians have the highest level of lifetime cannabis use (47.5%) and the second-highest level of past-year cannabis use (12.7%), behind only Nova Scotia (13.1%). Consistent with similar settings such as the United States (US), these high levels of cannabis use continue despite the implementation of legal deterrents.

Along with high levels of use, British Columbia (BC) is home to a large and burgeoning illegal cannabis industry, valued by economists at up to an estimated C\$7 billion annually.<sup>3</sup> This industry, the proceeds of which fund criminal organizations in the province, has grown along with increasing levels of drug-related violence and homicide. **Figure 1** demonstrates the increase in homicides in BC attributable to violence between drug gangs, which culminated in a 2008–2009 “drug war” between gangs in the Lower Mainland involved in the cannabis trade.<sup>4</sup> However, this was not an isolated event, with Royal Canadian Mounted Police (RCMP) data from BC demonstrating a steady increase in homicides in recent years. Specifically, while 25 gang-related homicides were reported in 1997, this number increased to 43 in 2009. It is noteworthy that the proportion of all homicides in BC attributable to gangs also increased from 21% in 1997 to 34% in 2009. Along with this upsurge in violence, the RCMP have also

cautioned that new data suggest that drug gangs are expanding their networks across BC.<sup>5</sup>

The US also has a large domestic market for cannabis.<sup>1</sup> This high demand has in turn helped to create a large cannabis export market in Canada and specifically in BC.<sup>6</sup> Across Canada, production is estimated to range from 1,399 to 3,498 tons of cannabis produced annually, and according to RCMP data, 1.75 million cannabis plants were seized by authorities in 2006.<sup>6</sup>

The ongoing presence of an extensive illegal cannabis industry in BC has fuelled a discussion about the known impacts of cannabis prohibition and the potential impacts of a regulated (i.e., legal) market.<sup>7</sup> Further, recent polls finding that the majority of British Columbians (77%) support cannabis law reform and the majority of Canadians (53%) are in favour of legalizing cannabis have intensified calls for a re-evaluation of Canadian cannabis policy.<sup>8,9</sup> This debate is in line with recent efforts to regulate cannabis in California, which recently culminated in the narrow defeat of the Regulate, Control and Tax Cannabis proposition in November 2010.

The health effects of cannabis have been described in detail elsewhere.<sup>10</sup> In brief, conflicting data from observational studies make the adverse and beneficial health effects associated with use of this drug the subject of ongoing debate and study.<sup>11,12</sup> In this context, cannabis’s relative addictive potential and adverse health effects have likely been overstated,<sup>13</sup> while the drug’s potential for health-related benefits has not been adequately communicated. While this debate will surely continue, there is nevertheless accumulating evidence that cannabis can have some adverse effects in susceptible individuals—particularly those who initiate use at a young

**Figure 1.** Gang-related homicides in British Columbia, 1997–2009

Source: RCMP Statistical Overview of Homicides in British Columbia, 2009 Update

age—or among longstanding, high-intensity users.<sup>14</sup> The major potential adverse effects of acute cannabis intoxication include its known short-term psychological effects and motor impairment, which create potential for accidental injury, including injury caused by motor vehicle accidents. As well, cannabis use may be a contributory cause of respiratory diseases from chronic smoke exposure.<sup>15-19</sup> It is important to put these health concerns into a comparative context, as was recently done by a panel of scientific experts from the United Kingdom who, using a nine-category matrix of harm spanning physical and social harms, ranked cannabis as less harmful than alcohol and tobacco.<sup>20</sup>

Nevertheless, in Canada, federal lawmakers have recently introduced new “tough on crime” legislation in an effort to reduce drug use and drug-related harms, though no impact assessment or planned evaluation of the effectiveness of this intensification of drug law enforcement

has been made public. This legislation includes the implementation of mandatory minimum sentencing for drug crimes, including the crime of possessing six or more cannabis plants.<sup>21, 22</sup> In this context, there are detailed data from other North American jurisdictions that have employed similar cannabis control initiatives (i.e., mandatory minimum sentences). The impact of such “tough on crime” policies elsewhere allows for the inference of their likely impact in Canada.<sup>23</sup>

