Public Health Perspectives for Regulating Psychoactive Substances

What We Can Do About Alcohol, Tobacco, and Other Drugs

For Discussion and Feedback November 2011

The Health Officers Council of British Columbia

Production of this Report
Has Been Supported by
The City of Vancouver

CITY OF VANCOUVER

About the Health Officer's Council

The Health Officers Council of BC (HOC) is a registered society in British Columbia of public health physicians who, among other activities, advise and advocate for public policies and programs directed to improving the health of populations. HOC provides recommendations to and works with a wide range of government and non-government agencies, both in and outside of BC.

Physicians involved in HOC include medical health officers in BC and the Yukon, physicians at the BC Centre for Disease Control, Ministry of Health, First Nations and Inuit Health and university departments as well as private consultants. Physicians may continue as active HOC members in retirement.

HOC is independent from these organizations and as such positions taken by HOC do not necessarily represent positions of the organization for which the members work.

Acknowledgements

The Health Officers Council of BC thanks the Psychoactive Substances Committee and many other people who have volunteered their time to provide helpful comments in the preparation of this paper. In particular the assistance of Mark Haden is appreciated for much dedicated work on the concepts, organization, writing, and supplying references.

The Health Officers Council is also very grateful to the City of Vancouver's Social Policy Division for their feedback and contribution in the making of this paper.

Endorsements

This paper is being disseminated "For Discussion and Feedback" to ensure that those interested and/or affected by harms associated with psychoactive substances can have the opportunity to review this paper and provide feedback and suggestions.

Comments or questions are encouraged, and can be directed to:

Dr. Brian Emerson, Secretary,
The Health Officers Council of BC
4-2 1515 Blanshard St.
Victoria, BC, V8W 3C8

T 250 952-1701
F 250 952-1713
brian.emerson@gov.bc.ca

Groups that are interested in providing letters of support or formally endorsing the recommendations of this paper should also contact the above.

This report is available online at **drugpolicy.ca** and **phabc.org/modules.php?name=Contentpub&pa=viewdoc&cid=11**

Table of Contents

Executive Summary and Key Messages

Background

Key Message 1 The adverse public health and social impacts associated with use of and policies related to psychoactive substances* are substantial, and in many respects, preventable.

The public health impacts associated with alcohol, tobacco, and illegal substances in Canada estimated recently by Rehm et al[1] for 2002 indicated that these substances accounted for 21.0 % of all deaths, 24.9% of all potential years of life lost, and 19.4% of all acute care hospital days. Prescription drugs are also believed to have significant adverse impacts but population data on them is lacking.

The substantial public health burden is because substances, as well as implementation of some of the policies to respond to them, contribute to the occurrence of many different diseases, disabilities and deaths; and for some specific categories of diseases and deaths a substantial fraction are directly related to psychoactive substances.[1]

For example tobacco contributes to many cancer types, cardiovascular disease, respiratory disease, perinatal health problems, and unintentional injuries i.e. fires. Alcohol contributes to the burden of death and diseases from cancer, diabetes, neuro-psychiatric conditions, cardiovascular disease, digestive diseases, skin diseases, perinatal health problems, and unintentional and intentional injuries. Illegal substances are related to death and diseases from mental and behavioural disorders, infectious diseases, perinatal health problems, unintentional and intentional injuries and poisonings.[1]

Total annual costs were estimated by Rehm et al[1] at $39.8 billion per year, based on direct costs of $15.5 billion (health care, enforcement, research, prevention, fire damage, vehicle collision, employee assistance programs, employee drug testing) and indirect costs of $24.3 billion (lost productivity in the workplace or at home). Tobacco comprised 42.7% of the costs, alcohol 36.6%, and illegal substances 20.7%. It should be noted that these are conservative estimates as they exclude costs related to private expenses, welfare benefits, pain and suffering, lost productivity of people in prison convicted of substance related crime, and costs from harms associated with prescription psychoactive substances.

When looked at from a prevention perspective only $148 million is dedicated to prevention and research, while $5.4 billion are classified as "law enforcement costs" (police, courts, corrections)[1] – a ratio of 36:1. While a main purpose of enforcement is supposed to be prevention by deterrence, and it can be a useful preventive tool when used appropriately, this raises serious questions about whether such an allocation is the most fiscally responsible approach to achieving the best results for the tax dollars expended, or whether greater investments in public health oriented approaches to substances would yield better individual and societal returns.

* Psychoactive substances affect mental functions such as sensations of pain and pleasure, mood, consciousness, perceptions of reality, thinking ability, motivation, alertness, or other psychological or behavioural functions. These include alcohol, tobacco, caffeine, prescription substances with reinforcing properties such as sleeping pills and pain medications, solvents, and illegal substances such as cannabis, cocaine, methamphetamine, ecstasy, LSD and heroin.

Key Message 2 **Legislative and policy frameworks for psychoactive substances have not kept pace with established public health best practices.**

Modernizing legislative and policy frameworks is a priority area of the "National Framework for Action to Reduce the Harms Associated with Alcohol and Other Drugs and Substances in Canada"[2] and has been called for internationally through initiatives such as the Vienna Declaration[3].

There is growing public support for change, and recent national reviews such as that done by the New Zealand Law Commission[4] and the urgent call by the recently established Global Commission on Drug Policy for "fundamental reforms in national and global drug control policies"[5] suggest innovative ways of moving forward.

The purposes of this paper are to provide governments with an evidence-based public health oriented framework for regulating psychoactive substances and to stimulate public and governmental discussions, development of policy proposals, and action to reduce the harms associated with psychoactive substances.

The paper acknowledges that psychoactive substances, as well as the interventions designed to deal with them, have both benefits and harms, and addresses the challenges of establishing systems of access and regulation that achieve a reasoned balance between the benefits and the harms of both the substances and their regulation.

Determinants of Harms and Benefits

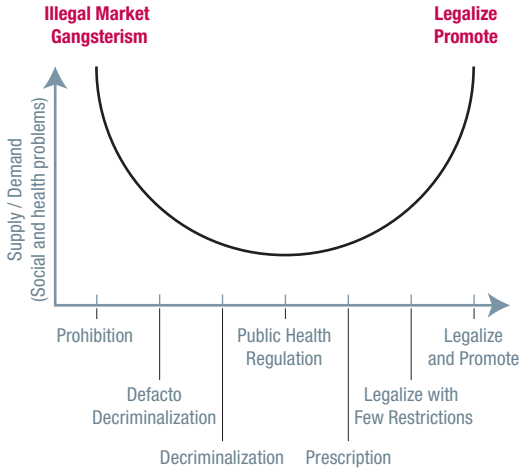
Individual and societal harms and benefits of substances are driven by interactions among biopsychosocial and economic conditions, the informational environment, growth/production of substances, other supply and demand variables, availability, accessibility, context, social norms and the laws that govern many of these activities. The interaction of these factors leads to use patterns that result in harms and benefits, some of which may be mitigated or aggravated by the health, social and criminal justice services brought to bear on these issues.

Laws, as manifested by statutes, regulations, and court judgements are important determinants and are the main focus of this paper. Throughout history societies have developed a spectrum of regulatory approaches to manage substances, generally from least restrictive to most restrictive with an attempt to mitigate potential harms. Current approaches to regulating substances include:

- Free market commercialization (e.g. tobacco, caffeinated beverages and alcohol) with and without varying licensing regimes.
- Over and behind the counter access through pharmacies (e.g. codeine based pain and cough medications).
- Prescription by a physician (e.g. sleeping pills, methadone and pain medications).
- Prohibition, where it is a criminal offence to possess and sell substances, except in some very limited circumstances (e.g. cannabis, cocaine, LSD and heroin).
- Varying combinations of civil and criminal based regulation.

There is increasing recognition of the ineffectiveness and substantial unintended consequences due to indiscriminate prohibition of some substances. This paper points out that the current prohibition approach is ineffective, and describes the failures and harms due to prohibition including accelerating the spread of HIV and hepatitis; overdose deaths; creation and aggravation of health and social problems due to criminalization, stigmatizing, and discrimination; and fuelling the existence of an illegal market that produces crime, violent injuries and deaths, and corruption.

Figure 1: Adapted from Marks "The Paradox of Prohibition"[6]



A Public Health Oriented Approach

Key Message 3 A public health oriented approach to regulating all psychoactive substances is needed.

A public health approach focuses on population health assessment and monitoring of the population's health trends, health promotion; prevention of disease, injury, disability, inequity and premature mortality; and health protection.

A public health approach operates within a framework of guiding principles, broad goals, and specific objectives and strategies. It recognizes that people use substances for anticipated beneficial effects, is attentive to the potential harms of the substances as well as the unintended effects of control policies. A public health approach seeks to ensure that the benefit to harm ratios associated with control interventions are not out of proportion to harms from use of substances themselves.

In "The Paradox of Prohibition"[6] Marks' describes how supply, demand, and harms from psychoactive drugs would be minimized at a mid-point between the extremes of "legalization" and "prohibition" approaches, at the "bottom" of a quadratic (U-shaped) curve; and that associated health and social problems could be reduced with movement away from either extreme. Alcohol control policy in North America has historically swung from one extreme (prohibition) to the other (legalize and promote). Paradoxically, supply, demand, and harms are highest with either unfettered "legalization" or full "prohibition". Figure 1 is an adaptation of Marks' concept.

Human rights considerations are fundamental to a public health approach and public health oriented regulation is supportive and consistent with the Canadian Charter of Rights and Freedoms[7].

Much has been learned about the harm reduction value of regulating tobacco and alcohol from a public health perspective. Conversely the very substantial harms associated with tobacco and alcohol that accrue when public health considerations are not given adequate attention is also well documented.

Public health oriented approaches to regulation of illegal substances are more prominent in European countries, with some notable examples being the Netherlands and their experience with cannabis; and Portugal which decriminalized all formerly illegal substances. Portugal increased emphasis on health based approaches, with the evidence indicating that substances use did not increase and that there have been reductions in problematic use, substances related harms, and criminal justice overcrowding.[8]

A Proposed Public Health Oriented Framework for Regulation of Psychoactive Substances

Key Message 4 **A public health oriented framework for regulating psychoactive substances is outlined based on proposed assumptions, principles, a vision and goals. To maximize control of availability and accessibility and reduce consumer demand all steps in the supply chain (governance, business model, production, wholesale, distribution, and retail) as well as demand associated activities such as information and promotion would be under comprehensive societal control or direction. The model of the provincial government alcohol monopoly which emphasizes public health and social aspects, without the product promotional aspects, merits consideration for other substances.**

Key Message 5 **The framework is proposed for discussion purposes to demonstrate what in general a new public health oriented regulatory system could look like. Discussion and acceptance of the foundational principles will be important. Additional policy analysis for specific substances will be needed before decisions can be made on which policies should be implemented.**

Some specific measures covered by the framework include *availability control* (governance, business model, retailing, regulation of densities, locations and hours of operation), *accessibility control* (age limits for sales and purchase, pricing), *demand reduction* (obligations for provision of objective information, product labelling, promotion such as advertising, branding, and sponsorship), *supply control* (home and commercial production, product standards, quotas) and *purchase*, *consumption*, and *use controls*.

Benefits anticipated from public health oriented regulation are much reduced health and social harms associated with all substances; more efficient and effective use of taxpayers' funds for government services, including elimination of programs that are ineffective and or harmful; reduced public disorder; and improved public safety.

It is predictable that while organized crime would be greatly diminished consequent to emphasizing regulation rather than prohibition of some substances, it will not be eliminated. Compliance officials such as inspectors and police will continue to be needed to ensure compliance with the regulations, intervene with people selling or consuming products in a manner that puts others at risk, and to deal with behaviours that are damaging to others. Penalties should be commensurate with the harms of the transgressions and based on research that relates penalties to their intended effect on deterrence.

Regulatory interventions are very important and should be complemented by other activities including researching and monitoring psychoactive substance use and harms, health promotion, education, health protection, harm reduction, and discrimination reduction. While reduced, there would continue to be health and social problems associated with substances, so comprehensive, high quality adequately resourced services (i.e. screening, diagnosis, brief intervention, withdrawal management, addictions treatment, rehabilitation and recovery services, social services) tailored to specific categories of psychoactive substances will be necessary.

The effects of changes would need to be carefully monitored and evaluated to answer questions regarding regulation and best practices implementation; and harms and benefits of the new

measures on health, crime, social, economic, safety and environmental indicators. Public evaluation reports would provide accountability.

Public discussions will be essential to move beyond rhetoric to evidence-informed decisions, and to overcome vested interests and barriers to change. Such barriers should not be underestimated, and will be present from those interested in protecting personal, commercial, illegal market, ideological and other interests.

Key Message 6 **Local and provincial regulation and other innovative actions should be supported and encouraged. Federal regulation and other actions should be designed to support rather than inhibit local and provincial actions, and should be tailored specifically to deal with issues of national or international interest, including regulation of international trade from a public health perspective.**

Clarity and appropriate role definition between levels of government is critical, as all levels – federal, aboriginal, provincial, territorial, and local – have important roles to play.

Provincial governments are primarily responsible for health, education, social services and the criminal justice system (except for federal correctional institutions and national policing). They could play a primary role in developing new public health oriented delivery and regulatory structures and processes for all substances based on provincial experience and lessons learned from dealing with alcohol and tobacco. Cross provincial government ministry approaches will be essential because of the far reaching impact of substances on numerous government ministries.

Local, e.g. municipal, governments have a particularly important role as they are front and centre in addressing the challenges and opportunities posed to their communities by the production, sale and use of substances.

Aboriginal governments are rapidly evolving and playing an increasingly important role in the governance landscape in Canada. They should be included in all discussions about substances regulation as the impacts of psychoactive substances on their populations has been disproportionate, and their abilities to influence substances availability and patterns of use should not be underestimated.

The federal role will continue to be important in public health promotion, monitoring, evaluation, research funding, international reporting, governing imports and exports, aligning the criminal law with public health and human rights imperatives, coordinating cross jurisdictional action, and synthesizing provincial perspectives to represent Canada on the international stage.

International agreements guided by the United Nations such as the international drug conventions which limit use to medical and scientific purposes, trade treaties, and human rights treaties are also relevant and international considerations will be important to keep in mind with regards to new regulatory mechanisms.

Conclusions

The size of the adverse public health impacts of the harms associated with psychoactive substances calls out for coherent public health oriented regulatory strategies to better regulate tobacco and alcohol, control the increasing harms associated with prescription pharmaceuticals, and mitigate the ineffectiveness and harm generation associated with prohibition of currently illegal substances.

Public health oriented regulation has much potential to reduce the health, social and fiscal harms associated with all psychoactive substances.

In addition, public health oriented regulation is supportive of Canadians human rights as established by the pre-eminence of the Charter of Rights and Freedoms [7] i.e. the "right to life, liberty and security of the person and the right not to be deprived thereof except in accordance with the principles of fundamental justice." (section 7), "subject only to such reasonable limits prescribed by law as can be demonstrably justified in a free and democratic society" (section 1).

Recommendations

1 That federal, aboriginal, provincial, territorial, and local governments use the proposed public health framework described in this paper to review, evaluate and update their psychoactive substances related laws to ensure that such laws encompass a public health orientation to the regulation of all psychoactive substances.

2 In view of the very substantial financial interests of those who profit from and promote the use of alcohol, tobacco, illegal and prescription drugs, governments should take leadership on issues related to the production, distribution, promotion and use of substances by encouraging and supporting consortia comprised of non-government organizations, professional organizations, private interests, business, people who are actively growing, producing, distributing, retailing and using substances, academics, researchers, and other partners to make recommendations for public health oriented psychoactive substances policies and programs.

3 That a national commission of inquiry be established to recommend ways of increasing emphasis on public health oriented approaches to alcohol, tobacco, currently illegal, prescription, and other psychoactive substances; based on the growing body of evidence of what works and does not work for reducing harms associated with psychoactive substances.

The commission should involve the general public; federal, aboriginal, provincial, territorial, and local governments; non-government organizations; professional organizations; private interests; businesses; people who are actively growing, producing, distributing, retailing and using substances; academics; researchers; and other players to make recommendations for coherent and comprehensive public health oriented psychoactive substances related policies and programs.

Chapter 1

Introduction

Harms associated with psychoactive substances such as alcohol, tobacco, prescription and currently illegal substances account for substantial, and for some substances increasing adverse health and social impacts on individuals, families, communities and society at large.

"Unless a credible public health led model of drug market regulation is proposed, myths and misrepresentations will inevitably fill the void. So what would such a model look like?... It is a debate that the medical and public health sectors have failed to engage with for far too long."

Stephen Rolles[23]

Legislative and policy frameworks for psychoactive substances have not kept pace with established public health best practices. Modernizing legislative and policy frameworks is a priority area of the "National Framework for Action to Reduce the Harms Associated with Alcohol and Other Drugs and Substances in Canada"[2].

In a comprehensive review by Rehm et al[1] for 2002 alcohol, tobacco, and currently illegal substances substances were estimated to account for 21.0% of all Canadian deaths, 24.9% of all "potential years of life lost" (death before age 70 years), and 19.4% of all "acute care hospital days", at an estimated direct and indirect cost of $39.8 billion. These are underestimates of the magnitude of the problem as they did not account for harms associated with prescription psychoactive substances due to lack of data on this class of substances.

The Schneider Institute for Health Policy identified substance-related conditions as the number one public health problem in the United States.[9]

Consequently, effective and efficient management of psychoactive substances is one of the most pressing, challenging, controversial, and important issues facing modern society.

In outlining the critical elements, the "National Framework" says that the relationship between policy, legislation, and effective responses "cannot be underestimated," that laws "can have both positive and negative impacts", and the extent to which laws are adequately addressing psychoactive substance issues "is critical".

In short, the size of the problem and the ineffectiveness and harm generation of some of the current approaches underlay the need to adopt new public health oriented strategies.

Therefore, the purpose of this paper is to provide governments with an evidence based public health oriented framework for regulating psychoactive substances to stimulate public and governmental discussions, development of policy proposals, and action.

1

Introduction

This paper is written for a variety of audiences, with the risk of not meeting all the needs of all of the audiences. Nevertheless, it is hoped that this paper will be adequate to stimulate further action by all the audiences to improve on the current situation. Expected audiences include:

- Political leaders as they are essential in driving, facilitating or resisting change;
- Policy makers, as they will be charged with developing, implementing, and evaluating the details of the policies needed to effect change;
- Non-governmental organizations as many have passionate interests and creative ideas based on their intimate knowledge of the risk and benefits of substances;
- The general public as they, as individuals and communities, are the ones directly affected by the harms, and the ones who will benefit significantly – in health, safety and fiscal domains – from the positive changes that are possible.

For over 15 years The Health Officers Council of BC (HOC)* has written discussion papers to clarify thinking about substances policy, to stimulate discussion, and to recommend improvements [10-14] (See Appendix 1 for a list of previous HOC recommendations).

In particular HOC has:

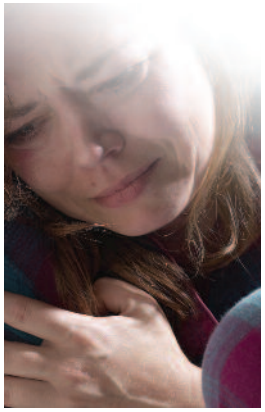
- Concluded that there is a pressing need for a coherent, public health oriented, effective and efficient approach to *all* psychoactive substances.
- Proposed that regulating substances from a public health perspective is fundamental to making progress towards reducing the health and social costs associated with substances.
- Described the ineffectiveness and social, fiscal and health-related harms from the current indiscriminate prohibition of many substances arising from the federal *Controlled Drugs and Substances Act* and its parent international conventions.**

Feedback on previous work done by the HOC included suggestions that the HOC develop "on the ground models" for how a public health oriented approach to regulating substances would work.

Fortunately this topic has been the subject of at least five recent books by Stockwell et al[15], Babor et al[16], Rolles et al[17], Babor et al[18] and Room et al[19] which summarize the evidence base for public health oriented substances policy, and which provide many suggestions for moving forward. Others have also made important contributions.[20, 21, 22] Translating the knowledge from these works into action is the intent of this paper.

This paper initially describes the concept of psychoactive substances and why the associated harms are an important public health issue. It then describes the determinants of harms and benefits, including the harms of prohibition. Finally the paper describes a public health oriented approach to substances, and details of what a regulatory framework based on public health perspectives could look like.

Clarity of language is critical to understanding concepts, and the language used in discussing substances and related issues presents particular language challenges (see also Perry and Reist[24] and Tupper[25]). To assist in ensuring clarity of language a glossary is included at the end of this paper.



* HOC is a registered society in British Columbia of public health physicians who, among other activities, advise and advocate for public policies and programs directed to improving the health of populations.

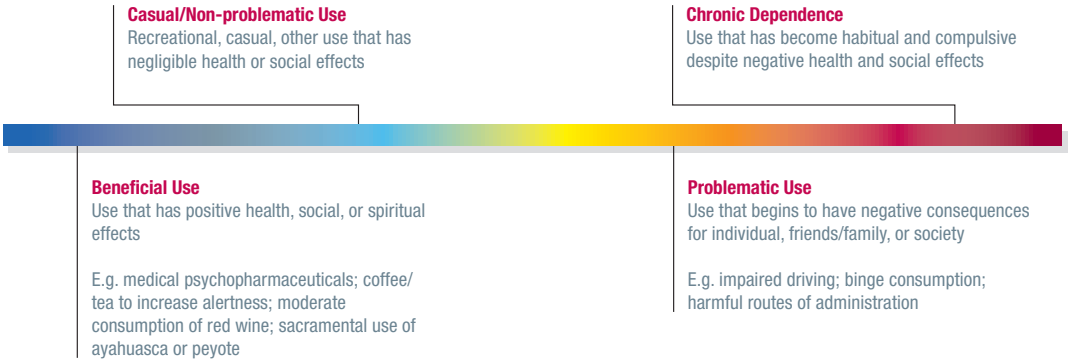
** the Single Convention on Narcotic Drugs, 1961; the Convention on Psychotropic Substances of 1971; and the United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988 – see incb.org

CHAPTER 2

What are "Psychoactive Substances"?