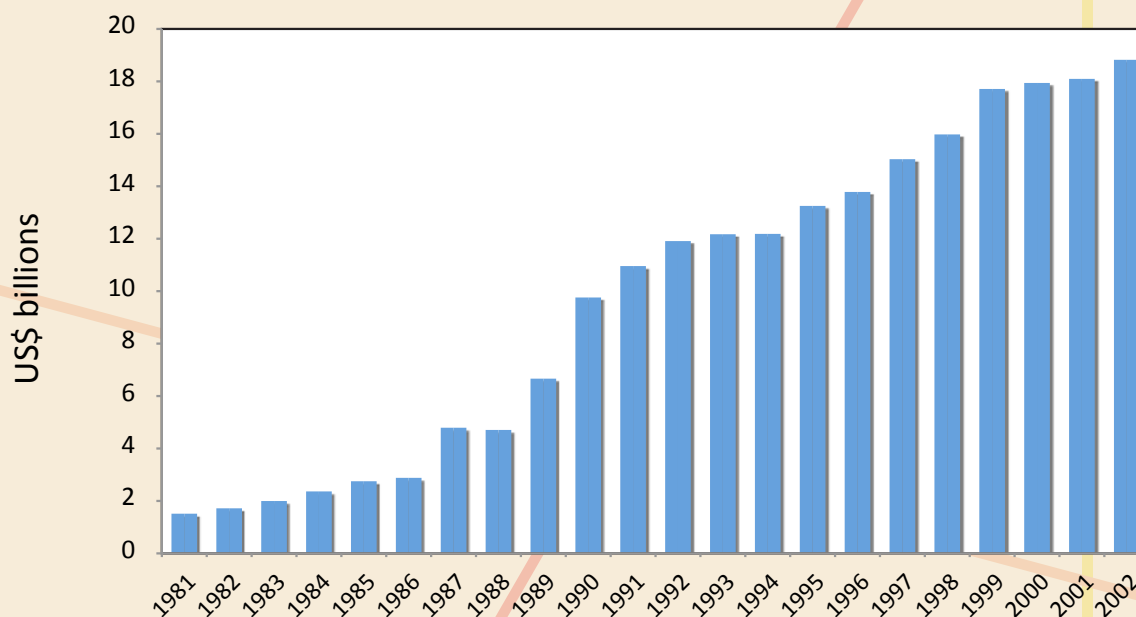
Drawing upon data derived from North American cannabis surveillance systems, this report specifically tests the assumption that increased funding for the enforcement of cannabis prohibition decreases cannabis availability, increases price, reduces potency, and reduces rates of use. The report concludes by describing regulatory tools that may be more effective in reducing cannabis-related harm within a regulated cannabis model.

## PROHIBITION FUNDING, CANNABIS SEIZURES AND ARRESTS

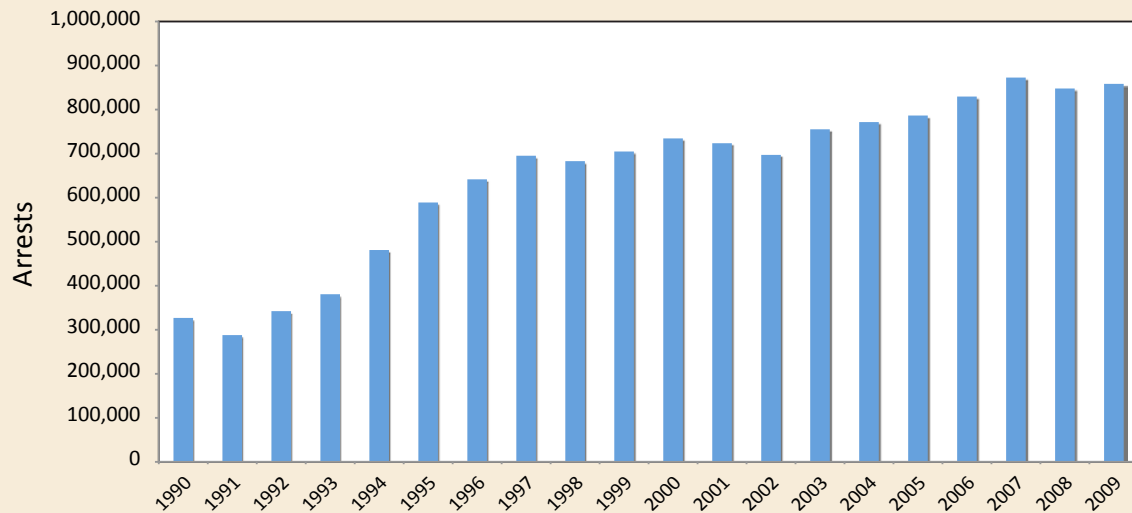
In the last several decades, there has been a remarkable increase in US federal and state funding for anti-drug efforts. The pattern of federal funding is shown in **Figure 2**, which demonstrates that the annual overall budget for US national drug control increased by more than 600% (inflation adjusted) over two decades, from approximately US\$1.5 billion in 1981 to over US\$18 billion in 2002, the last year this budget was consistently reported.<sup>24</sup> While not all of this budget funded programs specific to cannabis

prohibition, according to the US Bureau of Justice Statistics, this increase in funding nevertheless coincided with a 160% increase in cannabis-related arrests for cannabis possession, sale or production (**Figure 3**) and a 420% increase in cannabis-related seizures (**Figure 4**) between 1990 and 2009. The enforcement of cannabis prohibition in California alone is estimated to cost US taxpayers anywhere between US\$200 million and US\$1.9 billion each year.<sup>25</sup>

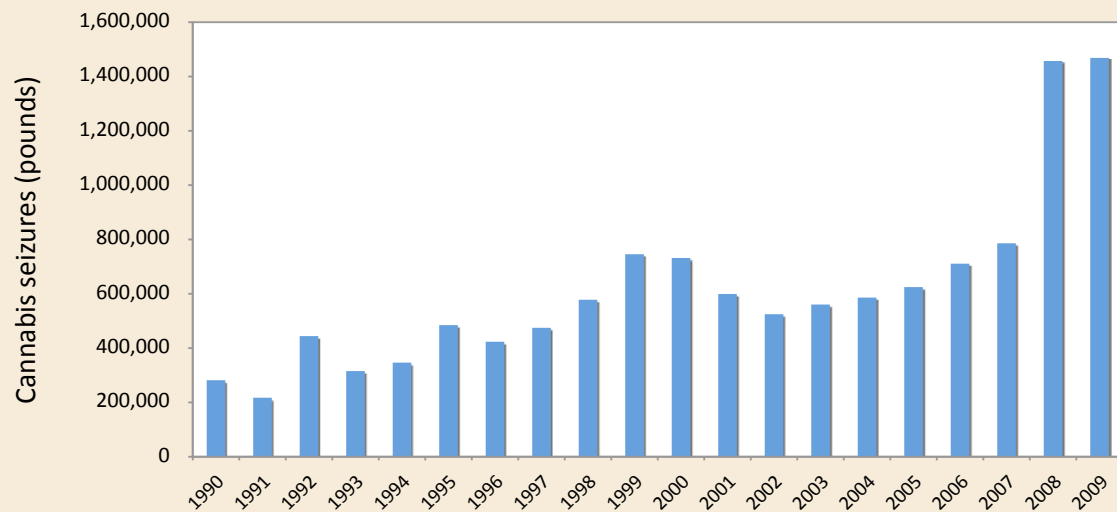
**Figure 2.** US federal drug control budget, 1981–2002



Source: US Office of National Drug Control Policy, 2004

**Figure 3.** Cannabis-related arrests in the United States, 1990–2009

Source: FBI Annual Uniform Crime Reporting

**Figure 4.** Annual cannabis seizures by the US Drug Enforcement Agency, 1990–2009

Source: US Drug Enforcement Agency STRIDE Surveillance System, 2010

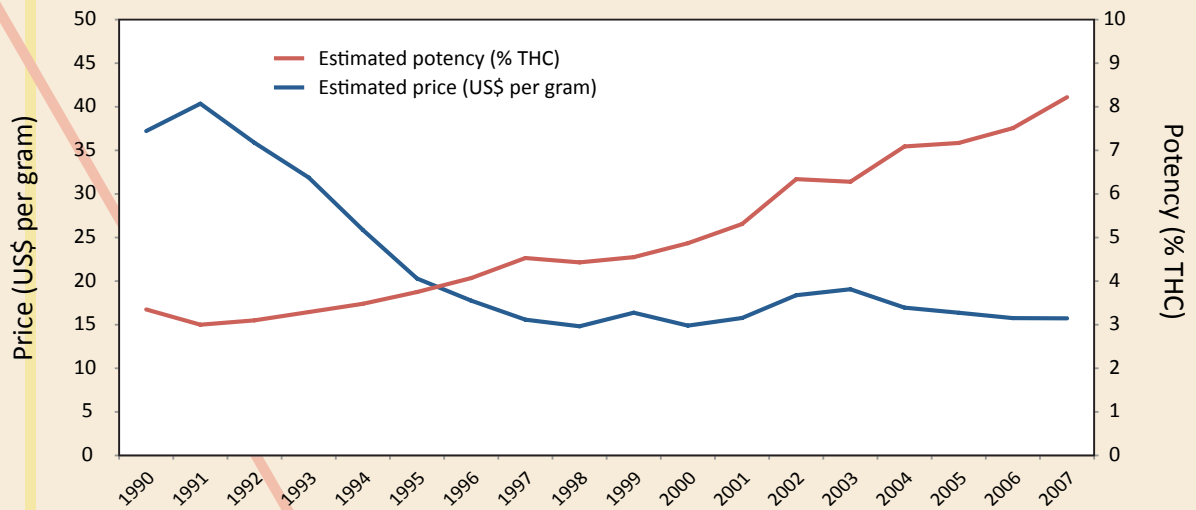
## CANNABIS PRICE, POTENCY, USE AND AVAILABILITY

We tested the assumption that increased funding for cannabis prohibition reduces the drug's availability by evaluating US federally funded surveillance systems examining markers of cannabis potency, price, availability and rates of use. As above, unless otherwise noted, the data presented in figures have been restricted to 1990 onwards to reflect the patterns observed over approximately the last two decades, during which funding for US drug control increased dramatically as noted above.