Figure 2: Spectrum of Psychoactive Substance Use

(Adapted From: BC Ministry of Health Services. "Every Door is the Right Door: A British Columbia planning framework to address problematic substance use and addiction" 2004)



What are the Harms and Benefits?

Psychoactive substances affect mental functions such as sensations of pain and pleasure, mood, consciousness, perceptions of reality, thinking ability, motivation, alertness, or other psychological or behavioural functions. These include alcohol, tobacco, caffeine, prescription substances with reinforcing properties such as sleeping pills and pain medications, solvents, and illegal substances such as cannabis, cocaine, methamphetamine, ecstasy, LSD and heroin.

Psychoactive substances can be classified into five broad, not mutually exclusive categories (adapted from Brand et al[26]):

- **Depressants**: e.g. alcohol, anxiety reducing drugs, sedatives, sleeping medication and opioid painkillers.
- **Stimulants**: e.g. nicotine, caffeine, cocaine and amphetamines
- **Psychedelics**: e.g. LSD, mescaline, psilocybin, and ayahuasca
- **Cannabis**
- **Psychiatric medications**: e.g. antipsychotics, antidepressants and mood stabilizers.

Psychoactive substance use has a long history, as plants and their extracts such as opium have been used both medically and non-medically for thousands of years "to benefit the body, mind, and soul" [26]. Beer has been brewed for nearly 6,000 years.[26, 27]

Depending on the substance, how it is used, and the context of use, substances can be a valuable medicine, an important element of a social, ceremonial or religious observance, or as a source of a problem, rather than a morally based binary of "use" versus "abuse". A spectrum of use can be postulated based on harmful and beneficial outcomes (see Figure 2).

2

Different categorizations of harms exist. Nutt et al[28] developed a rational scale to assess harms and categorized them into physical harms (acute, chronic, intravenous injection related), dependence (intensity of pleasure, psychological dependence, physical dependence), and social harms (intoxication, other social harms, health-care costs). Other authors have categorized harms by categories of health, social and economic functioning, safety and public order, and criminal justice.[29]

The Health Officers Council[13] identified categories of beneficial attributes of substances:

- **Physical:** pain relief, assistance with sleep, decreased risk of cardiovascular disease, increased endurance, stimulation or diminution of appetite.
- **Psychological:** relaxation, relief of stress and anxiety, increase alertness, assistance in coping with daily life, mood alteration, pleasure, performance improvement, or enhancement of creativity.
- **Social:** facilitation of social interaction, religious, spiritual or ceremonial use.
- **Economic:** wealth and job creation, industrial activity, employment, agricultural development, tax revenue generation.

Predicting the risk of harm at the individual and population level is very challenging, especially as many harms of currently illegal substances are a function of the prohibition policies. When a classification of harms was attempted for 20 substances in the UK it raised questions about the validity of the UK *Misuse of Drugs Act* classification scheme and the authors concluded that "Discussions based on a formal assessment of harm rather than on prejudice and assumptions might help society to engage in a more rational debate about the relative risks and harms of drugs."[28] A more recent ranking by Nutt et al resulted in alcohol being ranked overall most harmful, followed in order by heroin, crack cocaine, methamphetamine, cocaine, tobacco, amphetamine, cannabis, etc. The authors concluded "that present drug classification systems have little relation to the evidence of harm"[30].

From a societal standpoint simplistic criteria have long been used to separate classes of substance use. For example, non-medical use of cannabis, heroin, depressants, stimulants, psychedelics and anxiolytics is considered by some to be bad, immoral and harmful to societal norms. There are acceptable and non-acceptable uses of alcohol, and almost all use of tobacco is now considered "bad" (except traditional indigenous use), although tobacco remains a legally regulated substance.

But perhaps the most simplistic categorisation of psychoactive substances is the historic divide between "legal" and "illegal" substances. Much has been written around the development of this categorization in the early 20th century, and it is now clear that misinformation, lack of science, racism and prejudice set the parameters for this early dichotomy.[31] Scientific evidence and inclusion of the principles of public health and human rights were rarely part of this process.

CHAPTER 3

Why are the Associated Harms an Important Public Health Issue?

Substance associated harms account for substantial health and social impacts on individuals, families, communities and society at large. The public health impacts of substances were recently estimated by Rehm et al[1] for 2002 as follows:

- Substances accounted for 21.0 % of all Canadian deaths in 2002. Tobacco accounted for 16.6% of all deaths, alcohol 3.6%, and illegal drugs 0.8%.
- "Potential years of life lost" (PYLL – death before age 70 years) measures premature mortality, and substances accounted for 24.9% of all PYLL in 2002. Tobacco accounted for 16.7% of all PYLL, alcohol 6.2%, and illegal drugs 2.0%.
- "Acute care hospital days" is a measure of morbidity and demand on the health care system, and substances accounted for 19.4% of all hospital days in 2002. Tobacco accounted for 10.3% of all hospital days, alcohol 7.4%, and illegal drugs 1.6%.

Note that due to lack of data the population level adverse impacts of prescription psychoactive substances could not be measured, but if measureable, it is anticipated that these would also account for substantial harms.

The substantial public health burden is because substances as well as implementation of some of the policies to respond to them contribute to the occurrence of many different diseases, disabilities and deaths; and for some specific categories of diseases and deaths a substantial fraction are directly related to psychoactive substances:[1]

- Tobacco contributes to many cancers, cardiovascular disease, respiratory disease, perinatal health problems, and unintentional injuries i.e. fires.
- Alcohol contributes to the burden of death and diseases from cancer, diabetes, neuro-psychiatric conditions, cardiovascular disease, digestive diseases, skin diseases, perinatal health problems, unintentional and intentional injuries and poisonings.
- Illegal substances are related to death and diseases from mental and behavioural disorders, infectious diseases, perinatal health problems, unintentional and intentional injuries and poisonings (overdoses or contaminants).

3

Substance use is widespread in Canadian society. In a 2004 survey of people aged 15 and over, 79% reported drinking alcohol the previous year (BC 79%), 14% using cannabis (BC 17%), and 3% using other illegal substances (BC 4%).[32] The 2008 tobacco smoking rate of people aged 15 and over was 18% (BC 15%).[33]

An emerging concern is the non-medical use of opioids and increasing opioid related deaths and other problems in Canada that have been documented by Fischer et al[34], Dhalla et al[35], and in the US by Compton and Volkow[36].

When translated to costs, Rehm et al[1] estimated a total cost attributable to substances of $39.8 billion in 2002. Tobacco comprised 42.7% of the costs, alcohol 36.6%, and illegal substances 20.7%. These estimates were based on direct costs of $15.5 billion (health care, enforcement, research, prevention, fire damage, vehicle collision, employee assistance programs, employee drug testing) and indirect costs of $24.3 billion (lost productivity in the workplace or at home). These are conservative estimates as they exclude costs related to private expenses, welfare benefits, pain and suffering, lost productivity of people in prison convicted of substance related crime, and costs from harms associated with prescription psychoactive substances.

When looked at from a prevention perspective only $148[1] million is dedicated to prevention and research, while $5.4[1] billion are classified as "law enforcement costs"* a ratio of 36:1. While a main purpose of enforcement is supposed to be prevention by deterrence, and it can be a useful preventive tool when used appropriately, this raises serious questions about whether such an allocation is the most fiscally responsible approach to achieving the best results for the tax dollars expended, or whether greater investments in public health oriented approaches to substances would yield better individual and societal returns.

The magnitude and urgency to address substances issues was identified in *Reducing Crime and Improving Criminal Justice in British Columbia: Recommendations for Change*[37], a report to the BC Progress Board in 2006 which, without endorsing any particular strategy, suggested three options for dealing with these issues:

1. Legalize the trade, limiting products to adults, and treating addictions as health rather than criminal justice issues,
2. Ramp up enforcement substantially,
3. Ramp up enforcement followed by decriminalization plus comprehensive public education to reduce demand.

Notably, two of the three options include regulatory reform. In addition the authors recommended addressing the collateral effects of the drug trade and strengthening services to address childhood development issues.

Based on the above measures of the harms associated with substances and the unintended consequences of some of the current substance control policies discussed later it is evident that there is a pressing need to better address substances management and control at the societal level. A public health approach holds much promise to address this need.

* Police = $3.33 billion; courts = $0.84 billion, corrections = $1.23 billion[1]

Chapter 4

Determinants of Harms and Benefits

The harms and benefits of substances in society are driven by complex interactions among supply, demand, availability, accessibility, context, social norms and the laws that govern many of these activities. The interaction of these factors leads to consumption and use patterns which result in harms and benefits, some of which may be mitigated or aggravated by the health, social and criminal justice services brought to bear on these issues. The connections between these elements are shown in Figure 3 (next page) and detailed descriptions of these elements are found in Appendix 2.

It is particularly important to note that many of the drivers of demand are outside the control of the formal health care system (e.g. promotion of products, inadequate housing, poverty and inequity, harsh working conditions, lack of social connectedness, adverse early childhood development and traumatic childhood experiences, mental or physical distress, peer influence, and dependency).[38, 15]

Implementation of measures for each of these factors can also have consequences which may be harmful (as discussed below in relation to the harms of prohibition) or beneficial (as in reducing population consumption rates). In particular the use of law in the form of statutes (Acts) and their subordinate regulations in creating problems or preventing problems cannot be underestimated. The law is both a response to circumstances of the day and the past, and a driver of future approaches.

Because of the universal application of law and potential for widespread unintended consequences, statutes and regulations and their implementation must be under constant scrutiny to evaluate their consequences.

The law, as manifested by statutes, regulations, and court judgements is an important determinant and is the main focus of this paper. Throughout history societies have developed a spectrum of regulatory approaches to manage substances, generally from least restrictive to most restrictive with a purported attempt to mitigate potential harms. Current regulatory approaches to managing substances include:

- Free market commercialization (e.g. tobacco, caffeine and alcohol) with and without varying licensing regimes.
- Over and behind the counter access through pharmacies (e.g. codeine based pain and cough medications).
- Prescription by a physician (e.g. sleeping pills, methadone and pain medications).
- Prohibition, where it is a criminal offence to possess and sell substances, except in some very limited circumstances (e.g. cannabis, cocaine, LSD and heroin).
- Varying combinations of civil and criminal based regulation (see later discussion).

4

| Determinants of Harms and Benefits |

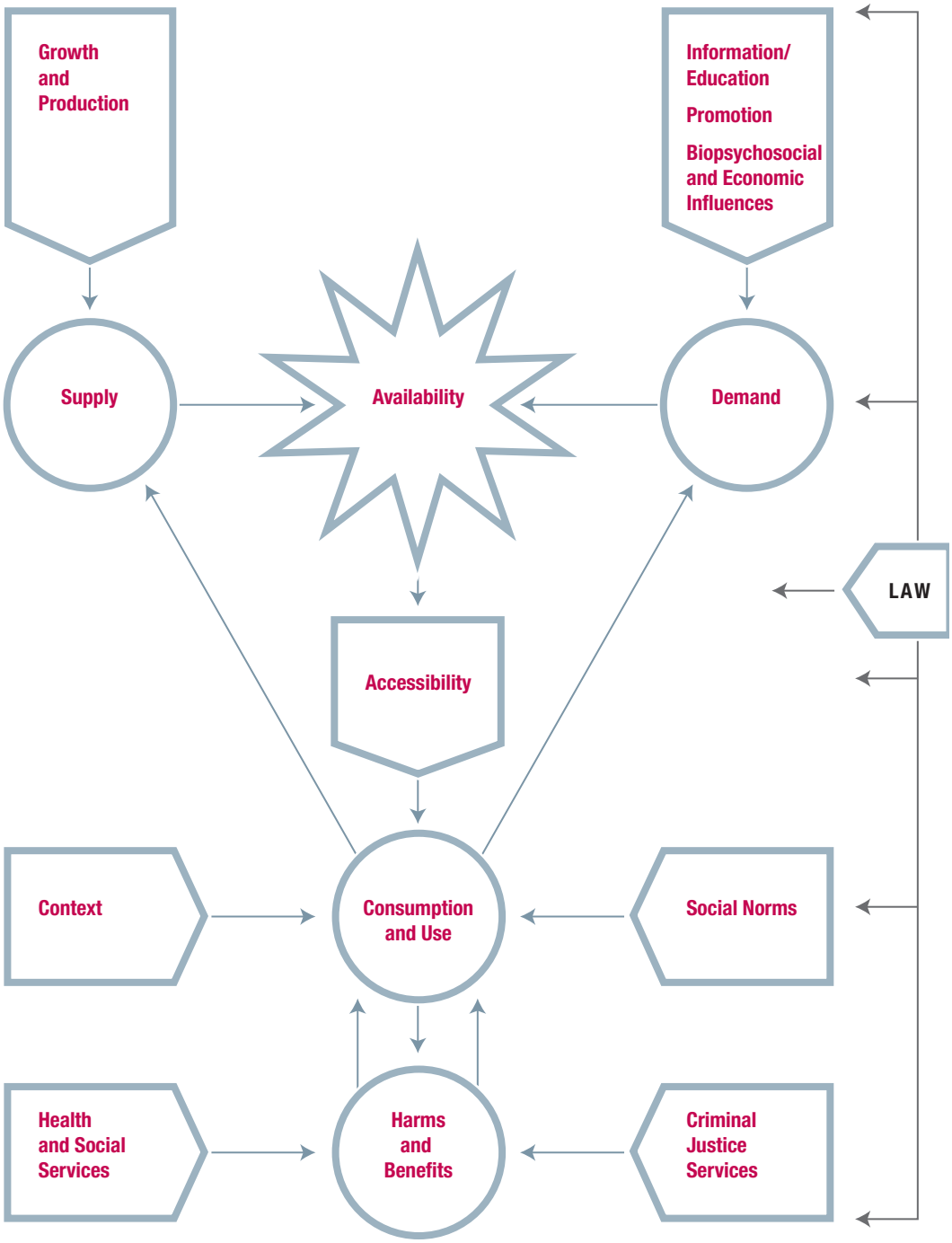


Figure 3: Determinants of Harms and Benefits of Substances

4

It is important to distinguish direct harms from consuming substances (e.g. acute toxic or chronic pharmacologic effects) from the indirect harms of policies that seek to manage substances (e.g. individual and societal costs of incarceration, adulterated products, sharing needles).

It is being increasingly recognized that the policy of indiscriminate prohibition has failed to achieve its intended goals and results in many negative unintended consequences, including:[39, 40, 41, 19, 42, 43]

- accelerating the spread of infectious diseases such as HIV and hepatitis;
- hospitalizations and overdose deaths from concentrated and contaminated products;
- violent injuries and deaths of users, dealers, and police;
- creation and aggravation of health and social problems due to criminalization, stigmatizing, and discrimination;
- the use of detention centres in which people who may have used illegal substances are arbitrarily incarcerated, physically abused, and forced to labour; [135]
- further marginalizing people with difficult health, psychological, and social problems;
- damaged houses and community disruption; and
- fuelling the existence of an illegal market, organized crime, and gangs that produces crime, violence, and corruption.

See Appendix 3 for more details on the harmful effects and failure of prohibition.

Most recently the XVIII International AIDS Conference (AIDS 2010) held in Vienna, Austria produced the Vienna Declaration, an official statement seeking to improve community health and safety by calling for the incorporation of scientific evidence into illegal drug policies. The declaration in part stated "The criminalisation of illicit drug users is fuelling the HIV epidemic and has resulted in overwhelmingly negative health and social consequences. A full policy reorientation is needed ... Basing drug policies on scientific evidence will not eliminate drug use or the problems stemming from drug injecting. However, reorienting drug policies towards evidence-based approaches that respect, protect and fulfil human rights has the potential to reduce harms deriving from current policies and would allow for the redirection of the vast financial resources towards where they are needed most: implementing and evaluating evidence-based prevention, regulatory, treatment and harm reduction interventions." (see **viennadeclaration.com** for full text of the Declaration)

As of November, 2011, the Vienna Declaration had received over 20,000 endorsements.[3]

4

Prohibition also results in economic distortions and harms from costs due to lost opportunities. In 2001, the federal auditor general of Canada estimated that the size of the Canadian illegal drug market was $7-$18 billion per year, and $450-$750 billion per year globally.[44] A report to the American Congress in 2008 estimated the size of the global illegal market at between $100 billion and a trillion dollars .[45] These funds are outside the control of governments, are supporting organized crime groups and are a strong incentive for new recruits. In British Columbia, a major source of revenue for local gangs is derived from cannabis, much of which is exported to the US. In 2000, this local market was estimated to be worth approximately C$7 billion.[46] In contrast, the province's forestry and fisheries industries together generated slightly less than $3 billion that same year.[47]

"Cannabis, the criminal organizations that control part of the production and distribution chain aside, neither leads to crime nor compromises safety. Even its social and health costs are relatively small compared to those of alcohol and tobacco. In fact, more than for any other illegal drug, we can safely state that its criminalization is the principal source of social and economic costs."

Senator Pierre Claude Nolin et al[48]

Due to the unregulated nature of this market a portion of this money is not available to government through taxation or revenue. If available these funds could support better control measures and provide improved support for problematic substance use through prevention, treatment, and addressing the negative social determinants of health (e.g. lack of housing, poor access to nutrition, unemployment, early childhood development).

In the British Columbia context, since the vast majority of the province's illegal drug market is based in the cannabis trade (estimated to be worth approximately C$7 billion[46]) its regulation may present an opportunity to explore alternative approaches to reducing drug supply to vulnerable groups (e.g. youth) while removing a key revenue stream for local gangs.

There is also growing public and professional support for change from the prohibition paradigm, as exemplified by many supporting editorials in newspapers and public opinion polls, recent national reviews such as that done by the New Zealand Law Commission[4] which concluded of their *Misuse of Drugs Act* needs a major overhaul to reflect more of a health rather than criminal perspective, and the urgent call by the recently established Global Commission on Drug Policy for "fundamental reforms in national and global drug control policies"[5]. Details of these calls for change are in Appendix 4.

Chapter 5

What is a "Public Health Approach" to Regulation of Psychoactive Substances?

A public health approach to an issue is an organized multi-level systems effort focusing on **health promotion** and **prevention** of disease, injury, disability, inequity and premature mortality. It also incorporates individual and societal **health protection** measures through protecting and promoting physical environments and social policy frameworks that maximize individual and community benefits and minimize harms. Underlying public health interventions are **population health assessment** and **surveillance** activities that generate the information needed to guide public health actions and evaluate interventions. A public health approach operates within a framework of guiding principles, broad goals, and specific objectives and strategies.

A public health approach is based on the principles of social justice, human rights and equality. It seeks to understand the underlying determinants of health, from a population perspective. Public health policies, programs and practice are based on sound, scientifically-generated evidence. One of the key foundational elements of public health science is epidemiology, the study of the distribution and determinants of disease and health.

A public health approach to psychoactive substances recognizes that people use substances for anticipated beneficial effects and is attentive to the potential harms of the substances as well as the unintended effects of control policies. A public health approach seeks to ensure that harms associated with control interventions are not out of proportion to the benefit to harm ratios of the substances themselves.

5

In "The Paradox of Prohibition"[6] Marks' describes how supply, demand, and harms from psychoactive drugs would be minimized at a mid-point between the extremes of "legalization" and "prohibition" approaches, at the "bottom" of a quadratic (U-shaped) curve; and that health and social problems associated could be reduced with movement away from either extreme. Alcohol control policy in North America has historically swung from one extreme (prohibition) to the other (legalize and promote). Paradoxically, supply, demand, and harms are highest with either unfettered "legalization" or full "prohibition". Figure 4 is an adaptation of Marks' concept.

The goal of the public health approach, which is to minimize harms, often puts public health in conflict with interest groups whose main activity occurs at either end of the U-shaped curve. For example, large multinational corporations involved in alcohol or tobacco manufacture and marketing oppose further controls of these substances, and those focused on enforcement usually oppose proposals that appear on the surface to loosen control on illegal substances (e.g. manifested as opposition to needle and syringe exchange, supervised injection sites or medical prescription of heroin). Operating at the centre of the U curve allows for the integration of public health, enforcement and corporate interests with the goal of protecting and improving the health of the public.