The limitations of cannabis prohibition in the US are demonstrated by the substantial increase in cannabis potency observed since 1990. According to the University of Mississippi Cannabis Potency Monitoring Project, which is funded by the US National Institutes of Health, scientific monitoring of cannabis potency shows that the estimated delta-9-tetrahydrocannabinol (THC) content of US cannabis has risen by approximately 145%, from 3.5% in 1990 to over 8.5% in 2007.<sup>26</sup> The failure to reduce the US supply of cannabis is further demonstrated by estimates derived from the US Drug Enforcement Agency for the same time period that show a decrease of 58% in the retail price of US cannabis, from an inflation-adjusted retail price of US\$37 per gram in 1990 to US\$15 per gram in 2007. The trend in potency and price of US cannabis is shown in **Figure 5**.<sup>27</sup> In Canada, while annualized data are unavailable, the RCMP has nevertheless reported the rising and overall extremely high potency of Canadian cannabis, which was reported to have reached 10.3% in 2006.<sup>6</sup>

The limitations of anti-cannabis law enforcement are also demonstrated by the ease with which youth in North America report being able to obtain the drug. According to drug use surveillance systems funded by the US National Institute on Drug Abuse, over the last 30 years of cannabis prohibition the drug has remained “almost universally available to American 12th graders,” with 80–90% of this group saying the drug is “very easy” or “fairly easy” to obtain.<sup>28</sup> Further, the US Substance Abuse and Mental Health Services Administration reports that about 60% of school-aged youth in the US who use cannabis either obtained their most recently used cannabis for free or shared someone else's.<sup>29</sup> Interestingly, rates of cannabis use among North American youth have not decreased during periods when levels of funding for cannabis prohibition have increased. Instead, the estimated annual prevalence of cannabis use among American grade 12 students rose from 27% in 1990 to 35% in 2010.<sup>30</sup> In Canada, data collected by the Ontario Student Drug Use and Health Survey demonstrate that the estimated average annual prevalence of cannabis use among Ontario high school students has almost doubled since the early 1990s, from 12% at the start of 1990 to 20% in 2009.<sup>31</sup> Among grade 11 students, annual prevalence of cannabis use increased from 23% at the start of 1990 to 39% in 2009.<sup>31</sup>

**Figure 5.** Estimated price and potency of cannabis in the United States, 1990–2007



Source: University of Mississippi Cannabis Potency Monitoring Project; Drug Enforcement Agency STRIDE Surveillance System

## UNINTENDED CONSEQUENCES OF CANNABIS PROHIBITION

The unintended consequences of cannabis prohibition have been reviewed in detail elsewhere,<sup>32-34</sup> but several points are worthy of reiteration. First, economists have long argued that a key unintended consequence of drug prohibition is its enrichment of organized crime groups. As US economist and Nobel laureate Milton Friedman observed in a 1991 interview: “If you look at the drug war from a purely economic point of view, the role of the government is to protect the drug cartel.” This is borne out by the fact that, as a consequence of prohibitions on all currently illegal drugs, a vast global illegal drug market—existing beyond the purview of government taxation—has emerged, which the United Nations estimates is worth US\$320 billion annually.<sup>35</sup> Beyond the fact that these profits remain entirely outside the control of governments, they fuel crime, violence and corruption in countless communities and have destabilized entire countries such as Colombia, Mexico and Afghanistan.<sup>35, 36</sup> As noted above, a 2008–2009 ‘war’ between drug gangs involved in drug trafficking in Greater Vancouver is only part of a long-term pattern of rising violence among drug gangs in BC (see **Figure 1**).<sup>4, 37</sup> The role of the cannabis trade in promoting violence is intimately linked with the massive profits associated with this drug. Afghanistan, for instance, is the globe’s largest producer of cannabis resin,<sup>1</sup> and in Mexico, where a drug war launched in 2006 has left tens of thousands dead, profits from Mexican drug cartel cannabis trafficking to the US may be worth up to US\$2 billion annually.<sup>38</sup> In BC, the multibillion dollar cannabis industry is estimated to be worth up to \$7 billion annually, which is more than double the total revenue from the province’s agriculture, forestry and fishing sectors combined.<sup>39</sup> These huge profits incentivize participation in the illegal drug trade. Further, since conventional

dispute resolution mechanisms do not exist in this unregulated economy, violence is commonly used to gain or maintain market share. This reality was demonstrated in a recent systematic review of all English language research papers that have evaluated the association between drug law enforcement and violence, which demonstrated that, rather than improving community health and safety, the enforcement of drug prohibition was associated with increases in drug market violence.<sup>40</sup> Specifically, this review concluded that successful law enforcement interventions, by removing key players, appear to have the perverse effect of making it more profitable for new suppliers to get involved in the illegal drug market. This may explain why both cannabis source countries bordering the US (i.e., Canada and Mexico) are experiencing increasing violence between groups that supply cannabis to the US market, despite increased emphasis on drug law enforcement.<sup>5, 41, 42</sup>

The enforcement of cannabis prohibition also contributes to social inequity in North America. In Canada, despite the fact that individuals of Aboriginal ancestry constitute less than 4% of the population, they nevertheless make up 18% of all sentenced admissions to federal correctional facilities, and drug-related criminal convictions play a major role in this disproportionate level of incarceration.<sup>43, 44</sup> Similarly, in the US, ethnic minority communities are those generally most adversely affected by current cannabis laws. According to a recent report,<sup>33</sup> for instance, the cannabis possession arrest rate for African Americans in Los Angeles county is more than 300% higher than it is for whites. This disparity exists despite government studies suggesting that African Americans use cannabis at lower rates than whites.<sup>29</sup>



Despite legal prohibitions against cannabis, the drug is widely available. This photo was taken in front of Vancouver's old courthouse building, where thousands gathered at the 2010 '420' celebration to openly consume cannabis and to advocate for the decriminalization of the drug. Vancouver, April 20, 2010. Creative Commons BY-NC-ND 2.0 (<http://www.flickr.com/photos/coaxial/466738081>)



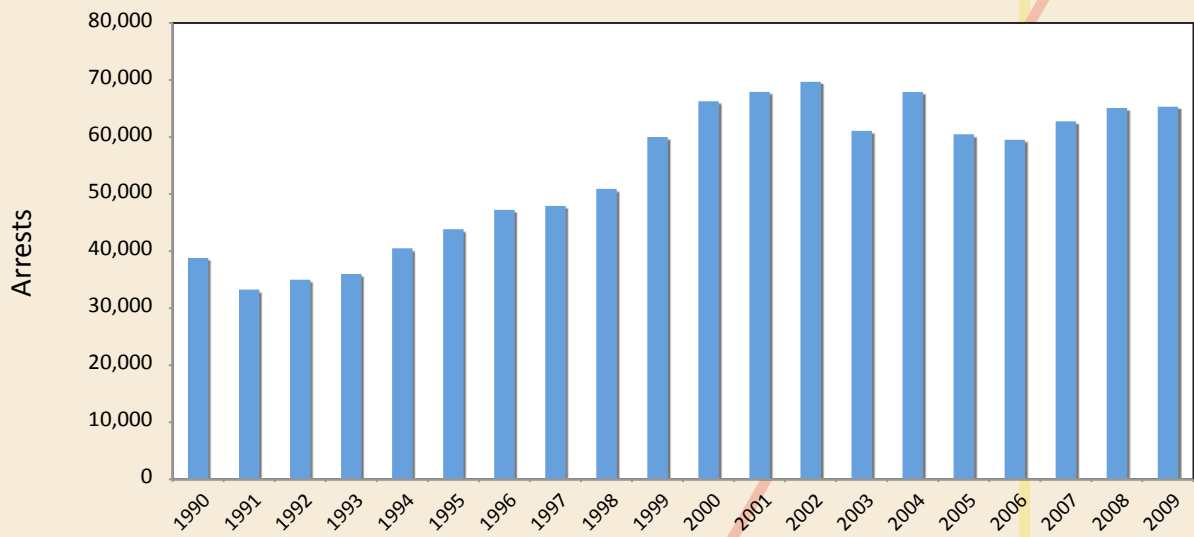
## THE RELATIONSHIP BETWEEN DRUG POLICIES AND RATES OF CANNABIS USE

It has been argued that rates of cannabis use would be higher if law enforcement measures were not in place.<sup>45</sup> However, as described below, available scientific evidence indicates that patterns of drug law enforcement are not strongly correlated with rates of cannabis use. Further, this position is inconsistent with the government surveillance data presented in this report and with recent international evidence.<sup>46-48</sup> This evidence includes a World Health Organization report indicating that country level rates of drug law enforcement and patterns of drug use do not appear to be correlated.<sup>46</sup> Indeed, despite an estimated US\$1 trillion spent on the US war on drugs in the last 40 years, the US has the highest lifetime incidence of cannabis use, which, at 42%, is higher than that of any of the other countries surveyed in the report, including Colombia, Mexico, Belgium, France, Germany, Italy, Netherlands, Spain, Ukraine, Israel, Lebanon, Nigeria, South Africa, Japan, People's Republic of China and New Zealand.<sup>46</sup> Further, the data presented in this report suggest that anti-cannabis law enforcement likely has a limited impact, given that increases in government anti-cannabis expenditures have not translated into meaningful reductions in levels

of cannabis availability, decreases in potency, increases in price or decreases in the rates of use of this drug, particularly among youth. Similarly, specific comparisons between the US and the Netherlands, where cannabis is de facto legalized, also indicate that despite the US's record levels of drug enforcement expenditures, the lifetime rate of cannabis use in the US is more than double that observed in the Netherlands (42% compared to 20%).<sup>46</sup> In Canada, levels of cannabis use among youth have increased despite the fact that cannabis-related arrests have gone up from roughly 38,000 in 1990 to more than 65,000 in 2008, as shown in **Figure 6**.<sup>31, 49</sup>

While the Canadian government has allocated C\$10 million towards a public service campaign (i.e., anti-drug advertisements) seeking to dissuade youth from using cannabis,<sup>50</sup> evaluations of similar campaigns in the US suggest that the Canadian campaign is likely to be ineffective.<sup>51</sup> Of further concern, as was cautioned by the US Government Accountability Office, such campaigns paradoxically may also lead to an increase in the use of illegal drugs such as cannabis among youth.<sup>52</sup>