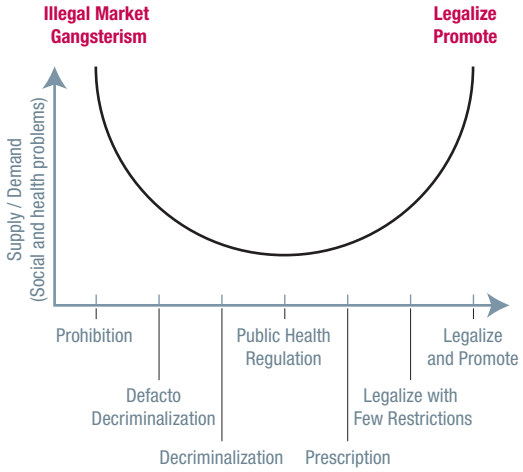


Figure 4: Adapted from Marks "The Paradox of Prohibition"[6]

Human rights considerations are fundamental to a public health approach. A description of how "promoting and protecting human rights is inextricably linked to promoting and protecting health" was described by Jonathan Mann in 1997.[49]

The Canadian Charter of Rights and Freedoms (1982)[7] and the Universal Declaration of Human Rights (1948), as well as a number of United Nations conventions* lay out the fundamental rights and freedoms which belong to all people, and are foundational to the discussion of substances regulation. Freedom from discrimination, arbitrary detentions and imprisonment, freedom of religion and thought, and the right to life, liberty and security of the person are established human rights.

* International Covenant on Civil and Political Rights
International Covenant on Economic, Social and Cultural Rights
Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment
Convention on the Elimination of All Forms of Discrimination Against Women
International Convention on the Elimination of All Forms of Racial Discrimination
Convention on the Rights of the Child
International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families
International Convention for the Protection of All Persons from Enforced Disappearance (not yet in force)
International Convention on the Protection and Promotion of the Rights and Dignity of Persons with Disabilities (not yet in force)

5

Public health oriented regulation is supportive and consistent with Canadians human rights as established by the preeminence of the Canadian Charter of Rights and Freedoms[7] i.e. the "right to life, liberty and security of the person and the right not to be deprived thereof except in accordance with the principles of fundamental justice." (section 7), "subject only to such reasonable limits prescribed by law as can be demonstrably justified in a free and democratic society" (section 1).

"Whether the next decade will see a further increase in alcohol consumption, high-risk drinking, and damage from alcohol will depend largely on whether the public health community and those responsible for alcohol control step into a leadership role, draw attention to this issue and take steps needed to reduce the health and safety burden in Canadian communities. Are they up to the task?

N. Giesbrecht, T. Stockwell, P. Kendall, and R. Strang[52]

When human rights and freedoms are honoured, the perspectives of the individuals who use and are affected by substances will be included in the development of new policies. For a detailed discussion of this issue see "Recalibrating the Regime: The Need for a Human Rights-Based Approach to International Drug Policy".[42]

Public health oriented approaches to regulating food and pharmaceuticals have been a legitimate function of government for decades. As well there is much to be learned from the experience with attempting to regulate tobacco and alcohol from a public health perspective and some of the lessons learned are described in Appendix 5.

A number of countries have implemented public health oriented regulatory approaches to illegal substances, and lessons learned from them are found in Appendix 6.

The experience in Portugal is particularly notable as in 2001 they were the first country to decriminalize all drug use, and introduced a more public health oriented approach.[50] The Portuguese realized that the problems associated with substances were significant and that "the principal obstacles to effective government policies to manage the problems were the treatment barriers and resource drain imposed by the criminalization regime".[51] The fears of opponents that decriminalization would result in increased health and social problems did not materialize. A recent peer reviewed study concluded that decriminalization in Portugal did not lead to major increases in drug use and that the evidence indicates reductions in problematic use, drug related harms, and criminal justice overcrowding .[8] In a report by the Cato Institute it was noted that "drug related pathologies – such as sexually transmitted diseases and deaths due to drug usage have decreased dramatically".[51] For example HIV notification among drug users declined from 1400/year to 400/year between 2000 and 2006, while in non-drug users there was hardly any effect – from 1250/year to 1150 per year. For the same period drug-related deaths declined from close to 400 to 290.

In summary, the lessons learned from regulation of alcohol and tobacco and other countries experiences with illegal substances is that public health oriented regulation holds much promise for reducing the harms associated with all substances, while at the same time minimizing the harms that result from non-public health oriented regulation.

CHAPTER 6

A Public Health Oriented Framework for Regulation

A New Perspective Based on Evidence and Experience

Based on evidence, experience, and lessons learned from regulation of alcohol and tobacco and from regulating illegal substances in other countries a public health oriented approach for regulating substances can be constructed, rather than maintaining current commercialization and/or criminalization oriented approaches. This section proposes ideas for moving to an evidence-informed public health approach for regulation of all psychoactive substances.

A solid foundation and programmatic approach based on the best available evidence is needed to reorient the current system, which should include clearly articulated assumptions and principles, a vision, goals, and objectives. A transparent expression of these concepts allows for a clear understanding of the policy foundations. The following are proposals for these foundational elements.

Assumptions

- Psychoactive substance consumption and use for both medical and non-medical purposes has occurred since near the beginning of human history and is predicted to continue to be a common feature of human behaviour into the future.
- New substances or variations on existing substances will continue to be discovered and produced, and the consequences of their availability will need to be effectively managed.
- Substantial, positive differences can be made with evidenced-based, coordinated, multi-sectoral, public health oriented strategies.

6

Principles for Policies, Laws and Strategies

Principles form a set of statements that reflect basic beliefs about an issue and those aspects and approaches that are valued. Differences in beliefs and values can give rise to much debate, rhetoric and opposition.

"Any move forward has to face these political issues and develop its own framing in terms of such ideals and principles as human rights and liberties, proportionality, and minimization of harm." Room et al[19]

The Special Senate Committee on Illegal Drugs suggested a number of important general guiding principles:[48]

- "… only offences involving significant direct danger to others should be matters of criminal law."
- "Not all use is abuse"
- "… in a free and democratic society, which recognizes fundamentally but not exclusively the rule of law as the source of normative rules and in which government must promote autonomy insofar as possible and therefore make only sparing use of the instruments of constraint, public policy on psychoactive substances must be structured around guiding principles respecting life, health, security and rights and freedoms of individuals, who, naturally and legitimately seek their own well-being and development and can recognize the presence, difference and equivalence of others."
- "This approach is neither one of total abdication nor an indication of abandonment but rather a vision of the role of the State and criminal law as developing and promoting but not controlling human action, and as stipulating only necessary prohibitions relating to the fundamental principle of respect for life, other persons, and harmonious community, and as supporting and assisting others, not judging and condemning difference."

"For every complex problem there is an answer that is clear, simple, and wrong."

H. L. Mencken

Recently the International Drug Policy Consortium proposed the following high-level principles for an effective drug policy:[53]

1. Drug policies should be developed through a structured and objective assessment of priorities and evidence.
2. All activities should be undertaken in full compliance with international human rights law.
3. Drug policies should focus on reducing the harmful consequences rather than the scale of drug use and markets.
4. Policy and activities should seek to promote the social inclusion of marginalised groups.
5. Governments should build open and constructive relationships with civil society in the discussion and delivery of their strategies.

It will be important to ensure, from an evidence basis, that individuals are well informed about the risks and benefits of substances; and that society is well informed about the societal (population) level of risk of harms and benefits. Adherence to this principle of "informed consent" will ensure the ethical, legal, health care, and human rights imperatives of being well informed are being met; and that liability risk related to production, distribution and retailing are minimized. Maximizing informed consent will drive harm minimization while respecting individual autonomy and allowing for benefit realization.

6

Complementing the informed consent principle is the need to ensure that the principle of consumer protection guides decision making. It is recognized that in addition to relying on individual decision making about risk and benefits, consumer protective mechanisms such as product quality control, safety packaging, ingredient labelling, product cautions, and restrictions on making false claims are important.

"Scientific evidence alone is not sufficient to stem the rising worldwide tide of drug problems, but it could be a powerful ally of leaders who have the courage, creativity, and conviction to create more effective drug policy."

Babor et al[16]

Based on the preceding the following principles are proposed as foundations for policies, laws and strategies for managing psychoactive substances:

- Promotion and protection of life, health, security, and human rights and freedoms, attention to the determinants of health, and avoidance of unintended consequences.
- Empowerment through evidenced based information, education, and support for self determination.
- Informed consent about harms and benefits.
- Protection of consumers against false claims and unsafe products.
- Respect for individual autonomy in making decisions that affect ones body.
- Individuals need to be held responsible and accountable for actions that harm others.
- Consideration and respect for spiritual, traditional and therapeutic use of substances.
- Criminal sanctions limited to harm to others (i.e. crimes of force, bodily harm, fraud and public safety).
- Compassion for people directly or indirectly adversely affected by substances.
- Non-stigmatization and non-discrimination of consumers and providers.
- Evidence, incremental implementation and rigorous evaluation; not ideology. In speaking about a Presidential Memorandum to develop a strategy for restoring scientific integrity to government decision making, Barak Obama said "To ensure that in this new Administration, we base our public policies on the soundest science; that we appoint scientific advisors based on their credentials and experience, not their politics or ideology; and that we are open and honest with the American people about the science behind our decisions."[54]
- Regulation intensity based on the potential population level harm/benefit ratio.
- Where substances are available, those variations that pose the least harm should be the most accessible. For example anywhere that dirty sources of such substances (e.g., cigarettes or other devices involving burning organic materials) or highly addictive sources (e.g., cigarettes , nicotine inhalers, other stimulants) are sold, there must also be sold or encouraged cleaner, less harmful and less addicting sources of such substances (e.g., nicotine patch, oral products such as nicotine gum, cannabis vaporizers, coca leaves).
- Easy and readily available access to help for people who do experience problems with substances.

Process Principles for Making Policies, Laws and Strategies

The processes to develop policies, laws and strategies for psychoactive substances should be based on:

- Rational and respectful discussion.
- Consensus building.
- Inclusivity - Involvement of people who are actively growing, producing, distributing, and retailing substances and those directly affected by substances, civil society, and the general public.
- Gaining support of communities and their leadership.
- Access to information and transparency.
- Where evidence is lacking, encouraging pilot research projects with careful evaluation.
- Where policies and strategies are made without supporting evidence, this will be made explicit, and evaluation and research will be initiated.
- Attention needs to be paid to potential and actual negative unintended consequences, and decision makers need to be prepared to change course based on awareness of such consequences.

The resulting policies and regulations that flow from these assumptions and principles should be:

- Clear, comprehensive, coherent and connected.
- Feasible, practical, and affordable.
- Easy to understand, straightforward to implement, and encouraging of compliance.
- Supportive of improving the determinants of health.

Critical factors for achieving success include:[19]

- Strong political commitment for comprehensive multisectoral measures and coordinated responses.
- International cooperation.
- Protection of policies from being co-opted by commercial and other vested economic interests.

Vision

- All people live in free and democratic societies that deal with psychoactive substances in a mature, compassionate and open manner. This includes using the law as an important source of rules for behaviour, while also promoting autonomy and individual responsibility, and therefore making only sparing use of the laws of criminalization.
- Consumption and use is not promoted and is appropriately discouraged.
- People are supported to seek their own well-being and development and recognize the presence, difference and equivalence of others.
- Individuals, families, and communities with problems associated with substances are readily able to find accessible, appropriate, effective and non-discriminatory services.

Overarching Goal

Minimization of the harms associated with psychoactive substances resulting from consumption, use, policies, laws, and programs; and a realization of the benefits; for individuals, families, communities, and society.

Goals and Objectives by Sector

See Appendix 7 for sample goals and objectives by sector.

6

Proposed Policies and Regulations

The following ideas are proposed for discussion purposes to demonstrate what, in general, a new regulatory system could look like. The actual regulations will depend very much on the substance to be regulated, the evidence base that exists for the suggested actions, and not all of these concepts will apply to all substances.* More detailed policy analysis for specific substances is needed before decisions can be made on what exactly should be implemented.**

As discussed previously, the approach to developing public health oriented regulations can be organized according to the determinants model outlined in Figure 3 on pg 17.

All models are wrong, but some are useful.

George E. P. Box

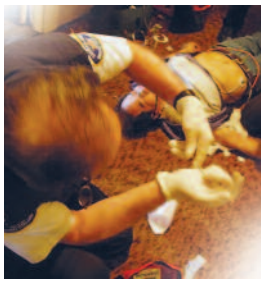
To maximize control of availability and accessibility and reduce demand all steps in the supply chain (production, wholesale, distribution, and retail) as well as demand associated activities such as information and promotion should be under comprehensive public health oriented government control.

This is in contrast to the current situation where most of these activities are regulated from a revenue generation and profit-motivated orientation such as for tobacco and alcohol, and controlled by organized crime to maximize revenue for illegal substances.

In order to develop regulations for substances a number of questions will need to be answered, such as those relating to:

- Production and possession for personal consumption and use.
- Availability and accessibility - who is allowed to distribute, sell, and purchase, how this is organized, and quantities of purchase allowed.
- Regulation of distribution of substances – the production or manufacturing, importing/exporting, wholesaling and retailing.
- Context of consumption and use.
- Product quality, form and concentration.
- Product promotion, packaging and presentation.
- Information about risks and safer use.
- Public use and impairment.

See Appendix 8 for more specific regulation related questions.



Because of the centrality of availability and accessibility in mediating between the supply and demand variables and the consumer, these will be discussed first.

Availability Control of Substances

Governance, Business Model, Wholesale, Distribution, and Revenue

Availability is controlled by the governance and business model chosen so the decision about which model to use is critical. From a public health perspective the governance and business model should be based on public interest rather than private interest. That is, the model would be one in which public health and safety rather than revenue generation and profit making are the main focus, and accountability for outcomes would be to the public through government rather than to shareholders. Examples of these types of models for tobacco are described in detail by Borland[55] and Callard, Thompson and Collishaw[56].

* Exceptions to the policies and regulations would be allowed for ceremonial and other cultural uses of substances such as tobacco, peyote, coca and ayahuasca as used by indigenous cultures because the rules governing cultural use are largely determined by the social norms of the culture.

** Exceptions or special considerations for regulations will need to be made for substances that are used for therapeutic purposes within the medical care or complementary care context e.g. opioids, cannabis, amphetamines

There are a variety of governance and business models that could be selected e.g. state-run monopolies with varying allowance for private enterprise; government licensing of producers and retailers with requirements for meeting public health objectives; community based non-profit production and distribution. Ensuring that the model supports the goal of minimizing harms while allowing for realization of benefits, and avoiding unintended consequences will be fundamental to guiding the decision about which model to choose.

Choice of the model will depend on existing production and distribution activities, the impact that a new model will have on those activities and the people and communities affected, and the expected health, social, and economic outcomes of the new model. Involvement of people actively involved in the production, distribution, retail, and consumption of the substance under consideration will be critical to ensuring acceptability and success of a new model.

Public interest models for substances already exist in varying forms for alcohol, and Babor et al[16] have summarized the evidence supporting the value of state-run alcohol monopoly-type models in moderating alcohol consumption and alcohol-related harms. They have also raised concerns about increased harms from the changing focus of these monopolies to increasing volume sales. The National Alcohol Strategy has recommended that to reduce harm the provincial and territorial monopoly systems of control over alcohol should be maintained.[57] Recent publications by Stockwell et al have documented the effects of moving from a government monopoly-type model to partial privatization of alcohol in BC, including increased consumption[58] and increased harms as indicated by increased mortality[59].

Ideas for details of a monopoly-type business and governance model similar to that which was developed for alcohol following repeal of alcohol prohibition, and that continues in many places today, are found in Appendix 9.

Retailing– Purchase to Take Away and On-site Consumption

Licensed retailers will be the critical interface with the consumer to provide substances at a price that does not promote consumption, is an effective competition for the illegal market, and allows for a reasonable return for the retailer. Unlicensed sales and sales to minors would be subject to significant penalties.

Retailers could be required to complete appropriate training about the substances that they are selling so that they can advise about substance use, potential harms, alternatives, and support services for problematic use.

To assist with reducing criminality, existing growers, producers, distributors and retailers operating outside the law could be engaged in the creation of the regulated market.

Retail shops for take away could be licensed to sell substances as well as being subject to business licensing by local government. These shops would be open to unannounced inspections at any time, and would have to maintain security measures to deter theft.

Consumption retail sites may or may not exist, depending on the substance and the potential health effects to workers who would staff the site.

Retailing could be limited to nondescript shops of limited size with a "non commercial" or "health/pharmacy" appearance. Standard signage will be designed to inform but not engage and will therefore be minimal and simply identify the outlet as a source of substances.

Alternatively restricting sales to behind the counter in pharmacies may be a viable option to stand alone shops for some substances. This would allow pharmacists who have knowledge about the effects and interactions of substances to counsel people, as well as to potentially offer alternatives such as smoking cessation products.

Requirements for retail sites could include:

- To reduce impulse buying purchases made by filling out a form to access behind the counter substances – there would be no self serve purchases.
- The form could include a declaration that the substance is only for use by the purchaser, their spouse, or child who has reached the legal age of purchase, unless the person is authorized by government to purchase for someone else.
- Limits on quantity of individual purchase.
- Prohibition of vending machines.
- Retailers trained and required to pass courses to be sources of objective information about the risks and benefits of the substances. Training would also be required in recognizing people experiencing problems related to their consumption patterns, and in promoting cessation products.
- Staff required to have training in management of people under the influence of a variety of substances as well as basic first aid to deal with potentially difficult situations e.g. someone under the influence of alcohol causing disruption in a retail location.
- Retailers required to ensure that objective, health-based prevention, harm reduction and dependency treatment information is prominently displayed.
- Retailers obliged to check identification of people appearing age 25 years or under, and prohibited from selling to people under age 19. Workers would have to be at least 25 years old to work in the outlet.
- For standalone shops, sales of merchandise unrelated to substances would not be allowed.
- Retailers required to develop good neighbour agreements, may be limited in terms of reasonable distance from schools and the density of outlets, and would have limited hours of operation. Local community authority to vary these standards within limits on a case by case basis could be included.
- Require reporting on volume and other information about of sales of substances.

Accessibility - Tools to Regulate Access to Purchase Substances

Age

As mentioned above, the age of purchase could be set at 19 years. Purchasers under the age of 25 could be required to produce identification, and retailers required to check identification of anyone who appears to be under 25.

Price, Taxation and Other Financial Controls

Price is an important public health measure that affects patterns of use, so price rules and taxation of products could be used to establish prices that reduce harms by inhibiting or altering patterns of consumption.

In addition, revenue targets would be set to ensure that enough revenue is generated to pay for the cost of operating the regulatory and control system and to compensate for the costs of harms.

Prescription

For some substances, or for concentrated versions of some substances, requiring a prescription by a health care provider could be an important method of controlling access, as well as enabling support for the person for dealing with other health related

issues through their relationship with the provider. In addition allowing/facilitating prescription can aid in reducing harms by ensuring that people with dependency or other medical conditions can obtain substances or substitution products i.e. prescription methadone, heroin in a safer and more controlled manner than by acquiring substances of unknown quality from unregulated street suppliers.

At the same time, recognition of the magnitude and variety of harms associated with prescription substances is growing. Careful, well informed prescribing is essential to limit harms associated with prescription psychoactive substances.

Demand Reduction

An important role for government is to address the biopsychosocial and economic determinants of demand such as self medication, escapism, experimentation, improving performance, coping with physical and psychological distress from trauma, poverty, housing, etc.

Information and Educational Requirements about Substances

Labelling which describes active ingredient concentrations, strain differences if relevant, and potential harms of the products would be required.

Retailers would be required to ensure that objective health-based prevention, harm reduction and dependency treatment information is prominently displayed.

School districts would be encouraged and supported to provide evidenced-based, objective, age appropriate education grounded in public health principles and delivered by trained, competent instructors. Mandating requirements for student education would need consideration.

Product Promotion of Substances

One of the most important lessons learned from the commercialization of tobacco and alcohol is that product promotion is a significant driver of consumption and consequent increases in population harms. Therefore all promotion of substances will be prohibited.

Promotion comes in many forms and includes advertising, branding/naming, sponsorship, gifting, product association with film, leading personality recruitment, associating use with attractive activities such as sporting, socialization, sex, and vacations; pricing reductions (i.e. loss leaders); labelling suggestive of pleasure, enhanced performance, over stated benefits; creating similar products for children (i.e. chocolate cigarettes) or youth attractive products (e.g. alcopops, flavoured cigarettes and cigars); and other information presentations suggestive of performance enhancement.

Branding of substances products is critical to promotion, and once branding is allowed promotion is very difficult to prevent. Therefore, to prevent branding from occurring, substances should only be available in generic packaging.

Supply Control

Growth and/or Production

Adults would not be prohibited from growing, producing or possessing substances for their own personal consumption up to specified limits. The role of the state regarding personal possession is to prevent unlicensed individuals from distributing substances to others and from profiting by sales of personally grown or produced substances outside of the regulated market.

Unlicensed sale of home grown/produced substances, or product obtained illegally would be subject to significant penalties.

Personal processing to create more concentrated products that would be hazardous would generally be prohibited (as is home-based distilling for alcohol).

Growth and production for sale would require a license, and quota systems could be in place to prevent over production.

Growing standards about fertilizers, pesticides, etc., and manufacturing standards regarding use of any chemical would be specified.

Growers/producers/packagers could only be permitted to sell substances to government regulated or operated wholesalers. Direct sale to consumers could be prohibited.

Reporting on production quantities and other information could be required.

Standard quantities per consumer package could be established, concentration limits, and standards of active ingredients and contaminants set.

Packaging could be done only in government-licensed facilities according to set standards.

The system could provide incentives for substances producers to develop, and consumers to use, less harmful products.

Purchase, Consumption, and Use

Youth under the age of 19 could be prohibited from purchasing substances and could be subject to age appropriate penalties if offending. People under the age of 25 could have to provide identification for purchase.

Consumption of substances in indoor and outdoor public places could be prohibited.

Behaviour that is potentially harmful to others (e.g. impaired driving or operation of other machinery, smoking in public enclosed spaces or vehicles) would be subject to appropriate and significant sanctions, recognizing the consequences of the harms, individual circumstances, and the need to balance deterrence, punishment, and rehabilitation.

CHAPTER 7

Other Considerations

Health and Social Services

In spite of the best regulations, programs and services there will still be health and social problems associated with substances. Unfortunately a "no harm" situation is unachievable, and perhaps undesirable, as it would also equate to a no benefit situation.

Comprehensive, adequately resourced programs tailored to specific categories of psychoactive substances are needed. These include researching and monitoring psychoactive substance use and harms, health promotion, education, prevention, protection, harm reduction, discrimination reduction, screening, diagnosis, brief intervention, withdrawal management, treatment, rehabilitation and recovery. Access to behaviour related, supportive, and social services e.g. spiritual, financial, interpersonal, and ensuring adequate resources for daily living such as housing and food and, if indicated, pharmaceutical and/or natural agents under appropriate supervision, will be important for patients that have problems with their personal management of substances.

As Babor et al[16] points out "Another important conclusion is that many drug-related problems about which policy makers worry are caused by a relatively small group of individuals who use drugs heavily." They then point out that there are evidence based programs and services that "can have a significant impact on population-level drug problem indicators precisely because they are accessed primarily by those individuals who use drugs most heavily and with the most severe consequences. We would emphasize also that the scientific evidence strongly supports the proposition that such services benefit both the drug user and the broader society."

Crucial for the medical and pharmaceutical professions will be ensuring that they are not contributing to problems by having in place adequate information and supports for appropriate prescribing of psychoactive pharmaceuticals.

In addition, enforcement programs are essential to ensure compliance with the regulations, and to deal with behaviours that are damaging to others.

Enforcement and Penalties

Enforcement personnel will be needed to closely monitor and to ensure compliance with the regulations. It is predictable that while organized crime will be greatly diminished it will not be eliminated. Compliance officials such as inspectors and police, and an adequate compliance bureaucracy will be needed to monitor production, distribution, and sales, intervene with people selling or consuming products in a manner that puts others at risk, and to deal with behaviours that are damaging to others. Penalties should be commensurate with the harms of the transgressions and will be based on research that relates penalties to their intended effect on deterrence.

Accountability and Evaluation

The positive and negative effects on individuals, families, communities and society as a whole will need to be carefully monitored. Adequate investments in dedicated resources for this activity will be essential to provide the information needed to guide such important changes.

Evaluation will be required to answer questions regarding regulation and best practices implementation and effectiveness or harms of the new regulations on health, crime, social, economic, safety and environmental indicators. These evaluation reports will be available to the public and will therefore provide accountability. Original research will also need to be sponsored to address questions that necessitate the rigors of academic scrutiny.

In moving towards different means of regulation, unintended consequences must be anticipated. For example Room et al[19] note:

"It is clear that removing penalties for use and possession from the criminal law, and reducing them to a minimum, can have beneficial effects in reducing the adverse effects of criminal penalties on the user and those close to the user. But there is also a clear warning in the evaluation studies that, if such measures retain penalties for use and make it easier for police to enforce them, the result can be 'net-widening', that is, an increasing number of persons, particularly the more disadvantaged, become caught up in legal enforcement systems.

As we have noted, the evidence from these evaluation studies is that removing or reducing penalties for use or possession appears to have little effect on rates of use. Reducing use and possession penalties to a minimum, without creating a situation which encourages enthusiastic police enforcement of the reduced penalties, thus seems a minimum step forward towards more rational cannabis policies."

Transition and Reparations

The question of how to transition from the current approach while minimizing negative impacts will need to be addressed. Some communities are somewhat to very dependent on revenues related to trade in substances. Some people will lose sources of income, whether illegal or legitimate, which could also be considered harm.

"Drug policies must be pragmatic. They must be assessed on their actual consequences, not on whether they send the right, the wrong, or mixed messages."

Desjarlais[60]

Reparations for those who have been harmed by implementation of the current prohibitionist drug laws will need to be addressed. Many thousands of people have criminal records which have affected their livelihood and freedom to travel, have been harmed by being incarcerated, or have contracted HIV or hepatitis through needle sharing. Releasing those currently incarcerated for drug possession and trafficking crimes which do not involve violence or who are not a threat to society, and erasing criminal records related to drug crimes will need to be considered. The criminal justice system and health care cost savings from public health oriented regulations are anticipated to be substantial and could be used to deal with the reparations issue.

Implications for Governments and their Roles

Clarity and appropriate role definition between levels of government is critical, as all levels - federal, aboriginal, provincial, territorial, and local - have important roles to play.

Local and aboriginal governments have a particularly important role as they are front and centre in addressing the challenges posed to their communities by substances. They often have innovative ideas and solutions as they are close to the action, are aware of community needs and concerns and have the flexibility to take action on local situations.

For example, the City of Vancouver has produced a number of important documents and undertaken many actions regarding substances related issues (see **vancouver.ca/fourpillars/comm_dpp.htm**).

Provincial and federal governments establish laws and policies that affect what happens in local communities, but are often distant when unintended consequences appear. Cookie cutter, one size fits all solutions from higher levels of government are sometimes more of a problem than a solution for local and aboriginal governments.

"The City advocates a regulatory regime based on the particular health and social harm related to each substance"

City of Vancouver [61]

The provincial government is primarily responsible for health, education, social services and the criminal justice system (except for federal correctional institutions and national policing). It could play a primary role in developing new public health oriented delivery and regulatory structures and processes for prohibited substances based on provincial experience in dealing with alcohol and tobacco. Cross government approaches will be essential because of the far reaching impact of substances on numerous government ministries.

Aboriginal governments are rapidly evolving and playing an increasingly important role in the governance landscape in Canada. The impacts of substances on their populations have been disproportionate, their abilities to influence substances availability and patterns of use should not be underestimated, and the need to include them in all discussions about substances regulation is essential.

The federal role will continue to be important in public health promotion, monitoring, evaluation, international reporting, governing imports and exports, aligning the criminal law with public health and human rights imperatives, and synthesizing provincial perspectives to represent Canada on the international stage. Key will be putting into place federal processes that enable management of currently prohibited substances by the provinces. For example an historical precedence was the change in the federal gambling control law which gave control of gambling to the provinces.[56] A similar example in the US is state level management of medical cannabis (currently in 16 states* and the District of Columbia[62]).

International agreements guided by the United Nations such as the international drug conventions, trade treaties, and human rights treaties are also relevant. More details on these and other issues related to governments are in Appendix 11.

In summary, local, aboriginal, and provincial regulation and innovation should be supported and encouraged. Federal regulation should be focussed on those issues for which federal regulation is necessary or clearly superior for the public interest. International considerations will be important to keep in mind with regards to new regulatory mechanisms.

* Alaska, Arizona, California, Colorado, Delaware, District of Columbia, Hawaii, Maine, Michigan, Montana, New Jersey, Nevada, New Mexico, Oregon, Rhode Island, Vermont, Washington

CHAPTER 8

Public Discussion

An inclusive but time limited public discussion on renewing the current approach to substances is needed. This discussion must be inclusive because substances directly or indirectly affect all citizens, and there is great diversity of views about what needs to be done. A well implemented public discourse should result in greater public support and a more solid basis for proposed changes.

Proposals for revision of substances policies towards the incorporation of public health oriented approaches have commonly resulted in strident opposition. While a healthy debate is needed, there must be greater recognition of the role that special interests (e.g. alcohol and tobacco industry, law enforcement bodies, pharmaceutical companies, the media, organized crime etc) will likely play in potentially opposing modernization in this area. This derives from the fact that many benefit from the existing approaches and will support continued prohibition and commercialization of tobacco and alcohol. See Appendix 12 for more details about potential opposition to change.

Public discussion must be both time limited as well as ongoing. It must be time limited because the only way to make progress is to implement action which is then subject to evaluation. Public discussion must also be ongoing because as changes and learning occur, the approaches will change. Rationale for changes should be documented so that there is a clear record of why changes have been made. The ability to alter the system through ongoing public discussion will allow for starting action, rather than getting held up on prolonged public debate about changes.

Substances users groups and existing growers, manufacturers, and retailers will play a vital and meaningful role in all stages of the development and roll out of new approaches. For illegal substances this important process would allow individuals and organizations to exit from the illegal market and become part of the regulated market in a similar way as happened when alcohol prohibition ended and illegal liquor production and distribution became part of the regulated market.[63]

The process for developing this system will be cyclical with incremental change. Discussion needs to be followed by careful planning, implementation followed by evaluation, which then results in changes for refining the system.

The net result would be a truly innovative approach to psychoactive substances control that could lead the world.

Chapter 9

Conclusions and Recommendations

Conclusions

The size of the adverse public health impacts of the harms associated with psychoactive substances calls out for coherent public health oriented regulatory strategies to better regulate tobacco and alcohol, control the increasing harms associated with prescription pharmaceuticals, and mitigate the ineffectiveness and harm generation associated with prohibition of currently illegal substances.

Recently there have been a number of well-researched books published on substances policy which have underscored the importance of a public health approach to dealing with the harms associated with substances by Stockwell et al[15], Babor et al[18] Rolles et al[17] Babor et al[16], and Room et al[19]. These books point out that there are policies available that could substantially reduce the harms associated with substances.

> *"Every truth passes through three stages. First, it is ridiculed. Second, it is violently opposed. Third, it is accepted as being self-evident."*
>
> Arthur Schopenhauer, German Philosopher,

Unfortunately this information is not being put into practice as well as it could: "It is clear that there is a great disparity between the broad evidence base for prevention programmes and policies and the patterns of investment usually displayed by government. The greatest expenditure is generally directed towards the deterrence or prevention strategies that have the least impressive evidence of effectiveness … In other cases, and a few have been identified, strong political leadership can overcome these impediments and bring public opinion with them with lasting benefits to public health, safety, and order." Stockwell et al[15].

The failure and harms associated with prohibition - as well as the growing momentum for moving some substances, particularly cannabis, out of a prohibition model - warrants implementation of proactive measures to design regulations, other policies, and programs to ensure that the harms from a free market approach to substances, as has been experienced with tobacco and alcohol, are not repeated. This is not an argument to maintain the status quo of prohibition - rather it is an argument to move proactively, deliberately and carefully to deal with all substances using modern tools that place the health of the public first.

The future of preventing many of the harms associated with substances is promising if coherent public health oriented regulations are developed, which includes laws, policies and programs based on scientific evidence, attention being paid to evaluation of intended and unintended consequences, inclusion of the people most affected, and preparedness to change course based on lessons learned from close monitoring and evaluation. Examples of some of the expected benefits of a public health oriented approach are in Appendix 13.

9

In addition, a public health oriented regulatory approach is supportive of Canadians human rights as established by the preeminence of the Charter of Rights and Freedoms[7] i.e. the "right to life, liberty and security of the person and the right not to be deprived thereof except in accordance with the principles of fundamental justice." (section 7), "subject only to such reasonable limits prescribed by law as can be demonstrably justified in a free and democratic society" (section 1).

Failure to regulate substances from a public health perspective will unfortunately perpetuate the preventable deaths, disease, crime and human suffering that characterize the current approach. Inaction or misdirected action will also leave individuals and the public vulnerable to additional harms from inadequately regulated psychoactive substances that are newly discovered or synthesized in the future.

Drug policy is a critical factor in issues ranging from crime to disease, mental health, civil liberties and international development. Surely it is time for a serious examination of drug policy, from top to bottom.

So let's have a commission of inquiry that can gather the best evidence from all over the world, analyze it properly, and draw conclusions without regard to political expediency.

Let the evidence decide. If the police and other supporters of the status quo are confident they are right, they should welcome an inquiry as a chance to silence the critics.

Demand wide terms of reference, a serious research budget, and a respected voice to lead it.

Dan Gardner[64]

Recommendations

1 That federal, aboriginal, provincial, territorial, and local governments use the proposed public health framework described in this paper (see pg 23-30) to review, evaluate and update their psychoactive substances related laws to ensure that their laws encompass a public health orientation to the regulation of psychoactive substances.

2 In view of the very substantial financial interests of those who profit from and promote the use of alcohol, tobacco, illegal and prescription drugs, governments should take leadership on issues related to the production, distribution, promotion and use of substances by establishing and supporting consortia comprised of non- government organizations, professional organizations, private interests, business, users, academics, researchers, and other partners to make recommendations for public health oriented psychoactive substances policies.

3 That a national commission of inquiry be established to recommend ways of increasing emphasis on public health oriented approaches to alcohol, tobacco, currently illegal, prescription, and other psychoactive substances; based on the growing body of evidence of what works and does not work for reducing harms associated with psychoactive substances.

The commission should involve the general public; federal, aboriginal, provincial, territorial, and local governments; non-government organizations; professional organizations; private interests; businesses; people who are actively growing, producing, distributing, retailing and using substances; academics; researchers; and other players to make recommendations for coherent and comprehensive public health oriented psychoactive substances related policies and programs.

Glossary

Clarity of language is critical to understanding concepts, and the language used in discussing substances and related issues presents particular language challenges (see also Perry and Reist D[24])

Another useful reference is the glossary by the Canadian Centre on Substance Abuse. **ccsa.ca/Eng/KnowledgeCentre/OurDatabases/Glossary/Pages/index.aspx**

Accessibility · Refers to the ease with which one may obtain a substance, and is a function of the availability and other control measures that limit or facilitate purchase such as price, age requirements, and social networks that may be a source.

Availability · Refers to the probability of being able to encounter or be exposed to the option of obtaining a substance. For example may be determined by numbers of outlets, restrictions on density of retail outlets or hours of operation.

Cannabis · "A generic term used to denote the several psychoactive preparations of the cannabis (hemp) plant, *Cannabis sativa*. They include cannabis leaf (in street jargon: grass, pot, dope, weed, or reefers), bhang, ganja, or hashish (derived from the resin of the flowering heads of the plant), and hashish oil."[65]

Commercialization · The process of marketing a substance in a manner that treats it primarily as a product for consumption. Restrictive measures on marketing activities may be included secondarily to the status of the product as a freely marketed commodity. Emphasis is on the profitable aspects.

Commoditization · The process of treating a substance as a simple commodity (product) that does not warrant special measures to protect health and safety. Some limited health and safety measures may be secondarily applied.

Consumption · Refers to the act of taking a substance into the body by ingestion, inhalation, injection, or absorption via mucous membranes or through the skin.

Criminalization · To make punishable under the Criminal Code and related statutes. "The process leading up to and including the finding of guilt for a criminal offence, as well as the consequences following the designation of a criminal label.[16] Is a method of state sponsored stigmatization.

Decriminalization · Prohibition with civil penalties, i.e. fines and administrative sanctions.[19]

Demand · The population's willingness to purchase substances at a given price[16] and is driven by a number of factors including:

1 Promotion of products (e.g. advertising).

2 Information and education about the harms and benefits of the substance.

3 Biopsychosocial and economic influences

Depenalization · Prohibition with cautioning or diversion.[19]

Dependence potential · "The propensity of a substance, as a consequence of its pharmacological ef-

fects on physiological or psychological functions, to give rise to dependence on that substance. Dependence potential is determined by those intrinsic pharmacologic properties that can be measured in animal and human drug testing procedures."[16]

Drug war · Conflict between organized traders of illegal drugs. Can be extremely violent and brutal, as demonstrated by recent incidents in Mexico between rival trading groups. See also "war on drugs".

Evidence-informed (evidence based) · "Means that decision making processes related to policy or practice having included a conscientious review and judicious integration of the best available research evidence, professional expertise, and practical wisdom. When the term "evidence-informed" or "evidence-based" is used, it should always be accompanied by a clear description of the nature of the evidence it speaks to."[24]

Human rights · Fundamental rights, especially those believed to belong to an individual and in whose exercise a government may not interfere, as the rights to speak, associate, work, etc.[66]

Ideology · "1. the body of doctrine, myth, belief, etc., that guides an individual, social movement, institution, class, or large group. 2. such a body of doctrine, myth, etc., with reference to some political and social plan, as that of fascism, along with the devices for putting it into operation."[66]

Illicit drugs · "Illicit" contains the moral connotation of being bad, and use of this term tends to suggest that people who consume substances are bad people. This term should not be used as tends to stigmatize people who consume substances.

Legalization · Non-specific term that refers in a general sense to removal of criminal sanctions for possession, production, distribution and sale of substances. Includes a number of measures such as decriminalization, depenalization, and other regulatory measures. Due to its non-specific nature use of this term is discouraged in favour of use of the more specific terms.

- De facto legalization, i.e. prohibition with an expediency principle – laws are not enforced at select stages.[19]
- De jure legalization, i.e. explicit laws that permit use.[19]

Opioids · The family of substances derived from alkaloids of the opium poppy, *Papaver somniferum*. These substances are potent analgesics (pain-relievers). Naturally occurring opioids, such as codeine and morphine, are termed "opiates." Examples of synthetic and semi-synthetic opioids include methadone, Demerol (meperidine), Oxycontin (oxycodone), fentanyl and heroin (diacetylmorphine).[67]

Problematic Substance Use · "Problematic substance use refers to instances or patterns of substance use associated with physical, psychological, economic or social problems or use that constitutes a risk to health, security or well-being of individuals, families or communities. Some forms of problematic substance use involve potentially harmful types of use that may not constitute clinical disorders, such as impaired driving, using a substance while pregnant, binge consumption and routes of administration (i.e. ways of taking a substance into one's body) that increase harm. Problematic substance use also includes "substance use disorders" (i.e. clinical conditions defined by the DSM-IV, including dependence or "addiction"). Problematic substance use is not related to the legal status of the substance used, but to the amount used, the pattern of use, the context in which it is used and, ultimately, the potential for harm."[67]

Prohibition · "Policy under which the cultivation, manufacture, and/or sale (and sometimes the use) of a psychoactive drug are forbidden (although pharmaceutical sales are usually permitted). The term applies particularly to alcohol, notably (as Prohibition) in relation to the period of national interdiction of alcohol sales in the USA, 1919-1933, and in various other countries between the two World Wars. Prohibition is also used to refer to religious proscriptions of drug use, particularly in Islamic countries."[65]

Promotion · Comes in many forms and includes advertising, branding/naming, sponsorship, gifting, product association with film, leading personality recruitment, associating use with attractive activities such as sporting, socialization, sex, and vacations; pricing reductions (i.e. loss leaders); labelling suggestive of pleasure, enhanced performance, over stated benefits; associations with pleasant activities; creating similar products for children (i.e. chocolate cigarettes) or youth attractive products (e.g. alcopops, flavoured cigarettes and cigars); and suggestion of performance enhancement.

Public health approach · Focuses on health promotion and prevention of disease, injury, disability, inequity and premature mortality. It also incorporates individual and societal health protection measures through protecting and promoting physical environments and social policy frameworks that maximize individual and community benefits and minimize harms. A public health approach operates within a framework of guiding principles, broad goals, and specific objectives and strategies.

This approach to substances recognizes that people use substances for anticipated beneficial effects and is attentive to the potential harms of the substances and the unintended effects of control policies. A public health approach seeks to ensure that harms associated with control interventions are not out of proportion to the benefit to harm ratios of the substances themselves.

Regulating/Regulated · A process of establishing formal legal rules for psychoactive substances growth, production, wholesaling, distribution, retailing, promotion and other related activities that relies primarily on administrative and civil law rather than criminal law as the primary legal instruments. A regulatory framework can include criminal law as a component for actions where others are harmed by an individual's or company's actions.

Reparations · "1. the making of amends for wrong or injury done: *reparation for an injustice.* 2. Usually, reparations, compensation in money, material, labour, etc., payable by a defeated country to another country or to an individual for loss suffered during or as a result of war. 3. restoration to good condition."[66]

Stigmatization · A process by which people are labelled as different, the difference is linked to negative stereotypes, the labelled people are placed into distinct categories to separate "us" from "them", and the labelled people experience disapproval, rejection, status loss, exclusion, and discrimination. The term "stigma" is often used in place of stigmatization (adapted from description in Battin et al[68],

Use · Consumption of substances with a specific intent in mind, implies a utilitarian reason for consumption

War on drugs · The reliance on police enforcement, military involvement and the criminal law to control supply of substances. Formally declared by President Richard Nixon in June, 1971. See also "drug war".

Appendix 1

Previous Health Officer Council Papers Recommendations

Regulation of Psychoactive Substances in Canada

Seeking a Coherent Public Health Approach, May 3, 2007[14]

The HOC proposes several steps to address the "National Framework" recommendations:

1. The formation of a steering and working groups to develop public health oriented proposals for policy and regulatory approaches to psychoactive substances
2. Creation of a multi-sectoral, public health oriented policy framework for developing substance category specific policies and strategies.
3. Ongoing evaluation of the current approach and various new demand and supply side approaches, including evaluation of variation of approaches at the local, provincial, and national levels.

A Public Health Approach to Drug Control in Canada Discussion Paper, October 2005[13]

Recommendations

A Reform Federal and Provincial laws and international agreements that deal with psychoactive drugs

The federal government needs to take a leadership role at the national and international levels in actively initiating reform of current psychoactive drug laws, including a review and revision of the *Controlled Drugs and Substances Act*, to create regulatory frameworks for drugs that will allow governments at all levels to better address the harms associated with the production, trade, distribution, and use of these substances.

Changes at the federal and international levels will allow provinces and local governments to develop creative regulatory solutions as part of a comprehensive public health approach to psychoactive drug control.

B Devise pan-Canadian, public health based strategies to manage psychoactive drugs.