**Figure 6.** Cannabis-related arrests in Canada, 1990–2009



Source: Statistics Canada

## POLICY ALTERNATIVES

Several countries, including Portugal, Argentina, Brazil, Paraguay, Peru, Mexico and the United States, have instituted varying levels of cannabis decriminalization. While data are limited, evaluations of decriminalization models suggest that they are not associated with increased drug use.<sup>32, 53, 54</sup> On the contrary, Portugal, which decriminalized all drug use in 2001, has rates of cannabis use that remain among the lowest in the European Union.<sup>55, 56</sup> However, without regulatory mechanisms allowing for legal production—as is the case for alcohol, tobacco and other psychoactive substances—organized crime groups will continue to generate significant revenue from the cannabis market.<sup>57</sup>

Given the limitations and continued harms that persist despite decriminalization (e.g., revenue to organized crime), several groups have recently proposed a regulated market model for cannabis control. These include models for cannabis policy reform that have been developed specific to Canada and BC. For instance, a report by the BC Health Officers Council has called for the public health oriented regulation of cannabis and other illegal substances to reduce the public health harms, including drug-related violence and homicide, that are currently attributable to cannabis prohibition.<sup>7</sup> Additionally, a report by the Fraser Institute has also called for consideration of cannabis taxation in order to offset the effects of the illegal cannabis industry on negative health and social outcomes.<sup>3</sup> In this context, a recent poll indicates that 77% of British Columbians support cannabis law reform.<sup>8</sup>

There are some data regarding the impact of cannabis legalization on rates of cannabis use and related harm. In the Netherlands, where cannabis is de facto regulated and retail sales

are restricted to adults through licensed coffee shops, rates of cannabis use are much lower than in the US and Canada.<sup>46, 58</sup> However, the Dutch model is limited to regulated distribution to the end consumer (production remains illegal), and experts have pointed out that there are approaches to cannabis law reform that extend beyond this model.<sup>25</sup>

The effects of alternative approaches to cannabis regulation on cannabis-related harm, including policy-related harm, will likely depend on the regulatory mechanisms devised to control both use and availability, as well as the subsequent cultural norms that emerge under a revised legal framework.<sup>57, 59</sup> It is important to stress in this context that the mechanisms for psychoactive drug control (for example, alcohol and tobacco regulation) vary widely, and most settings do not have health-focused drug control systems in place. Instead, the interests of the tobacco and alcohol industries have commonly trumped effective public health strategies such as maintaining high prices through taxation, restricting advertising and promotion, and other regulatory controls.<sup>60, 61</sup> Types of regulatory mechanisms for cannabis control have been fully described elsewhere and are summarized in **Tables 1 and 2**.<sup>57, 62, 63</sup>

In brief, while not all of these regulatory tools may be directly applicable to a regulated market for cannabis, a number of mechanisms should be given serious consideration in any locality contemplating regulated cannabis sale or use. These include policies already in place at some medical cannabis dispensaries, such as permit systems for cannabis users and conditional licensing systems for cannabis dispensaries based upon adherence to regulatory

**Table 1: Potential benefits of a regulated market for cannabis**

<b>Availability</b>	Regulatory tools can be used in an effort to control availability. <sup>63</sup>
<b>Drug market violence</b>	By eliminating the illegal cannabis market, violence arising from conflict among those involved in cannabis supply will likely be reduced. <sup>40</sup>
<b>Organized crime</b>	Removing the illegal market will eliminate a key source of revenue for organized crime groups. <sup>73</sup>
<b>Law enforcement resources</b>	A regulated market for cannabis creates opportunities for enforcement resources to be redeployed towards improving and maintaining community health and safety. Estimates suggest that national regulation of cannabis in the US would result in savings of US\$44.1 billion per year on enforcement expenditures alone. <sup>34</sup>
<b>Tax revenue</b>	Regulating cannabis could create new sources of revenue for governments. The potential new revenue for the state of California is estimated to be between approximately US\$990 million and US\$1.4 billion annually. <sup>74</sup>

**Table 2: Models and mechanisms for reducing cannabis harms in a regulated market**

<b>Prescription or permit system</b>	Prescriptions or permits could be issued to individual purchasers, similar to systems in place at some medical cannabis dispensaries. <sup>63</sup>
<b>Licensing system</b>	Cannabis dispensaries could be issued conditional licences requiring compliance with regulatory guidelines. <sup>57, 63</sup>
<b>Purchasing controls</b>	Taxation (i.e., increasing consumer price barriers) has been shown to affect levels of alcohol and tobacco use and could be applicable to cannabis. <sup>60, 63-67</sup>
<b>Sales restrictions</b>	Implementing age restrictions, similar to tobacco and alcohol regulations, could limit access to cannabis among youth. <sup>57, 66</sup>
	Limiting days and hours of sale of alcohol has been shown to affect levels of alcohol use and could affect rates of cannabis use. <sup>60, 63, 67</sup>
	Alcohol outlet density has been associated with rates of alcohol use and hence limiting cannabis outlet density could limit rates of use. <sup>60, 67</sup>
	Restrictions on bulk sales as employed in the Netherlands, where purchases are restricted to 5 grams, could help restrict diversion to minors. <sup>57, 63</sup>
<b>Restrictions on use</b>	Regulatory policies that affect the location or circumstances of use and allow for limited use in designated places, such as the Dutch coffee shop model for cannabis, could limit uncontrolled and “public nuisance” use. <sup>57, 63</sup>
	Strict regulations would prohibit driving or operating machinery while impaired. <sup>57, 60</sup>
<b>Marketing</b>	Strict regulations on marketing and product branding would reduce exposure to advertising, which is known to affect rates of alcohol and tobacco use. <sup>57, 60</sup>
<b>Packaging</b>	Tamper-proof packaging, standard labelling on content, factual health warnings, and no on-pack branding or marketing would help regulate cannabis use. <sup>57</sup>
<b>Reducing harm</b>	Regulated and controlled availability of lesser-strength substances reduces the illegal market for and use of higher potency substances, as has occurred with the regulation of alcohol. <sup>63</sup>
	Opportunities should be explored to change patterns of use towards non-smoked cannabis. <sup>75, 76</sup>