As a new regulatory regime is being developed, the federal, provincial/territorial, and local governments must work together to devise national strategies for managing different classes of psychoactive drugs according to their potential for harm, and gather best evidence around how harms may be reduced, using both public health and human rights principles.

This process will include engaging the public and stakeholders in an open and frank dialogue regarding the guiding principles, goals, objectives and strategies.

From this process we would expect a revised tobacco control strategy, a national strategy for preventing harms from alcohol, a comprehensive cannabis strategy, a variety of strategies for other currently non-prescription psychoactive substances, e.g. opioids, stimulants, hallucinogens etc., and a strategy for reducing harms from prescription psychoactive drugs.

C Improve capabilities to closely monitor and provide information about the health and social consequences of psychoactive drugs and drug control strategies.

Accurate information on psychoactive drug use and harm trends, evidence supporting effective policies, programs and services, and ongoing evaluation and reporting on national, provincial/territorial, and local

strategies is essential. In addition, Canadians need accurate information about psychoactive drugs in order to make informed decisions about their use and potential adverse effects.

We recognize that federal bodies such as the Canadian Centre on Substance Abuse, the Canadian Institutes of Health Research, and provincial bodies such as the Centre for Addiction Research (BC), the Centre for Addiction and Mental Health (Ontario) and others are doing the best they can with current resources. However, these agencies must be adequately resourced to provide all Canadians with the information and knowledge needed to deal with the enormous problems related to psychoactive drugs. This needs to include the ability to provide accurate local information to enable and support communities to take an active role in psychoactive drug issues.

This backbone of support is necessary to be able to evaluate strategies, the impact of regulatory changes, progress, and detection of problems. It will be important that this information be current in order to revise programs in real time to achieve the stated goals and objectives.

D Develop comprehensive services and a balanced investment for prevention, harm reduction, treatment, rehabilitation, and enforcement.

As we and others have pointed out, the health and social impacts of drugs and inappropriate responses to their management have enormous health and social consequences. There should be close examinations and tracking of federal and provincial psychoactive drug related budgets with the intention of providing resources for services that are more in line with the enormous costs, and achieving a more balanced expenditure for prevention, harm reduction, treatment, rehabilitation, and enforcement.

In addition to adequate services "on the ground", there is the need to be able to effectively advise on, coordinate, and integrate new policy directions across government departments and between levels of government with regard to psychoactive drugs.

Coordinating structures with clear responsibilities, authorities, and accountabilities for psychoactive drug issues are needed at high levels. They would deal with such matters as overseeing the development of the above-mentioned strategies, ensuring that the objectives of the strategies are satisfied; and serve as links regarding drug related issues between local, provincial/territorial, national, and international levels.

In recognition of the importance of local leadership, community action, and grassroots support to the success in public health strategies, local communities should be included and supported as key players in the development of psychoactive drug related policies, programs, and services.

Psychoactive Drugs, Including Alcohol and Tobacco (PaDIAT): A Public Health Approach Discussion Paper, May 5, 2004[12]

Recommendations

1 That the Federal and Provincial Governments create positions and structures at a high level that have clear responsibility, authority, independence and accountability for coordinating and integrating all government activity with regards to psychoactive drugs (illegal, legal, prescription), including alcohol and tobacco.

2 That local leaders with interest in and responsibility for psychoactive drugs, including alcohol and tobacco related issues in their communities be identified, encouraged, and supported by the Federal and Provincial Governments to become involved, generate ideas, and take action in their communities; and that strong links be made between the National and Provincial Advisors/Commissioners and the local leaders.

3 That the Federal and Provincial Governments establish and adequately resource agencies whose responsibility it is to assess and monitor the health and social consequences of psychoactive drugs, including alcohol and tobacco, evaluate and recommend best practices for the prevention, treatment, and rehabilitation related to psychoactive drugs, including alcohol and tobacco use, oversee the implementation of national and provincial policies, strategies, programs, and services, and work closely with the Commissioners to support them in their mandates.

4 That the Federal and Provincial Governments engage the public and stakeholders in an open and frank dialogue regarding the guiding principles, goals, objectives, and strategies of a "Strategic Framework for Action on Psychoactive Drugs, Including Alcohol and Tobacco". As part of this dialogue, there must be discussion and debate about the

recommendations in the recent reviews cited in this and other reports, with the intent of taking concrete action at the local, provincial, and national levels.

A Comprehensive Public Health Approach to the Problem of Illicit Drug Use, May 1998[11]

Recommendations

1 The government of British Columbia should mandate and fund the immediate implementation of comprehensive health and addiction management programs accessible to injection users throughout the province. This action should be coupled with a commitment to primary prevention programming, including a broad public education campaign.

2 The federal, provincial, and municipal governments should support the immediate development of a multi-centre trial of a comprehensive addiction management program, including prescription of various opiates and other drugs. The trial should assess impacts on health, risk behaviours, employment, and criminal behaviour of enrolled users.

3 The federal government should amend the Controlled Substances Act to provide for controlled legal availability of certain Schedule 1 drugs in a tightly controlled system of medical prescription within a comprehensive addiction management program. Possession of small quantities of controlled drugs should be decriminalized. Importing and trafficking offences should remain, and enforcement of them be improved.

Submission to the Provincial Coroner's Task Force Examining Illicit Heroin Related Deaths, 1994[10]

Recommendations

1 The Government of British Columbia should provide basic levels of medical care, housing and social support to all addicts at all stages of addiction and recovery.

2 Through the Ministry of Attorney General, begin to organize debate around the nature of Canada's Illicit Drug laws and examine decriminalization of illicit drugs as a potential harm reduction solution to preventing future illicit intravenous drug-related deaths. To further this, a Task Force should be struck in British Columbia to develop criteria for the legal prescription of heroin by physicians. The British Columbia Medical Association and the College of Physicians and Surgeons of British Columbia should be invited to participate.

3 The B.C. Government should implement a system of care that has the capacity to:

- i Provide appropriate assessment and treatment for all narcotics addicts:
- ii Provide services designed to build motivation in addicts that eventually leads to the consideration and ultimate acceptance of a drug-free lifestyle;
- iii Identify addicts who wish to enter addiction treatment programs;'
- iv Improve access to addiction treatment services for motivated addicts; and seeks user community input at all stages of development and implementation of programs.

4 Funding should be reallocated from enforcement to programs providing harm reduction services known to effectively reduce the health risks associated with illicit intravenous drug use. Such services as needle-exchanges, condom distribution, and vein care education can be integrated with access to assessment and other services such as housing, social support and income assistance. (Methadone services will require physician involvement.)

5 Encourage and facilitate cooperation between the Ministry of Health and the B.C. College of Physicians and Surgeons and the B.C. College of Pharmacists towards increasing both the number of and geographic distribution of physicians dispensing methadone.

6 Continue to report mortality, morbidity and costs to society from illicit drug use. This should be reviewed annually by the Provincial Health Officer.

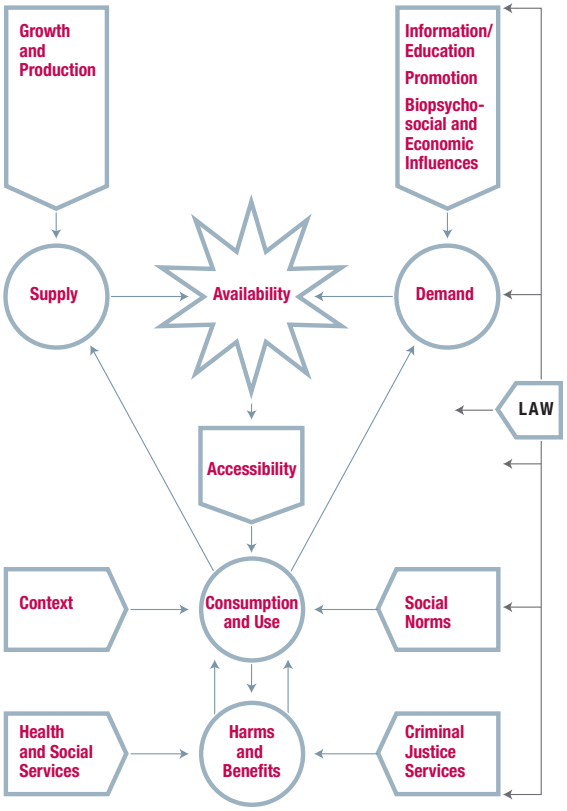
Determinants of Harms and Benefits

Figure 3, *right*: Determinants of Harms and Benefits of Substances

The harms and benefits of substances in society are driven by complex interactions among supply, demand, availability, accessibility, context, and social norms. The interaction of these factors leads to consumption and use patterns which result in harms and benefits, some of which may be mitigated or aggravated by the health, social and criminal justice services brought to bear on these issues.

Implementation of measures for each of these factors can also have consequences which may be harmful (as discussed in relation to the harms of prohibition) or beneficial (as in reducing population consumption rates). In particular the use of law in the form of statutes (Acts) and their subordinate regulations in creating problems or preventing problems cannot be underestimated. The law is both a response to circumstances of the day and the past, and a driver of future approaches. Because of the universal application of law and potential for widespread unintended consequences, statutes and regulations must be under constant scrutiny to evaluate their consequences.

The interaction of these elements is shown in Figure 3 (right).



2

| Appendix |

DEMAND is the population's willingness to purchase substances at a given price[16] and is driven by a number of factors including:

1 Promotion of products (e.g. advertising).

2 Information and education about the harms and benefits of the substance.

3 Biopsychosocial and economic influences such as age, gender, ethnicity and:[38, 15]

Housing · Inadequate or lack of housing and the stresses of uncomfortable, dangerous, outdoor, or unstable living situation. Conversely, substance dependency can result in a person becoming homeless, perpetuating a vicious cycle of problematic substance use and homelessness.

Income and Wealth Distribution · Lower income is associated with increased risk of problematic substance use, and conversely, adequate income is protective.

·**Working conditions** · Stressful, dangerous, or unfulfilling working conditions add to risk of problematic substance use.

·**Social connectedness and living in a healthy community** · A community which supports citizen engagement and health and well being is also a community that experiences less problems associated with substances.[69]

Early childhood development and parental support · A healthy pregnancy, a nurturing and adequately supported and stimulated early childhood, and positive childhood experiences are important protective factors against problematic substance use. Conversely, difficult and traumatic childhood experiences are risk factors for later problematic substance use.

"Drugs are richly functional scapegoats. They provide elites with fig leaves to place over the unsightly socially ills that are endemic to the social system over which they preside. And they provide the public with a restricted aperture of attribution in which only a chemical bogey man or the lone deviants who ingest it are seen as the cause of a cornucopia of complex problems."

C. Reinarman[70]

Mental or physical distress · The need to alleviate distress resulting from current or previous life experiences (e.g. childhood psychological and physical trauma, poor or no housing, lack of food) or seek relief from symptoms of medical conditions e.g. opiates and cannabis for pain relief.

Peer influence · For initiating substance use.

Desire/need · To relax, increase alertness, concentration, energy and stamina (e.g. amphetamines), alter experiences, perceptions of reality, experience pleasure, spirituality.

Dependence · Avoid uncomfortable withdrawal symptoms or to maintain a desired state of mental and physical functioning.

SUPPLY is created by the relationship between price and the quantity of substances that producers and distributors are willing to provide at that price.[16] This results in production through cultivation of plants or fungi (e.g. yeast, mushrooms); natural availability, harvesting, and processing into end products; or de novo manufacturing of synthetic substances from a range of raw materials (precursors). The final product can take many forms and concentrations which influences the harm potential.

AVAILABILITY of substances is determined by the mechanisms that move products from producers to consumers and includes wholesaling, distribution, and retailing (either to take away or consume on-site).

2

| Appendix |

Substances are made more or less **ACCESSIBLE** to consumers through restrictions such as age of purchase requirements or prices. The difference between availability and accessibility is that availability describes the probability of encountering substances (e.g. distribution and density of retailers) whereas accessibility describes how easy it is to acquire substances from a particular source (e.g. impeded by age restrictions, identity checking, higher prices, behind counter versus over the counter access to product, hours of operation).

CONSUMPTION is the taking into the body of a substance by various means (eating, drinking, smoking, etc), and is differentiated from **USE** in that the latter concept brings to light the utilitarian aspect of why substances are consumed, such as using them as cognitive tools.[71]

SOCIAL NORMS such as acceptability of some substances over others, acceptability of consuming substances in certain patterns but not others, or stigmatization associated with some substances are important considerations as they can be more powerful in influence use than regulations, and do not require ongoing enforcement processes. These in turn are influenced by many of the other factors in the model.

The **CONTEXT** in which substances are taken can greatly influence the potential for harm. The experience with the supervised consumption site in Vancouver ("Insite") in which overdoses can be rapidly attended to prevent death is an excellent example.[72]

The pathways from consuming the substance to harms or benefits at the individual level are complex and are influenced by the particular substance, dose, quality, pattern of consumption, and mode of administration. These can lead to toxic effects, intoxication, and dependence. See Babor et al[16] (pg 18-20) for a more detailed discussion.

A minority of people who try substances will develop patterns of use that jeopardize their health or adversely affect their families, friends, and community. For example Anthony et al[73] reported that the prevalence of lifetime dependence is around 9% among persons who ever used cannabis, 32% for tobacco, 23% for heroin, 17% for cocaine, 15% for alcohol, and 11% for stimulant use. Adequate **HEALTH AND SOCIAL SERVICES** must be in place to treat and support those people and their families and communities in dealing with problematic substance use.

Adequate **CRIMINAL JUSTICE SERVICES** are necessary to ensure that regulations are adhered to and enforced, and that transgressions of regulations are dealt with fairly and in proportion to the harms of the transgressions.

The **LAW**, as manifested by statutes, regulations, and court judgements is an important determinant and is the main focus of this paper. Throughout history societies have developed a spectrum of regulatory approaches to manage substances, generally from least restrictive to most restrictive with a purported attempt to mitigate potential harms. Current approaches to managing substances include:

- Free market commercialization (e.g. tobacco, caffeine and alcohol) with and without varying licensing regimes.
- Over and behind the counter access through pharmacies (e.g. codeine based pain and cough medications).
- Prescription by a physician (e.g. sleeping pills, methadone and pain medications).
- Prohibition, where it is a criminal offence to possess and sell substances, except in some very limited circumstances (e.g. cannabis, cocaine, LSD and heroin).
- Varying combinations of civil and criminal based regulation (see later discussion).

2

| Appendix |

Tobacco has long been a focus of local government regulation, and in 2005 the City of Vancouver adopted a report in which it was recommended that the city "enact by-laws that restrict the display of tobacco products in retail outlets, limit the number of stores selling tobacco products in Vancouver and refuse to issue new business licenses for outlets selling tobacco located within 150 metres of an elementary or secondary school."[74]

In 2001 the Royal College of Physicians in the United Kingdom conducted an extensive review of tobacco harm reduction and concluded:

"The regulation of nicotine products, whether medicinal or tobacco based, thus needs radical reform to ensure that the market forces of affordability, promotion and availability act in a strong and directly inverse relation to the hazard of the nicotine product, and that the marketing and use of nicotine products are carefully monitored to maximise public health benefit.

While it may be possible to achieve this reform and consistency by more rational application of existing regulatory frameworks, our conclusion is that the scale of the problem, and the difficulties of achieving successful reform, are such that the problem will be best addressed by the creation of a nicotine regulatory authority to take control of all aspects of regulation of all nicotine products."[75]

Canada has been a world leader with regards to federal legislation about sponsorship restrictions, graphic packaging warnings and banning flavours; and provincial legislation setting minimum age and package size, banning displays and setting indoor restrictions/set buffer zones.

Appendix 3

Harms and Benefits of Substance Prohibition

When the only tool you own is a hammer, every problem looks like a nail.

It is important to distinguish direct harms from consuming substances (e.g. acute toxic or chronic effects) from the indirect harms of policies that seek to manage substances (e.g. individual and societal costs of incarceration of individuals, sharing needles). In particular it is being increasingly recognized that the policy of indiscriminate prohibition has failed to achieve its intended goals and results in many negative unintended consequences such as enriching organized crime, driving gang violence, fuelling the spread of HIV and Hepatitis C, promoting overdose deaths, and further marginalizing many people with difficult health, psychological, and social problems.

This conclusion is not new and is shared by many others. In an open letter to Kofi Annan, 1998 Secretary General to the UN, approximately 600 leading thinkers, researchers, politicians, legal experts and others concluded "The illegal drug industry … has empowered organized criminals, corrupted governments at all levels, eroded internal security, stimulated violence, and distorted both economic markets and moral values. These are the consequences not of drug use per se, but of decades of failed and futile drug war policies … We believe that the global war on drugs is now causing more harm than drug abuse itself."[77]

Similar concerns are shared by many other groups* and there is growing global awareness of the need to end indiscriminate drug prohibition and implement regulated approaches for all currently illegal drugs based on public health and human rights principles.

Most recently the XVIII International AIDS Conference (AIDS 2010) held in Vienna, Austria produced the Vienna Declaration, an official statement seeking to improve community health and safety by calling for the incorporation of scientific evidence into illicit drug policies. The declaration in part stated "The criminalisation of illicit drug users is fuelling the HIV epidemic and has resulted in overwhelmingly negative health and social consequences. A full policy reorientation is needed … Basing drug policies on scientific evidence will not eliminate drug use or the problems stemming from drug injecting. However, reorienting drug policies towards evidence-based approaches that respect, protect and fulfil human rights has the potential to reduce harms deriving from current policies and would allow for the redirection of the vast financial resources towards where they are needed most: implementing and evaluating evidence-based prevention, regulatory, treatment and harm reduction interventions." (see **viennadeclaration.com** for full text of the Declaration)

As of November 2011, the Vienna Declaration had received over 20,000 endorsements.[3]

In 2001, the federal auditor general of Canada estimated that the size of the Canadian illegal drug market was $7-$18 billion and $450-$750 billion globally.[44] A report to the American Congress in 2008 estimated the size of the global illegal market at between $100 billion and a trillion dollars.[45] These funds are outside the control of governments, are supporting organized crime groups and are a strong incentive for new recruits. In British Columbia, a major source of

* Among others examples include: Canadian Foundation for Drug Policy cfdp.ca , Drug Policy Alliance Network drugpolicy.org/homepage.cfm, Transform Drug Policy Foundation tdpf.org.uk, King County Bar Association kcba.org/druglaw/index.aspx, International Drug Policy Consortium idpc.net.

3

| Appendix |

revenue for local gangs is derived from cannabis, much of which is exported to the US. In 2000, this local market was estimated to be worth approximately C$7 billion.[46] In contrast, the province's forestry and fisheries industries together generated slightly less than $3 billion that same year.[47]

Through a regulated market a portion of this money could be available to government through taxation. This could fund better control measures and provide improved support for problematic substance use through prevention, treatment, and addressing the negative social determinants of health (e.g. lack of housing, poor access to nutrition, unemployment). In the British Columbia context, since the vast majority of the province's illegal drug market is based in the cannabis trade this may present an opportunity to explore alternative approaches to reducing drug supply to vulnerable groups (e.g. youth) while removing a key revenue stream for local gangs.

> *"That which is prohibited cannot be easily regulated."*
>
> Room et al[19]

In a paper written in 2010, Jeffery Miron concluded[78] that in the US legalizing drugs would save roughly $48.7 billion per year in government expenditure on enforcement of prohibition. $33.1 billion of this savings would accrue to state and local governments, while $15.6 billion would accrue to the federal government. Approximately $13.7 billion of the savings would result from legalization of cannabis, $22.3 billion from legalization of cocaine and heroin, and $12.8 billion from legalization of other drugs. The report also estimates that drug legalization would yield tax revenue of $34.3 billion annually; assuming legal drugs are taxed at rates comparable to those on alcohol and tobacco. Approximately $6.4 billion of this revenue would result from legalization of cannabis, $23.9 billion from legalization of cocaine and heroin, and $4.0 billion from legalization of other drugs.

The harmful effects of prohibition include:

- Promotion of sharing of needles and other drug use paraphernalia facilitating and accelerating the spread of HIV, hepatitis C, and many other infections.[39, 40] Injection drug use accounted for 17% of positive HIV test reports in 2008.[79] Drug use is currently the most important risk factor for HCV infection, accounting for 72% of infections (63% intravenous drug use, 9% drug snorting).[80]
- Prohibition creates an illegal market* that produces concentrated and contaminated products which are high risk to users, leading to overdose hospitalizations and deaths. In Canada in 2002 there were 733 overdoses for males and 225 for females, totalling about 958 deaths. This constituted 56.5% of all 2002 illegal drug deaths in Canada.[1]
- Contamination of illegal market produced drugs can result in serious illness. For example contamination of cocaine with levamisole (an anti-worming agent) has been found to be associated with very low white blood cell counts.[81] Recent contamination of heroin with anthrax in the UK has been noted.[82]
- Fuelling the existence of an illegal market that produces crime, violence, and corruption. Prohibition creates a massive and lucrative illicit market for drugs, one estimated to be worth as much as $320 billion US globally, and $7 billion Canadian in B.C.[41] There are substantial rewards to be made from engaging in such a market, resulting in significant associated violence because there are no legal means to deal with competition and settle disputes. This results in violent injuries and deaths of users, dealers, police and innocent bystanders. This has been particularly evident recently in Mexico where an estimated 28,000 people have died since 2006[83] as a result of drug trade violence and enforcement activities.
- Increased drug market violence. A recent systematic review examining the impacts of drug law enforcement interventions on drug market violence found that increasing drug law enforcement intensity resulted in increased rates of drug market violence.[41] Notably, nine of the 11 studies (82%) employing regression analyses of longitudinal data found a significant positive association between drug law enforcement increases and increased levels of violence. The authors concluded " … from an

* HOC prefers to use the term "illegal market" rather than black market because of racial connotations of the latter term, and in recognition that prohibition has been particularly harmful in stigmatizing and resulting in discrimination of racial minorities.

Table 1, *right*: Police-reported crime for substance related offences (2008)

Type of violations		2008	2007-2008
	number	rate	% change in rate
Possession of cannabis	50,145	151	5
Possession of cocaine	10,423	31	-12
Possession of other Controlled Drugs and Substances Act drugs	9,353	28	-1
Trafficking, production or distribution of cannabis	14,958	45	-4
Trafficking, production or distribution of cocaine	11,169	34	-3
Trafficking, production or distribution of other Controlled Drugs and Substances Act drugs	5,917	18	-3

Note: Rates are calculated on the basis of per 100,000 population.

evidence-based public policy perspective and based on several decades of available data, the existing evidence strongly suggests that drug law enforcement contributes to gun violence and high homicide rates and that increasingly sophisticated methods of disrupting Canadian gangs involved in drug distribution could unintentionally increase violence. In this context, and since drug prohibition has not achieved its stated goal of reducing drug supply, alternative models for drug control may need to be considered if drug-related violence is to be meaningfully reduced."

- Damaged houses and community disruption from in-home grow and lab operations.
- The illegal market created by prohibition, paradoxically makes illegal drugs widely available as there are no regulations and little control. Dealers never ask customers for age identification.
- The glamourization of the illegal market as a consequence of prohibition is engaging for youth. Schools play a role in the network of drug distribution, exposing students to criminal activity and enticing some into selling drugs to make "easy" money.
- Negative health and social consequences from arrests, criminal records and incarceration. Criminalization leads to stigmatization, marginalization and discrimination of vulnerable people and visible minorities, aggravating underlying problems and making it more difficult for them to access health and social services. Marginalization is a determinant of health which results in significant harms to individuals and their families and increased costs to society. Criminalization leads to many encounters with the criminal justice system, including time spent in jail waiting for trial. Table 1 lists police-reported crime for substance related offences in 2008.[84] The percentage of the violations that result in harms to the people arrested is not known, but the large numbers for possession alone (nearly 70,000), especially for cannabis, give pause for concern.
- The detention of people who use drugs in such centers is a common practice in numerous countries throughout Asia. Estimates of how many people are undergoing compulsory drug detention at any one time in China range from 300,000 to half a million. As many as 60,000 people are interned annually in drug detention centers in Vietnam. Thousands more are detained in centers in Cambodia, Thailand, Malaysia, Laos, Burma, Mexico and Russia.[135]

If prohibition is so harmful, one must ask if there are some benefits to this policy. An important value of prohibition identified by Babor et al[16] is that it "prevents large-scale corporate entities from promoting drug sales through modern marketing techniques". Having a product categorized as "legal", without adequate information about potential harms, can also send messages that substances are safe, quality is assured, and that labelling is accurate, as was demonstrated in New Zealand with the experience of benzylpiperazine-containing party pills.[85] Prohibiting a substance does send a message of social disapproval of use, while a legal status can send an opposite message, but the value of using prohibition to send a message to dissuade use must be weighed against the harmful consequences of implementing prohibition, and the utility of other measures that are less harmful to individuals than criminalization.

- "As it currently exists, the international cannabis prohibition regime by its nature and functioning imposes substantial personal and social harms." Room et al[19]
- "The implementation of prohibition is also counterproductive to the pursuit of fundamental human rights and freedoms." Barrett et al[42]
- "In Vancouver an estimated 70 percent of criminal activity is associated with illicit drugs … With drugs as its primary source of revenue, organized crime has intimidated police officers, judges, juries and correctional officers. Such intimidation is a direct threat to Canada's philosophy of peace, order, and good government … There have been growing

3

| Appendix |

Table 2: Harms of Prohibition

With acknowledgement for some of the content in this Table to Catherine Carstairs[43]

Harm Category	Examples of Harm
1 Substances prohibited	Higher concentrations – easier to transport and conceal, greater profits More dangerous modes of consumption i.e. injecting, smoking Impurities
2a Individuals - substance users	Health effects – overdose, death, HIV, Hep C, TB, injuries, abscesses, vein thrombosis, endocarditis, risks of carrying drugs in body cavities Creation of secret and dangerous rituals of drug use to avoid detection Violence directed at users as part of police seizures to secure drugs before tossing Violence from other users and dealers Switch to alcohol, other more dangerous drugs during scarcities Working difficult, low paying jobs, aggravation poverty Stigmatization and discrimination, isolation from services (especially for people with mental disorders) Involvement in the sex trade to buy substances Recruitment of youth to reduce risk for dealers Vicious cycle of drugs, imprisonment, poor relationships, more drugs Involvement in other criminal activities Incarceration (sometimes for long periods), criminal records
2b Individuals - criminal justice personnel	Violence - injuries and death Worker stress and anxiety Bribery and corruption Overcrowded prisons Lack of respect for police
3 Families	Inability to care for children Much time spent on searching for drugs and money, lead to difficulties holding down steady jobs, supporting families, maintaining solid relationships. Distrust of friends and family Destabilized users lives adversely affecting families
4 Communities	Small underground labs that are very difficult to control, produce product of hazardous quality, damage houses and disrupt communities

Harm Category	Examples of Harm
4 Communities	Creates a community of users, making it difficult for users to leave the community Gives rise to a distinct culture of drug use, specialized knowledge, status, excitement By driving "controlled" users out of the community with strict enforcement and severe penalties, drug enforcement decreases the likelihood that new users would learn techniques for managing and controlling drug use from experienced users. Drug trade violence Drug related crime Police surveillance and invasion of homes
5 Society - provincial, national, international	Results in creation of a "black market", fuels organized crime Federal rules and regulations con tribute to fewer doctors wanting drug users as patients Barrier to health and social service provision Deprives provinces of greater role in regulation Treatment poorly developed Loss of therapeutic opportunities for some substances Difficulty in conducting research due to illegal nature of some substances Lack of respect for law Disproportionate impact on racial and ethnic minorities Distracts from major sources of psychoactive substance harm – tobacco and alcohol Drug trade funded military conflicts, terrorism Destabilizes economic markets International tension regarding ideological based approaches Environmental damage from illegal drug labs and herbicide spraying Political instability for some governments Loss of government and local revenue opportunities Opportunity cost –better spending of public funds

3

| Appendix |

acknowledgements by Canadians and parliamentarians that there are limits on the ability of law enforcement to reduce the supply of drugs." Office of the Auditor General of Canada.[44]

- The ineffectiveness in contrast to the substantial expenditures of cannabis prohibition in the US have recently been described by Wood et al[86].

"The problems created by drugs control policies have turned out to be much larger than those they intended to solve. The immense global harm caused by the prohibition of drugs to public health, sound economy, sustainable development and community safety is well documented but insufficiently understood by policy makers, mass media, and consequently the general public"

European Coalition for Just and Effective Drug Policies[87]

The evidence is clear that prohibition has failed to achieve its intended goals, the loftiest of which is the United Nations General Assembly Special Session (UNGASS) 1998 slogan of a "A drug free world – we can do it!".[88] On a more pragmatic level prohibition is a failure, as it is unable, except very briefly, to reduce the availability or increase the price of drugs.[41, 89]

In the February 2010 National Drug Threat Assessment it was reported that "Overall, the availability of illicit drugs in the United States is increasing. In fact, in 2009 the prevalence of four of the five major drugs – heroin, methamphetamine, cannabis, and MDMA (3,4-methylenedioxymethamphetamine) – was widespread and increasing in some areas."[90]

Notably, from 1989-2004 cannabis lifetime use in Canada increased from 23% to 44% of the population, and past year use increased from 6.5% to 14.1%. For injectable drugs, lifetime use increased from 1.7 million in 1994 to a little more than 4.1 million in 2004, and past year use increased from 132,000 in 1994 to 269,000 in 2004.[32]

Appendix 4

Growing Support for Change

There is clear indication that many countries are incrementally moving away from indiscriminate drug prohibition and that there is increasing public support for this change.

A 2010 poll by Angus Reid found that a majority of Canadians (53%) support the legalization of cannabis, with people in British Columbia (61%), Alberta (59%) and Ontario (57%) holding the highest level of support. In contrast, support for legalization of other drugs, such as ecstasy, crack cocaine, powder cocaine, heroin and methamphetamine or "crystal meth" was less than 10%.[91] US statistics are similar, with a 2009 survey indicating 53% of Americans were in favour of cannabis legalization; and 68% believed the "War on Drugs" has been a failure.[92]

In a recent California ballot proposition 46% of voters were in favour of a measure that would allow individuals age 21 or older to possess and cultivate limited amounts of cannabis for personal use; and allow state and local governments to authorize, regulate, and tax commercial cannabis-related activities under certain conditions.[93]

In 2005 the City of Vancouver recommended "That the Federal Government initiate a process of reviewing Canada's legislative, regulatory and policy frameworks governing illegal drugs with regard to their effectiveness in preventing and reducing harm from problematic drug use and their effectiveness in enabling municipalities to better address the harm from the sale and use of these substances at the local level AND establish a process with broad participation to consider regulatory alternatives to the current policy of prohibition for currently illegal drugs."[74]

They also recommended "That the Federal Government implement further legislative changes to create a legal regulatory framework for cannabis in order to enable municipalities to develop comprehensive cannabis strategies that promote public health objectives, include appropriate regulatory controls for cannabis related products, and support the development of public education approaches to cannabis use and related harm based on best evidence."[74]

This support is also reflected in the media as many newspaper editorial boards have now announced their position against prohibition and in favour of significant change:

- The Vancouver Sun stated that it was their editorial board's opinion that " … many countries recognize the folly of the war on drugs, and are, therefore, open to discussing legalization and regulation. Canada is particularly well suited to promoting such discussions"[94]. The Sun recently featured an article titled "It just makes sense to end the war on drugs" and stated "The shootings and the deaths of the last few weeks underscore the need to reform our drug laws"[95].
- The Province Newspaper editorial board took a similar stand, stating "In our opinion legalization needs study". They observed that historically the Province had opposed the legalization of drugs, but now believed that "it's time legalization was given due consideration by our governments"[96].
- The Chilliwack Progress asked "is it time for society to rethink its drug laws?" and explored the benefits of ending prohibition.[97]
- The Surrey Leader stated that we need " … a focused examination and debate on ending the massively expensive and ineffective war on drugs – particularly marijuana. Prohibition is not working. It merely fuels the insanely profitable illicit drug trade and creates the bloody havoc being wrought on our streets."[98]

4

| Appendix |

- The Times Colonist in Victoria is repetitive in its editorials against prohibition. They state "It's time to begin legalizing and controlling distribution as part of an entirely new approach to reducing the damage done by guns."[99] and "Enforcement is only part of the solution … legalization of drugs to remove the gang's source of profits … and other measures are all needed."[100] and "Too much of our drug policy has been based on myth, ideology and wishful thinking"[101].
- The National Post had a full page article with a headline that simply stated "Legalize Drugs. Put the gangs out of business" and continued with " … we need to embark on drug legalization, which will starve the gangs of their principle oxygen supply."[102]

All of these articles were preceded by Dan Gardner's Ottawa Citizen detailed and lengthy 13 part analysis of the failure of the drug war. This series was picked up by other newspapers across the country.[103] This significant shift in local media reporting is reflected in many other countries around the globe.[104-107]

Physicians have also been advocating for change for many years. In a 2001 editorial in the Canadian Medical Association Journal discussing the harms of cannabis and its criminalization the editor twice stated that possession of small amounts of cannabis for personal use should be decriminalized.[108] The recent vigorous and ongoing debate about introducing mandatory minimum jail sentences for drug offences to the *Controlled Drugs and Substances Act* is a good example of the ongoing concerns about prohibition.[109]

The Law Commission in New Zealand has recently conducted a comprehensive review[4] of their *Misuse of Drugs Act* and have concluded that it needs a major overhaul to reflect more of a health rather than criminal perspective, including:

- A presumption against imprisonment whenever the circumstances indicate that a drug offence was committed in a personal use context.
- The supply by drug users of small amounts of drugs with no significant element of commerciality ("social dealing") is entirely different from commercial dealing
- A mandatory cautioning scheme for all personal possession and use offences that come to the attention of the police, removing minor drug offenders from the criminal justice system and providing greater opportunities for those in need of treatment to access it.
- A full scale review of the current drug classification system which is used to determine restrictiveness of controls and severity of penalties, addressing existing inconsistencies and focusing solely on assessing a drug's risk of harm, including social harm.

In commenting on an article in the British Medical Journal by Stephen Rolles[23] that "calls on us to envisage an alternative to the hopelessly failed war on drugs" the editor stated "I agree, that we must regulate drug use, not criminalise it". This sentiment was supported shortly after by one of the UK's leading doctors, Sir Ian Gilmore, former president of the Royal College of Physicians who said that the government should consider decriminalising drugs because the blanket ban has failed to cut crime or improve health.[110]

4

| Appendix |

In the US there are signs of changes in messaging, with the new Obama administration Director of the Office of National Drug Control Policy (the "drug czar") Gil Kerlikowske, in commenting about the war on drugs: "In the grand scheme, it has not been successful. Forty years later, the concern about drugs and drug problems is, if anything, magnified, intensified."[113]

The importance of moving soon to a public health approach to alcohol has been recently identified by the World Health Organization.[114]

At the global level, an urgent call by the recently established Global Commission on Drug Policy, a group of world leaders including former country presidents and the former UN Secretary General Kofi Annan called for "fundamental reforms in national and global drug control policies"[5] including:

- "End the criminalization, marginalization and stigmatization of people who use drugs but who do no harm to others.
- Encourage experimentation by governments with models of legal regulation of drugs (especially cannabis) to undermine the power of organized crime and safeguard the health and security of their citizens.
- Ensure that a variety of treatment modalities are available – including not just methadone and buprenorphine treatment but also the heroin-assisted treatment programs that have proven successful in many European countries and Canada.
- Apply human rights and harm reduction principles and policies both to people who use drugs as well as those involved in the lower ends of illegal drug markets such as farmers, couriers and petty sellers."[115]

U.S. works to reduce prison population as Canada boosts sentences

Improved targeting of police resources is a theme explored in depth by Mark Kleiman, a professor of public policy at UCLA whose latest book, "When Brute Force Fails: How to have less crime and less punishment" is being published later this month. The prescription, Kleiman said in an interview with The Canadian Press, is to "apply what every mother and animal trainer knows. If people mostly get away with [crime] but occasionally get creamed, they're going to keep doing it."

He advocates sharply targeting police activities while ramping back stiff U.S. prison sentences. "Not only is certainty and swiftness [of conviction] more important than severity, severity is the enemy of certainty and swiftness," said Kleiman.[111]

Peter McKnight agrees with Kleiman's point of view, stating "We will not likely see a decrease in drug use, but we will see an increase in prison populations, which will place an additional burden on taxpayers. And worst of all, there's reason to believe we will also see an increase in drug-related violence … For as the literature demonstrates, the war on drugs is a war on us."[112]

Appendix 5

Learning from the Experience with Alcohol and Tobacco

Public health oriented approaches to tobacco have been increasing, such as measures directed at the sale and use of tobacco products (e.g. elimination of "power walls", prohibiting advertising of tobacco in vendors, prohibiting smoking indoors and in cars with children). On April 29, 2010 Australia announced it will force tobacco companies to use plain packaging with no logos or colours on its products:[116]

"Cracking Down on Cigarette Advertising

In a world first, all cigarettes will be sold in plain packaging by 1 July 2012.

This will remove one of the last remaining frontiers for cigarette advertising, and was a key recommendation of the National Preventative Health Taskforce.

The legislation will restrict or prohibit:

- *Tobacco industry logos*
- *Brand imagery*
- *Colours*
- *Promotional text other than brand and product names in a standard colour, position, font style and size.*

The Government will develop and test package design that will make cigarettes less appealing, particularly to young people.

Graphic health warnings will be updated and expanded. Research shows that industry branding and packaging design reduce the effectiveness of graphic health warnings on tobacco products.

The National Preventative Health Taskforce concluded that "there can be no justification for allowing any form of promotion for this uniquely dangerous and addictive product which it is illegal to sell to children", including packaging.

The Government will also legislate to restrict Australian internet advertising of tobacco products, bringing the internet into line with restrictions already in place in other media."[116]

Regulation of the quality of tobacco, additives, and cultivation standards has been notable by its absence.

The consequences of historically regulating tobacco from a commercial perspective are well documented. More than 45 years after the US Surgeon General published his landmark paper on smoking and health[117] the proportion of the population smoking has dropped from the 50-60% range in the 1960s to 18% in 2008[33, 117] which is laudable. However the total number of smokers in Canada and in BC has barely shrunk due to the population growth since 1965. Table 3 shows that since 1965 the number of smokers in BC has only dropped by about 37,000, and in fact there has been an increase in the number of female smokers. For Canada a similar picture is evident, except that the number of female smokers has declined, albeit marginally, compared to male smokers. This is not to negate the very important gains made by decreasing the percentage of smokers, which really is a success. The main points are that the total burden from smoking related diseases is still very substantial because of the persistently large number of smokers and the quantities of tobacco being smoke, and there is much more that needs to be done to reduce this burden.

5

| Appendix |

Current Smokers Aged 15+					
	1965		2008		# Change since 1965
	%	#	%	#	
British Columbia					
Males	57.4	359,535	16.6	302,567	-56,968
Females	37.7	232,431	13.4	250,918	+18,487
Total	47.5	590,376	15.1	553,485	-36,891
Canada					
Males	65.2	4,254,304	20.1	2,710,000	-1,544,304
Females	34.7	2,277,313	15.7	2,170,000	-107,313
Total	49.8	6,517,758	17.9	4,880,000	-1,637,758

Notes:

Population Statistics to derive population estimates of smokers from: Statistics Canada, Ottawa.

Prepared by: BC Stats, Victoria. All figures are as of July 1st of the year stated

Smoking Frequency from Hackland, S. "Smoking Habits of Canadians" Technical Report Series No. 1. Health and Welfare Canada. 1976. Table 1b

Totals not exactly sum of males and females due to rounding in percentage of smokers.

BC 2008 data from "Tobacco Attitudes and Behaviours Survey Report Survey 2008 Final Report". BCStats, BC Government. April 2009

Canada 2008 data from "Canada Tobacco Use Monitoring Survey (CTUMS) 2009". Health Canada. hc-sc.gc.ca/hc-ps/tobac-tabac/research-recherche/stat/ctums-esutc_2009-eng.php

Table 3, *left*: Total smokers in BC and Canada by year

"We need to show greater compassion for smokers. We need to offer them far more help to quit and a wider range of less toxic options for those not yet ready, willing and able to quit. We need to provide truthful and non-misleading information about the relative risks, and allow consumers to make informed decisions.

Were we to do so, we could have far, far fewer Canadians smoking cigarettes. That would create a public health breakthrough of historic proportions. Such a breakthrough would not stop efforts at reducing overall nicotine use, but, even for those with zero-tolerance for any form of nicotine use, the first step should be to keep the users alive long enough for other interventions to work."

David Sweanor[76]

While reducing the percentage of smokers in the population is important, the total numbers indicate a substantial, unacceptable and preventable future burden of death and illness. The number of tobacco vendors is substantial (5900 in BC in 2010[118]) which certainly contributes to the ongoing availability of tobacco. In developing countries, which are least able to deal with the health impacts of tobacco, the trends are particularly worrisome: "The burden of tobacco use is greatest in low- and middle-income countries, and will increase more rapidly in these countries in coming decades."[119]

The commoditization of alcohol is another example. The failure to use a public health approach to alcohol results in substantial death, disease, disability and significant social problems.[18] In fact, alcohol has been going through a period of deregulation, such that in BC the availability for alcohol rapidly increased from 786 retail liquor stores in 2002 to 1294 retail liquor stores in 2008.[120] In this report the BC Provincial Health Officer concluded "Overall, alcohol is confirmed as a major source of health and social harms and costs, and it appears as though the concerns expressed in the 2002 PHO report about the effects of increased access leading to greater consumption have been confirmed. The evidence also suggests that the growth in consumption has translated into concomitant increases in some health and social harms, notably indicators of alcohol-related road trauma and, to a lesser extent, hospitalizations attributable to alcohol use."

Appendix 6

Regulating Currently Illegal Drugs – Learning From Other Countries

Specific proposals examining the details of a regulated market for all currently illegal drugs are being actively explored by different groups around the globe. In *Drug Policy and the Public Good* Babor et al[16] have recently summarized the evidence about illegal drug policies. In addition, the UK based group Transform has produced the book by Rolles et al *After the War on Drugs: Blueprint for Regulation*[17], that provides a regulatory framework and models for different classes of substances, and which has been helpful in developing the proposals in this paper.

In the recently published book *Cannabis Policy: Moving Beyond Stalemate* Room et al[19] summarize the world literature on cannabis policy. This book proposes a *Framework Convention on Cannabis Control* based on the World Health Organization-sponsored United Nations *Framework Convention on Tobacco Control*.

A number of countries have attempted to move away from indiscriminate prohibition in relation to possession and use. Room et al[19] describes four categories of cannabis use control reforms:

Depenalization · prohibition with cautioning or diversion (France, Australia, Canada, Britain, a number of US states, and Brazil).