guidelines.<sup>57, 63</sup> Regulations could also include age restrictions on sales, restrictions on driving or operating machinery while intoxicated, limited hours of sale and outlet density, restrictions on bulk sales and limitations on the potency of legal cannabis.<sup>57, 60, 62-67</sup> Additional regulatory alternatives worthy of consideration include restrictions such as those on alcohol and tobacco that limit the location and circumstances of use, as well as the Dutch “coffee shop” model, which is designed to reduce public use.<sup>63</sup> Strict prohibitions on marketing and product branding could also be used to avoid promotion of cannabis use,<sup>25, 57</sup> and evidence has confirmed the utility of tamper-proof packaging, standard labelling on content and factual health warnings for licit substances.<sup>57</sup> Since taxation (resulting in a higher consumer price) has been shown to affect levels of alcohol and tobacco use, the price of cannabis could also be kept as high as possible to limit use, but low enough to avoid incentivizing an illegal market.<sup>62-67</sup>

It is important in this context to highlight the potential impact of regulatory and public health approaches on cultural norms surrounding cannabis use. Drug use has stabilized or decreased in a number of settings such as Portugal and the Netherlands where governments have

adopted policies of cannabis decriminalization or regulation.<sup>32, 53, 54</sup> In fact, both of these countries report levels of illegal drug use that are below the US and European averages. Further research is required to understand these shifts in cultural norms, but there is evidence to suggest that public health oriented regulation may reduce the appeal for some youth of experimentation with an illegal substance. For instance, Switzerland’s implementation of a regulated heroin prescription program was associated with a sharp decline in heroin use attributable to increased negative attitudes towards heroin among Swiss youth.<sup>68</sup> This effectiveness in altering cultural norms on illegal drug use stands in contrast to the impact of the bulk of the public education campaigns that have been undertaken in North America. Indeed, the implementation of popular public education programs such as Drug Abuse Resistance Education (DARE) and anti-drug public service announcements has been found to be ineffective, and in some cases harmful, in terms of the impact on attitudes towards drugs among youth.<sup>69-71</sup> Experts therefore have suggested that current Canadian prevention efforts targeted towards cannabis use employ a public health, rather than a prohibitive, approach.<sup>72</sup>

# GANG WAR FEARS



**KELOWNA** • The violent death of notorious gangster Jonathan Bacon has spurred worries of fresh gangland carnage ahead. **P4-5**

ABBOTSFORD NEWS-BLACK PRESS/IGMI AGENCY

## BACON BROTHER KILLED

**KELOWNA:** Gangster Jonathan Bacon shot dead and five wounded in brazen daylight hit **NEWS A3**

Paramedics attend to a victim of a mass shooting Sunday in Kelowna, in which notorious gangster Jonathan Bacon was killed and five others were wounded. **DON SIFOS — FOR THE PROVINCE**

**ORGANIZED CRIME**

**GANG TASK FORCE**

**OUTLAW MOTORCYCLE GANG UNIT**



CARMINE MARINELLI, 24 HOURS

# PUBLIC WARNING

**VANCOUVER** • Supt. Tom McCluskie and the Gang Task Force have issued a warning to avoid contact with gangs after a shooting in Surrey last Friday. **P3**