Decriminalization · prohibition with civil penalties, i.e. fines and administrative sanctions (Belgium, Italy, Czech Republic, Portugal, Denmark, Australia).

De facto legalization · i.e. prohibition with an expediency principle – laws are not enforced at select stages (The Netherlands, Germany, Austria, Spain).

De jure legalization · i.e. explicit laws that permit use (Alaska, Colombia, Switzerland, India, Spain, US state and Canada medical cannabis laws).

In Latin America some significant changes have occurred. The Latin American Commission on Drugs and Democracy co-chaired by the former presidents of Brazil, Mexico, and Colombia called for a paradigm shift in drug policies: "Evaluate from a public health standpoint and on the basis of the most advanced medical science the convenience of decriminalizing the possession of cannabis for personal use."[121] In August 2009 Mexican legislation provided for referral for treatment for small amounts of possession for personal use, rather than criminalization. In 2009 the Supreme Court of Argentina ruled it is unconstitutional to punish people for possessing cannabis for personal consumption.[19]

Similar reforms to address supply have been much more limited, and proposals rely on systems in which all cultivation, sale, and supply of cannabis would be controlled or regulated by the government, carrying out an active monopoly for cannabis production and distribution which resembles the systems by which alcohol production and dissemination are handled.[19]

Historically, the Netherlands has been a leading country in public health-based drug policy reform. Cannabis has been de facto legalized for over 30 years and is sold openly in "coffee shops" to adults (over the age of 18) with volume restrictions and no advertising for either consumption or take home use. Coffee shops do not sell alcohol and the only other substance sold is

6

| Appendix |

caffeine. The Netherlands' reductions in criminal penalties appear to have had little effect on cannabis use.[19] However it has been suggested that some increase in use was associated with increased commercial access with a growth in numbers of coffee shops and visible promotion especially in counter culture media.[19] The Dutch coffee shops appear to have separated the cannabis market from other illegal drug markets (except that increasing age restriction may have diverted youth to illegal markets and the production of cannabis has not been addressed).

The evidence for the success of the approach has been in the relatively low Dutch cannabis use rates (in 2005 lifetime use for people age 15-64 years was estimated at 23%, compared to the 2004 Canada estimate of 44%; the Dutch past-year use rate in 2005 was 5.4% compared to the 2004 Canada estimate of 14.1%)[122, 32] and low drug associated health and social problems.[123] This is consistent with the global analysis of drug use patterns where it can be observed that consumption levels vary independently of severity of drug laws.[48]

Portugal has also made significant contributions to drug policy reform as in 2001 they were the first country to completely decriminalize all drug use. The Portuguese realized that the problems associated with substances were significant and that "the principal obstacles to effective government policies to manage the problems were the treatment barriers and resource drain imposed by the criminalization regime"[51]. The fears of opponents that this would result in increased health and social problems did not materialize. In fact the opposite has occurred; decriminalization does not appear to have had an adverse effect on drug usage rates, and "drug related pathologies – such as sexually transmitted diseases and deaths due to drug usage have decreased dramatically"[51]. For example HIV notification among drug users declined from 1400/year to 400/year between 2000 and 2006, while non-drug users saw hardly any effect – from 1250/year to 1150 per year. For the same period drug-related deaths declined from close to 400 to 290. Other reviewers came to similar conclusions i.e. that decriminalization in Portugal did not lead to major increases in drug use and that the evidence indicates reductions in problematic use, drug related harms, and criminal justice overcrowding.[8]

In a movement away from the criminal justice approach, in 2009 the Czech government decriminalized personal possession of small amounts of heroin, cocaine, amphetamine, cannabis, ecstasy and psychedelics.[124]

In 2005 New Zealand amended its *Misuse of Drugs Act* to allow for a new restricted substances regime to regulate access to psychoactive substances that pose a less than moderate risk of harm. Changes included a minimum purchase age of 18, prohibitions of free-of-charge distribution and of advertisement of restricted substances in certain media. The government subsequently passed the Misuse of Drugs (Restricted Substance) Regulations 2008 which placed further controls on places from which restricted substances can be sold or supplied, the signage that must be displayed, and the advertising, labelling, packaging and storing of restricted substances.[125, 126] Benzylpiperazine-containing party pills (BZP) were included as restricted substances with the 2005 amendment. However in 2008 BZP, phenylpiperazine and related substances were classified as controlled drugs, making it illegal to manufacture, import, export, supply, purchase, possess, and use these substances.[85] Currently there are no restricted substances.

In British Columbia a new *Public Health Act* has been developed which allows for defining a broad range of trades, businesses and other activities as "regulated activities" if they pose risks to health; and allows for regulating conditions, things, or activities as either health hazards or health impediments.[127] Use of this Act to regulate substances and activities associated with them is possible but has not yet been explored.

While evaluations of these reforms have been limited in quantity and quality and generalizing from one country to another is difficult, in general evaluations of reforms has found that changes in penalties do not affect cannabis use and that trends in cannabis use appear to be independent of penalties. However reforms do reduce adverse consequences of prohibition because costs to individuals are reduced by lesser penalties.[19] However these beneficial effects have been noted to be undercut by net widening of police activity and discriminatory application of enforcement.[19]

Appendix 7

Proposed Policy Goals and Objectives by Sector

Health Sector

Goal: Minimize substance related morbidity and mortality.

Objectives:

- Reduced demand for substances.
- Reduced risky use of substances i.e. injection, smoking during pregnancy
- Reduced use of concentrated forms of substances.
- Delayed onset of substance use by youth.

Social Welfare Sector

Goals: Maximize individual, family, and community self reliance.

Minimize discrimination, stigmatization, and marginalization.

Objectives:

- Reduced family breakdown.
- Reduced individual and family dependence on social services.
- Reduced homelessness.
- Enhanced child development.
- Reduced child abuse and neglect.
- Enhanced community stability.

Education Sector

Goal: Maximize educational attainment

Objectives:

- Increased school completion.
- Reduced school problems related to substances.
- Reduced post-secondary school substance problems.

Safety, Public Order, and Justice Sector

Goal: Maximize public safety.

Minimize public disorder and crime.

Objectives:

- Reduced threatening activities and public disorder.
- Enhanced sense of security.
- Reduced arrests and incarceration of drug dependent people.
- Reduced crimes due to intoxication.
- Reduced psychoactive substance related organized criminal activity.

Agriculture Sector

Goal: Maximize agricultural activity.

Objectives:

- Increased agricultural production and revenues.
- Increased crop and product diversity.
- Increased agricultural land under production.
- Increased agricultural work force.

Environmental Sector

Goal: Maximize environmental sustainability.

Objectives:

- Reduced herbicide use.
- Reduced fossil fuel use.
- Increased conservation of forests.

Business and Finance Sector

Goals: Maximize business activity.

Use scarce public resources wisely.

Objectives:

- Increased revenues to legitimate businesses.
- Reduced adverse effects on businesses due to substance related activities.
- Increased tax revenues.
- More prudent, effective use of funds for health, social, education, public safety, and criminal justice programs.

Appendix 8

Proposed Regulation and Strategy development Questions

The proposed policy framework is a starting place for dialogue regarding the relative value of the various policy goals and objectives, and the strategies that are needed for managing each category of substances.

With regards to regulatory strategies, the "life cycle" and business model that supplies the substance to the consumer needs consideration. Of particular importance will deciding whether substances are supplied using largely "for profit" business models, or largely "public interest" models as described earlier.

The following provides some questions to be considered for the regulation of each substance category. The answers to each question will need to be analyzed according to the policy framework principles, and with respect to how the answer options meet the policy goals and objectives.

Public health based regulation would include the entire spectrum of psychoactive substance management (growth/production, wholesaling, marketing and distribution, retailing, prescribing, information provision, taxation, and consumption).

The follow questions are organized based on the determinants of harms and benefits of substances model (Figure 3, pg 17).

"… there is no doubt that making a market legal greatly increases the mechanisms available to the state for regulating it. And those who hold a license or other permission from the state to operate in the legal market have a shared interest in putting the illegal actors out of business."

Room et al[19]

Availability

Governance, Business Model, Wholesale, Distribution and Revenue

Should any business model other than public interest wholesaling, marketing and distribution* be allowed?

Should marketers be required to support prevention and minimization of the harmful effects of their product? If so, how?

To where do revenues to government from sales and taxation flow?

Should taxation levels be set to ensure that revenue is commensurate with the cost of harms to society?

Should taxation revenue be targeted to prevent and reduce the harmful effects of problematic substance use?

Should taxation revenue be used for general revenues?

Retailing – Purchase to Take Away and On-site Consumption

What are the licensing and training of staff/operators requirements?

What limitations will be placed on hours of operation, distance from schools?

* E.g. Wholesaling, marketing, and distribution only through a dedicated agency that has primarily a health promotion, protection, and harm minimisation charter. This would allow for control of the form and contents of, and information about, substances to minimise harms, manage the supply in ways that remove promotions, and provide incentives to develop less harmful products.

8

| Appendix |

What combinations of substances will be allowed to be sold by a single retailer?

What information must retailers provide as part of the sales about appropriate use, harms benefits, and resources for help if problems arise from use?

Accessibility

Age

What is the legal age of sale/purchase?

What is the minimum age for staff to work in retail outlets?

Price, Taxation and Other Financial Controls

How should prices be regulated to prevent pricing being used as a promotion of products, and as a method of influencing access and consumption?

How should taxation be used as a public health measure to affect price and there by patterns of use?

Prescription

Should some substances only be available by prescription?

What regulations are needed to reduce diversion of prescribed drugs, while not adversely affecting appropriate medical care?

Demand

Information and Educational Requirements

What information and education should be required to be provided regarding substances?

What labelling, warning, and other packaging is required to protect public health?

What information do marketers have to provide about appropriate use, harms, benefits, and resources for help if problems arise from use.

Should marketers bear a liability for withholding information about harms, misleading consumers, or for the health and social costs of their substances?

What educational programs should be required of school boards?

Product Promotion

Should any advertising, promotion, or sponsorship be permitted, and if so, under what conditions?

If promotion is permitted in exceptional circumstances for reasons of low harm potential (e.g. some caffeine products), what restrictions are required?

Should retailers be allowed to engage in promotional activities?

Supply – Growth, Production and Product

Should individuals be allowed to grow, produce, or acquire the substance for their own personal use?

What restrictions on growth/production should be imposed to mitigate potential adverse impacts of such activities on family, neighbours, and community?

Should individuals be permitted to sell or otherwise trade substances that they have grown, produced, or acquired?

Should larger scale growth/production be allowed for selling or otherwise distributing substances?

Should growers/producers be public sector or private sector owned and operated?

What standards should exist for growers/producers? e.g. quality control, standards, risk minimization to consumer.

Purchase, Consumption, and Use

What age and other restrictions should be established to protect children and youth?

What behaviours should be subject to penalties and criminal sanctions? E.g. impaired driving or impaired operation other machinery, exposure of others to smoke.

Appendix 9

Example Government Monopoly-type Business and Governance Model

Articles 23, 26 and 28 of the 1961 UN Single Convention on Narcotic Drugs, the first of three international conventions which governs illegal substances, requires that government monopolies be established if a country cultivates cannabis, coca or opium poppies to control the "importing, exporting, wholesale trading and maintaining stocks"[128] (see Appendix 9).

"A state monopoly or licensing regime gives the state strong tools to control the market."

Room et al[19]

Public interest business models for all substances could be similar to government alcohol monopolies, which were originally established to control alcohol related harms. This model could be overseen and implemented by an "arms length" provincial level body (hereafter called the "Commission"). However it would differ from exclusively for profit corporations in that it would have primarily a disease and injury prevention, health promotion, protection, and harm minimization charter.

The Commission would be charged with supply control, demand reduction, and legislation implementation. The mandate would be to act in the best interests of the public and to facilitate the provision of substances to consumers in such a manner that minimizes the health and social consequences of consumption, while allowing for the realization of potential benefits, on a cost recovery basis to the province.

Public service delivery organizations at arm's length accountable to government through a minister already exist, such as the BC regional health authorities, BC Housing, BC Transit, Community Living BC, and the BC Legal Services Society. The Commission would operate in an arm's length fashion from normal government operations to allow for stability and clarity of focus. It would also operate on a cost recovery "non profit" basis to ensure a health rather than profit generation focus, with costs to be recovered as discussed below.

Many government ministries have a shared interest in effective regulation and control of substances. Therefore the Commission staff will report to a board composed of people appointed by the ministers responsible for health, public safety, local government, education, child and family development, income assistance, public safety, agriculture, environment and finance. It would be accountable to the minister responsible for health in reflection of its primary mandate.

It will be essential to avoid possible regulatory "capture" of the system by industry (see Borland[55]) by including requirements for all board members and ministers involved to provide disclosure statements regarding financial or other interests in substances. Those with such interests would not be allowed to participate as part of the governing system.

The Commission would be advised by people who use, produce, distribute, and retail substances, local governments, experts in public health, mental health, addictions, social services, public, youth and children, education, business, agriculture, spirituality, aboriginal issues, environmental issues, criminal justice services, monitoring, inspection, administrative sanctions, enforcement, marketing and product promotion, and prosecution.

To maintain control of supply the Commission would be the only wholesaling organization authorized to purchase substances from growers or import to the province. It will be the only source of product for distribution to retailers. This model is similar to the BC Liquor Distribution Branch, which under the authority of the *Liquor Distribution Act*, has the sole right to purchase beverage alcohol, both in and out of British Columbia. The Liquor Distribution Branch is responsible for the importation, distribution and retailing of beverage alcohol in British Columbia.[129]

The Commission would be also be responsible for overseeing implementation of requirements on formulation and packaging of substances for retailers. The Commission may operate retail outlets itself, or it may distribute substances to licensed retailers.

Government revenues from the sale and taxation will flow to the Commission which will use the funds to:

- Cover the costs of running the Commission;
- Pay for the wholesale and distribution costs;
- Pay for evaluation costs (process and impact monitoring and best practice research);
- Invest in demand reduction, prevention, education and treatment programs including initiatives which target the social determinants of problematic substance use; and
- Supplement general government revenues once the above costs are covered.

United Nations Single Convention Articles

Article 4

General Obligations

The parties shall take such legislative and administrative measures as may be necessary:

a) To give effect to and carry out the provisions of this Convention within their own territories;

b) To co-operate with other States in the execution of the provisions of this Convention; and

c) Subject to the provisions of this Convention, to limit exclusively to medical and scientific purposes the production, manufacture, export, import, distribution of, trade in, use and possession of drugs.

Article 23

National Opium Agencies

1 A Party that permits the cultivation of the opium poppy for the production of opium shall establish, if it has not already done so, and maintain, one or more government agencies (hereafter in this article referred to as the Agency) to carry out the functions required under this article.

2 Each such Party shall apply the following provisions to the cultivation of the opium poppy for the production of opium and to opium:

a The Agency shall designate the areas in which, and the plots of land on which, cultivation of the opium poppy for the purpose of producing opium shall be permitted.

b Only cultivators licensed by the Agency shall be authorized to engage in such cultivation.

c Each licence shall specify the extent of the land on which the cultivation is permitted.

d All cultivators of the opium poppy shall be required to deliver their total crops of opium to the Agency. The Agency shall purchase and take physical possession of such crops as soon as possible, but not later than four months after the end of the harvest.

e The Agency shall, in respect of opium, have the exclusive right of importing, exporting, wholesale trading and maintaining stocks other than those held by manufacturers of opium alkaloids, medicinal opium or opium preparations. Parties need not extend this exclusive right to medicinal opium and opium preparations.

3 The governmental functions referred to in paragraph 2 shall be discharged by a single government agency if the constitution of the Party concerned permits it.

Article 26

The Coca Bush and Coca Leaves

1 If a Party permits the cultivation of the coca bush, it shall apply thereto and to coca leaves the system of controls as provided in article 23 respecting the control of the opium poppy, but as regards paragraph 2 d) of that article, the requirements imposed on the Agency therein referred to shall be only to take physical possession of the crops as soon as possible after the end of the harvest.

2 The Parties shall so far as possible enforce the uprooting of all coca bushes which grow wild. They shall destroy the coca bushes if illegally cultivated.

Article 28

Control of Cannabis

1 If a Party permits the cultivation of the cannabis plant for the production of cannabis or cannabis resin, it shall apply thereto the system of controls as provided in article 23 respecting the control of the opium poppy.

2 This Convention shall not apply to the cultivation of the cannabis plant exclusively for industrial purposes (fibre and seed) or horticultural purposes.

3 The Parties shall adopt such measures as may be necessary to prevent the misuse of, and illicit traffic in, the leaves of the cannabis plant.

Appendix 11

Implication for Governments and their Roles

Clarity and appropriate role definition between levels of government is critical, as all levels have important roles to play. This includes federal, aboriginal, provincial, territorial, and local governments.

Local governments have a particularly important role as they are front and centre in addressing the challenges posed to their communities by substances. Provincial and federal governments establish laws and policies that affect what happens in local communities, but are often distant when unintended consequences appear. Local governments often have innovative ideas and solutions as they are close to the action, are aware of community needs and concerns and have the flexibility to take action on local situations. For example, the City of Vancouver has produced a number of important documents and undertaken many actions regarding substances related issues (see **vancouver.ca/fourpillars/comm_dpp.htm**). Cookie cutter, one size fits all solutions from higher levels of government are sometimes more of a problem than a solution for local governments.

The provincial government is primarily responsible for health, education, social services and the criminal justice system (except for federal correctional institutions and national policing). It could play a primary role in developing new public health oriented delivery and regulatory structures and processes for prohibited substances based on provincial experience in dealing with alcohol and tobacco. Intra-provincial government approaches will be essential because of the far reaching impact of substances on numerous government ministries.

Aboriginal governments are rapidly evolving and playing an increasingly important role in the governance landscape in Canada. The impacts of substances on their populations have been disproportionate, their abilities to influence substances availability and patterns of use should not be underestimated, and the need to include them in all discussions about substances regulation is essential.

The federal role will continue to be important in public health promotion, monitoring, evaluation, international reporting, governing imports and exports, aligning the criminal law with public health and human rights imperatives, and synthesizing provincial perspectives to represent Canada on the international stage. Key will be putting into place federal processes that enable management of currently prohibited substances by the provinces. For example an historical precedence was the change in the federal gambling control law which gave control of gambling to the provinces.[56] A similar example in the US is state level management of medical cannabis (currently in 16 states* and the District of Columbia[62]).

One of the challenges of the current federal/provincial/local division of powers is that federal powers are particularly dominant when dealing with illegal substances, whereas provincial and local governments are the primary agencies that deal with the costs of the consequences of the predominantly prohibitionist regime.

From a jurisdictional point of view the problem is that while the provinces are responsible for most of the health care, social services, policing and provincial

* Alaska, Arizona, California, Colorado, Delaware, District of Columbia, Hawaii, Maine, Michigan, Montana, New Jersey, Nevada, New Mexico, Oregon, Rhode Island, Vermont, Washington

criminal justice service costs, it is the federal legislation that is engendering many of these costs. For example, some of the health care costs due to the emphasis on prohibition include costs due to hospitalizations, outpatient treatment of drug use related infections (HIV/AIDS, hepatitis B and C, skin infections, heart valve infections), emergency care and hospitalizations due to overdoses, and treatment of violent injuries due to drug related confrontations.

To rebalance this it could be helpful to work out the provincial costs due to the prohibitionist approach; compare that to the costs, and the potential taxes and other revenues anticipated under a regulated regime, and propose that the federal government reimburse provinces for the difference that is due to the implementation of federal prohibition laws. A parallel to this is the concept of recovering tobacco associated health care costs from the tobacco companies who are responsible for causing the expenses.

In summary, local, aboriginal, and provincial regulation and innovation should be supported and encouraged. Federal regulation should be focussed on those issues for which federal regulation is necessary or clearly superior for the public interest.

International agreements such as the international drug conventions, trade treaties, and human rights treaties are also relevant. These are guided by the United Nations, which was created in large part to support human rights, with one of the four founding purposes being "To achieve international co-operation in solving international problems of an economic, social, cultural, or humanitarian character, and in promoting and encouraging respect for human rights and for fundamental freedoms for all without distinction as to race, sex, language, or religion;"[130].

The UN focus on human rights provides the justification to the international community for moving to a public health based regulated market model of substances control. International agreements which support human rights should always be seen as pre-eminent over other treaties that govern substances. For a detailed discussion of this issue see Barrett[42].

The UN Single Convention dealing with substances, in article 4 limits "exclusively to medical and scientific purposes the production, manufacture, export, import, distribution of, trade in, use and possession of drugs"[128] and thus has a dichotomous perspective – substances are either prohibited or may be made available for medical and scientific purposes (see excerpt in Appendix 9). However, as stated in Barbor et al[16] the reality is that substances are also used "for staying awake and alert, improving physiological or physical performance, sleeping better, having better sex, and sensory enhancement. Restricting availability to the prescription regime means that these uses are either medicalized or illegitimized. The result has been a very broad medicalization of activities and conditions of daily life." The consequences have been increased pressure on governments to pay both for more and greater quantities of medications, as well to pay the enforcement costs of the prohibition policy in addition to the costs of the medical system.