## LIMITATIONS

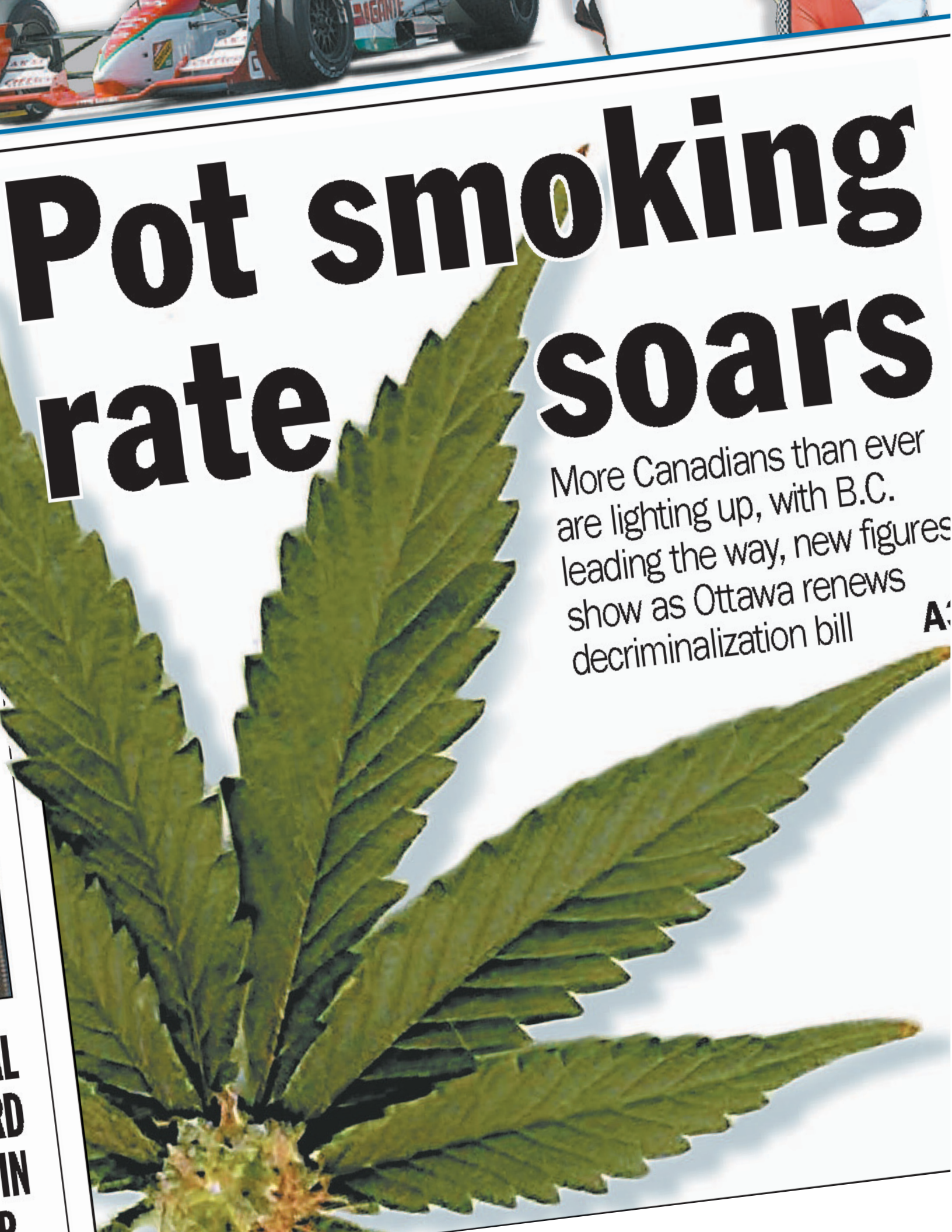
While some government surveillance data included in this report (e.g., numbers of arrests and seizures) accurately reflect the relevant law enforcement statistics, other data (e.g., price and potency estimates) were derived from non-random samples and are therefore only estimates of annual averages, which are likely to vary between regions and countries. Similarly, the lack of consistent national longitudinal data on levels of drug use in Canada, as well as easily comparable longitudinal datasets on resources allocated towards Canadian cannabis law enforcement, has necessitated reliance in this report on data from the US. Although the US's longstanding "war on drugs" policies make it an excellent policy laboratory, and while many similarities exist between these two countries, it is important to note that consistent longitudinal

Canadian surveillance data on these topics are needed. For instance, US data indicate that the availability of cannabis, as measured through indicators of price and potency, has increased steadily over the past two decades in that country. In BC, indicators of price and potency suggest that cannabis is even more widely available in BC than it is in the US. Therefore, US cannabis availability data may actually underestimate the extent to which BC's cannabis industry, as controlled by organized crime, has overwhelmed provincial anti-cannabis enforcement efforts. Finally, we note that budgetary data from the US Office of National Drug Control Policy were truncated at 2002 because of changes in reporting the US anti-drug budget, making comparisons between anti-drug expenditures before and after this date impossible.

## SUMMARY

Data from government-funded surveillance systems in Canada and the US demonstrate that, while increased intensity of cannabis prohibition has led to an increase in cannabis seizures and arrests, this approach has not been associated with a decrease in cannabis availability or potency, an increase in cannabis price, or a decrease in levels of use. On the contrary, the easy availability of cannabis among youth and the falling cannabis prices observed over the last two decades imply that cannabis supply is increasing. With an acceptance of the failure of cannabis prohibition must come an urgent

consideration of its harms, largest among them being the growth of organized crime and related gang violence linked to cannabis prohibition. In this context, this report outlines a range of regulatory mechanisms that have the potential not only to reduce cannabis availability and related violence but also to raise significant tax revenue. However, successfully reducing rates of cannabis-related harm will likely require the implementation of comprehensive regulatory mechanisms too commonly underutilized in the areas of tobacco and alcohol control.



# Pot smoking rate soars

More Canadians than ever are lighting up, with B.C. leading the way, new figures show as Ottawa renews decriminalization bill

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