Appendix 12

Opposition to Change

Proposals for revision of substances policies towards the incorporation of public health oriented approaches have commonly resulted in significant opposition. While a healthy debate is clearly needed, there must be greater recognition of the role that special interests (e.g. alcohol and tobacco industry, law enforcement lobby groups, pharmaceutical companies, the media, organized crime etc) will likely play in potentially opposing modernization in this area. This derives from the fact that many benefit from the existing approach and will support continued prohibition and commercialization of tobacco and alcohol. The police, judicial system workers, and the correctional system have seen much additional work, and many of their jobs were created as a result of the current approaches. Some have made the argument that, to some extent, the RCMP owe their existence to the fact that they have advocated for the drug war.[31] However, there are those within the enforcement sector (such as *Law Enforcement Against Prohibition* leap.cc) who are starting to speak out on the benefits of a regulated approach.

"No doubt, among the many factors responsible for the disjunction between scientific fact and public policy are the overwhelming influences of money and lobbying."

Battin et al[68]

The international illegal drug industry will likely be powerful in its efforts to maintain the status quo, fighting to maintain profits, and there could be large resources behind these efforts. This corrupting influence will not necessarily be easy to detect except that the underlying strategy will be to maintain prohibition of production, manufacture, and distribution.

As experience has shown, the legal substances industry is another barrier to a public health approach. The tobacco, alcohol, and pharmaceutical industries work very hard and invest large amounts of money in maximizing profits even when the adverse effects of their products are clearly known.[131, 132] They will also likely fear competition from the regulation and potential shift in use from their products to currently illegal substances.

In view of the substantial business interests in promotion, and the potential implications for promotion of other products that have negative health effects (i.e. unhealthy foods, dangerous products) opposition to the suggestion of prohibiting promotion is likely and in fact may be very challenging or take unexpected forms to protect business interests. The Quebec prohibition of advertising to children under age 13 is an example of the ability to take this action, which has been upheld by the Supreme Court of Canada to be a justifiable limitation on free speech rights.[133]

There will be those who predict that addictive drug use and harms will spiral out of control. Arguments will be used which will be similar to those that predicted an increase in social disorder and drug use before the opening of Vancouver's supervised injection site (InSite). In retrospect it is clear that the actual effect of InSite was the opposite of the dire predictions.[72]

12

| Appendix |

There will be fears with regards to increasing youth use. As pointed out earlier, the legal nature of benzylpiperazine-containing party pills (BZP) in New Zealand sent mixed messages to youth, in part because of the partial application of the full potential range of regulations.[85]

Parents will raise the concern that moving the legal status of substances from prohibited to regulated signals a change in messaging to youth. Some parents rely on the illegal nature of substances to support their admonitions. Maintaining a legal age for consumption will support parents in this regard, without having to resort to criminalizing personal behaviour that is not a threat to others.

"Sending the wrong message" can be interpreted in two ways:[19]

- From an instrumental perspective – that cannabis use will rise. The policy impact literature indicates this will not happen.[19]
- From an expressive perspective – that it is the duty of government to identify appropriate behaviours. This is not subject to empiric test but subject to considerations of ethics and human rights and subject to balance test – does criminalization of a widely engaged in behaviour undercut the overall rule of law.[19]

When proposals are made to "send a message" by using the law it is important to determine the motivation of the proposal and evaluate it according to these tests, particularly because of the unintended consequences that may result. The reality is that illegal substances are readily available in schools and communities and youth are well aware of the dishonesty of the prohibition message. Youth are also aware of the substantial numbers of adults who have used, and who continue to use substances.

Regulating substances as described in this paper will not prevent youth use, but age restrictions on purchase and the tightly controlled nature of the outlets will limit that access and "send the right message" of honesty, care and concern. Removing the taboo and the attractive nature of substances, and regulating products, actually sends a mature and constructive message: "that these are worrisome enough products to warrant very careful regulation". This will assist in making substances uninteresting to youth.

As protection of the health of young people by including measures to delay onset of use of substances will be important, it is anticipated that minimum age of purchase and restrictions of sales to youth below a certain age will be features of a new model. However, having prohibitions related to age will pose challenges due to the creating of an illegal market of sales to underage youth. Risks of this approach include bringing youth into contact with those who would exploit them, unsupervised consumption experiences, and potential consumption of adulterated substances.

While it is expected that having a legal age of purchase and sale will reduce age of uptake and regular use, other measures will need to be in place to support parents and youth who choose to use substances to make the transition from being an "underage" non-user to being an age permitted purchaser. These could include intergenerational education, graduated licensing for vehicle operation with initial very strict limits on substance use and driving, and allowance for underage consumption in supervised situations.

Careful analysis is needed to determine the risks and benefits of setting an appropriate legal age of purchase. Factors to consider are the potential to increase harms by having the age of purchase too closely linked to the age of leaving home (hence reduced parental supervision), and the potential to increase risk of dependency and poor school performance by setting too young an age of purchase. Protective factors in the model in this paper are the proposed limits on availability and access; and the lack of product promotion.

This approach will substantially reduce the connection of youth with the current criminal underworld that supplies them and puts them at risk of becoming engaged or impacted by criminal activity. This will be very different from the current situation where youth obtain drugs from a criminal marketplace to use and sell to each other with no restrictions.

12

| Appendix |

To address parents' concerns it will be essential to ensure that children and youth receive honest, factual and objective information about substances and have opportunities to learn skills to assist them in avoiding problem substance use. Youth also need to have adequate support services available if they do find they are developing problems associated with substances.

"A drug whose production is simple and widely available indicates the need for less restrictive regulatory mechanisms in order to challenge the economic realities of the illegal market."

Mark Haden[134]

Concerns about potential increases in population levels of consumption and a subsequent increase in adverse population health effects will be raised. While the evidence is reassuring that with a comprehensive public health approach this will not happen, careful monitoring will provide policy makers and the public detailed information about the impact of changes in order to determine whether these concerns are being realized.

Failure to adequately regulate is a risk and lax regulations on sellers, reliance on self-regulation, and allowing promotion by industry driven commercial interests are lessons learned from alcohol and tobacco that are likely to produce undesirable outcomes.[19]

Substance pricing needs to be competitive to illegal product and restrictions cannot be over zealous lest they re-create an illegal market.

The consequences of these changes are predicted to be far less than the consequences of continuing with the current criminal and commercial models of regulation of substances. One particular consequence that will need careful analysis is the anticipated effects of changing the regulatory regime in Canada with respect to that which exists in the United States. Significant differences in regimes may or may not have unintended consequences that will need to be anticipated and mitigation measures put in place to deal with them.

Appendix 13

Expected Benefits of Public Health Oriented Regulation

With a comprehensive, evidence-informed approach to substances that includes regulatory reform based on public health and human rights principles it can be anticipated that harms associated with psychoactive substances can be substantially reduced. Also there are many potential benefits from this model for individuals, families, communities, and society.

Such a system would bring international recognition of BC and Canada for innovation, creativity, compassion, and respect for human rights. In particular it is predicted that substance related morbidity and mortality will be reduced. It is predicted that from a health perspective there will be:

- Reduced risky use of substances i.e. injection, smoking during pregnancy.
- Reduced use of concentrated forms of substances.
- Delayed onset of substance use by youth.
- Improved performance of the health system by relieving it from dealing with large numbers of substance related morbidity and mortality.

Individual, family, and community self reliance should be improved, and discrimination, stigmatization, and marginalization related to substances should be reduced. There will likely be:

- Increased engagement of marginalized citizens.
- Enhanced community stability.

Educational attainment levels will likely be improved, including:

- Reduced involvement of youth in substance related activities.
- Reduced high school and post-secondary school problems related to substances.

13

| Appendix |

Public safety and public order will likely be improved. It is predicted there will be:

- Reduced threatening activities and public disorder.
- Reduced arrests and incarceration of people who are drug dependent.
- Reduced violent crimes due to intoxication.
- Reduced violence related to drug sales.
- Reduced organized criminal activity.
- Greater respect for the law and criminal justice personnel.
- Reduced corruption of police and other officials.
- Reduced numbers of people with criminal records and incarcerations and attendant harms that accompany these invasive interventions.
- Improved working conditions and lowered risk of occupational injury and death for police and prison workers.
- Enhanced performance of the criminal justice system by relieving it from dealing with large volumes of illegal substances related cases.
- Reduced personal risk to law enforcers when entering grow ops, meth labs, etc.

Agricultural activity could be enhanced, including:

- Increased agricultural production and revenues.
- Increased crop and product diversity.
- Increased agricultural work force.

Environmental sustainability could be improved, through:

- Reduced herbicide use due to stopping herbicide applications as part of the "war on plants".
- Reduced fossil fuel use due to emphasis on local production.
- Reduced environmental damage from the toxic by-products of illegal labs.
- Increased conservation of forests from use of alternate crops such as hemp to produce fibre.

Business activity will likely increase and scarce public resources will be used more wisely. There will be:

- Increased revenues to legitimate businesses.
- Reduced adverse effects on businesses due to fewer substance related criminal and public disorder activities.
- Increased tax revenues.
- More prudent, effective use of funds for health, social, education, public safety and criminal justice programs.

References

1. Rehm J, Baliunas D, Brochu S, Fischer B, Gnam G, Patra J, et al *The Costs of Substance Abuse in Canada, 2002*. Ottawa: Canadian Centre on Substance Abuse. March, 2006.
2. Canadian Centre on Substance Abuse. *National Framework for Action to Reduce the Harms Associated with Alcohol and Other Drugs and Substances in Canada*. First Edition, Fall 2005.
3. Vienna Declaration. Available at: viennadeclaration.com.
4. Law Commission. *Controlling and Regulating Drugs—A Review of the Misuse of Drugs Act 1975*. Wellington, New Zealand: Law Commission, New Zealand; 2011.
5. Global Commission on Drug Policy. *War on Drugs: Report of the Global Commission on Drug Policy*. Global Commission on Drug Policy; 2011 June.
6. Marks, J. *The Paradox of Prohibition* in *"Controlled Availability: Wisdom or Disaster?"*; National Drug and Alcohol Research Centre, University of New South Wales; p. 7-10. 1990.
7. Government of Canada. *Canadian Charter of Rights and Freedoms*. 1982.
8. Hughes C, Stevens A. *What Can We Learn From The Portuguese Decriminalization of Illicit Drugs?* Br J Criminol 2010; 11;50(6):999-1022.
9. Horgan C. *Substance abuse: The nation's number one health problem: Key indicators for policy*. New Jersey: Schneider Institute for Health Policy for the Robert Wood Johnson Foundation; 2001 February.
10. Health Officers Council of British Columbia. *Submission to the Provincial Coroner's Task Force Examining Illicit Heroin Related Deaths*. Victoria, British Columbia; 1994.
11. Health Officers Council of British Columbia. *A Comprehensive Public Health Response to the Problem of Illicit Injection Drug Use*. Victoria, British Columbia; 1998.
12. Health Officers Council of British Columbia. *Psychoactive Drugs, Including Alcohol and Tobacco: A Public Health Approach*. Victoria, British Columbia; 2004.
13. Health Officers Council of British Columbia. *A Public Health Approach to Drug Control in Canada Discussion Paper*. Victoria, British Columbia; 2005.
14. Health Officers Council of British Columbia. *Regulation of Psychoactive Substances in Canada - Seeking a Coherent Public Health Approach*. Victoria, British Columbia; 2007.
15. Stockwell T. *Preventing harmful substance use: the evidence base for policy and practice*. Chichester, England ; Hoboken, NJ: John Wiley & Sons; 2005.
16. Babor T. et al *Drug Policy and the Public Good*. UK: Oxford University Press; 2010.
17. Rolles S. *After the War on Drugs: Blueprint for Regulation*. United Kingdom: Transform Drug Policy Foundation; 2009.
18. Babor T. et al *Alcohol: No Ordinary Commodity: research and public policy*. Oxford University Press, New York, NY; 2010,
19. Room R, Fischer B, Hall W, Lenton S, Reuter P. *Cannabis policy: moving beyond stalemate*. Oxford; New York: Oxford University Press; 2010.
20. King County Bar Association. *Drug Policy Project. Effective Drug Control: Toward a New Legal Framework*. 2005.
21. Room R. *Rethinking alcohol tobacco and other drug control*. Addiction 2003; June;98(6).
22. Haden M. *Controlling Illegal Stimulants: a Regulated Market Model*. Harm Reduction Journal 2008;5(1).
23. Rolles S. *An alternative to the war on drugs*. BMJ 2010; July 17;341:c3360:127-8.
24. Perry S, Reist D. *Words, Values, and Canadians: A report on the dialogue at the National Symposium on Language* [Final Report on the National Symposium on Language]. Vancouver: University of Victoria; 2006.
25. Tupper K. *Drugs, discourses and education: A critical discourse analysis of a high-school drug education text*. Discourse: Studies in the Cultural Politics of Education 2008;29(2):223-38.
26. Brand B. *Drugs and Drug Abuse: a reference text book*. 3rd ed. Toronto, Ontario: Addiction Research Foundation; 1998.

27. Nelson M. *The barbarian's beverage: A history of beer in ancient Europe*. New York: Routledge; 2005.
28. Nutt D, King LA, Saulsbury W, Blakemore C. *Development of a rational scale to assess the harm of drugs of potential misuse*. Lancet 2007; 03/24;369(9566):1047-53.
29. MacCoun RJ, Reuter P. *Drug War Heresies; Learning from Other Vices, Times and Places*. Cambridge, UK: Cambridge University Press; 2001.
30. Nutt D et al *Drug harms in the UK: a mulitcriteria decision analysis*. Lancet 2010; November 1;6736.
31. Giffen PJ, Endicott S, Lambert S. *Panic and Indifference: The Politics of Canada's Drug Laws: A Study in the Sociology of Law*. Canadian Centre on Substance Abuse; 1991.
32. Adlaf E, Begin P, Sawka E. *Canadian Addiction Survey (CAS): A national survey of Canadians' use of alcohol and other drugs: Prevalence of use and related harms: Detailed report*. Ottawa: Canadian Centre on Substance Abuse; 2005.
33. Canadian Tobacco Use Monitoring Survey 2008. Available at: hc-sc.gc.ca/hc-ps/tobac-tabac/research-recherche/stat/ctums-esutc_2008-eng.php.
34. Fischer B, Rehm J, Goldman B, et al *Non-medical use of prescription opiods and public health in Canada: an urgent call for research and intervention development*. Can J Public Health 2008;99:182-4.
35. Dhalla I, Mamdani M, Sivilotti M. *Prescribing of opioid analgesics and related mortality before and after the introduction of long-acting oxycodone*. CMAJ 2009; December 8;181(12):891-6.
36. Compton W, Volkow N. *Major Increases in opiod analgesic abuse in the United States: Concerns and strategies*. Drug & Alcohol Dependence 2006;81:103-7.
37. Gordon R, Kinney J. *Reducing Crime and Improving Criminal Justice in British Columbia: Recommendations for Change—A discussion paper for the BC Progress Board*; 2006 November 15.
38. Spooner C, Heatherington K. *Social Determinants of Drug Use: Technical Report Number 228*. Sydney: National Drug and Alcohol Research Centre, University Of New South Wales; 2004.
39. DeBeck K, Wood E, Montaner J, Kerr T. *Canada's 2003 renewed drug strategy—an evidence-based review*. HIV/AIDS Policy and Law 2006; December;11(2/3):1-11.
40. Kerr T, Small W, Wood E. *The public health and social impacts of drug law enforcement: A review of the evidence*. International Journal of Drug Policy 2005;16:210-220.
41. Werb D, Rowell G, Kerr T, Guyatt G, Montaner J, Wood E. *Effect of Drug Law Enforcement on Drug-Related Violence: Evidence from a Scientific Review*. Vancouver: Urban Health Research Initiative, British Columbia Centre for Excellence in HIV/AIDS; 2010 March 23.
42. Barrett D, Lines R, Schliefer R, Elliot R, Bewley-Taylor D. *Recalibrating the Regime: The Need for a Human Rights Based Approach to Drug Policy*. The Beckley Foundation and the International Harm Reduction Association; UK: 2008 March. Report No. 13.
43. Carstairs C. *Jailed for Possession: Illegal Drug Use, Regulation, and Power in Canada. 1920-1961*. Toronto: University of Toronto Press; 2006.
44. Auditor General of Canada. *Illicit Drugs: The Federal Government's Role*. Ottawa: Office of the Auditor General of Canada; 2001.
45. Wyler L. S. *Report to Congress; International Drug Control Policy*. Congressional Research Service; 2008 June 23.
46. Easton S. *Marijuana Growth in British Columbia*. Vancouver, BC: Fraser Institute; 2004 May. Report No. 74.
47. BC Stats. *BC GDP by Industry—NAICS Aggregations*. Victoria, BC: Government of BC; 2010.
48. Nolin P. *Cannabis: Our Position for a Canadian Public Policy—Report of the Senate Special Committee on Illegal Drugs*. Ottawa: Senate of Canada; 2002.
49. Mann J. *Medicine and Public Health, Ethics and Human Rights*. Hastings Center Report 1997; May-June;27(3):6-13.
50. Moreira M, Hughes B, Costa Storti C, Zobel F. *Drug Policy Profiles: Portugal*. Luxembourg: European Monitoring Centre for Drugs and Drug Addiction; 2011.
51. Greenwald G. *Drug Decriminalization in Portugal: Lessons for Creating Fair and Successful Drug Policies*. Cato Institute; 2009.
52. Giesbrecht N, Stockwell T, Kendall P, Strang R. *Alcohol in Canada: reducing the toll through focused interventions and public health policies*. Canadian Medical Association Journal 2011; Feb 7;DOI:10.1503.
53. Armenta A. et al *Drug Policy Guide*. International Drug Policy Consortium; 2010 March.
54. Obama B. *A debt of gratitude to so many tireless advocates*. The Whitehouse Blog 2009; March 9.

55. Borland R. *A strategy for controlling the marketing of tobacco products: a regulated market model*. Tobacco Control 2003;12:374-82.

56. Callard C, Thompson D, Collishaw N. *Curing the addiction to profits : a supply-side approach to phasing out tobacco*. Ottawa: Canadian Centre for Policy Alternatives; 2005.

57. National Alcohol Strategy Working Group. *Reducing Alcohol-Related Harm in Canada: Toward a Culture of Moderation — Recommendations for a National Alcohol Strategy*. Canadian Centre on Substance Abuse; 2007 April.

58. Stockwell T, Zhao J, Macdonald S, et al *Changes in per capita alcohol sales during the partial privatization of British Columbia's retail alcohol monopoly 2003-2008: a multi-level local area analysis*. Addiction 2009;104:1827-36.

59. Stockwell T, Zhao J, Macdonald S, Vallance K, Gruenewald P, Ponicki W, et al *Impact on alcohol-related mortality of a rapid rise in the density of private liquor outlets in British Columbia: a local area multi-level analysis*. Addiction, 106: 768–776. 2011.

60. DesJarlais D. *Harm Reduction — A Framework for Incorporating Science into Drug Policy*. American Journal of Public Health 1995; January;85(1):10-12.

61. City of Vancouver. *Preventing Harm from Psychoactive Substance Use*. Vancouver, British Columbia: City of Vancouver; 2005.

62. *16 Legal Medical Marijuana States and DC*. Available at: medicalmarijuana.procon.org/view.resource.php?resourceID=002481. Accessed July 11, 2011.

63. Gray, J. *Booze*. The Macmillan Company of Canada Limited, Toronto, 1972.

64. Gardner D. *How to get me to shut up about drugs*. Ottawa Citizen 2009; March 6.

65. World Health Organization. *Lexicon of alcohol and drug terms published by the World Health Organization*. World Health Organization; 2010.

66. www.dictionary.com.

67. BC Ministry of Health Services. *Every Door is the Right Door*. Government of British Columbia; 2004 May.

68. Battin M, et al *Drugs and Justice*. Oxford University Press ed. Oxford; 2008.

69. *The Solid Facts: Second Edition* in *Social Determinants of Health*. Europe: World Health Organization; 2003.

70. Reinarman C. *The Social Construction of Drug Scares* in P. and P. Adler, editor; *Constructions of Deviance: Social Power, Context, and Interaction*. Wadsworth Publishing Co.; 1994. p. 92-103.

71. Tupper K. *Entheogens & Education: Exploring the Potential of Psychoactives as Educational Tools.* Journal of Drug Education and Awareness 2003;Vol 1(No 2):145-61.

72. Wood E, Tyndall M, Montaner J, Kerr T et al *Summary of findings from the evaluation of a pilot medically supervised safer injecting facility.* CMAJ 2006; November;175(11):1399.

73. Anthony J, Warner L, Kessler R. *Comparative epidemiology of dependence on tobacco, alcohol, controlled substances, and inhalants: Basic findings from the National Comorbidity Study.* Experimental and Clinical Psychopharmacology 1994;2:244-68.

74. City of Vancouver, Drug Policy Program. *Preventing Harm from Psychoactive Substance Use.* City of Vancouver; 2005 November.

75. Royal College of Physicians. *Harm reduction in nicotine addiction: helping people who can't quit. A report by the Tobacco Advisory Group of the Royal College of Physicians.* London: Royal College of Physicians; 2007.

76. Sweanor D. *It's Smoking that Kills.* Ottawa Citizen 2008; January 31.

77. *Public Letter to Kofi Annan*, Secretary General, United Nations June 1, 1998.

78. Miron J. *The Budgetary Implications of Drug Prohibition*; 2010 February.

79. Surveillance and Risk Assessment Division, Centre for Communicable Diseases and Infection Control. *Summary: Estimates of HIV Prevalence and Incidence in Canada, 2008*. Public Health Agency of Canada; 2009 November 25.

80. *Epidemiology of Acute Hepatitis C Infection in Canada: Results from the Enhanced Hepatitis Strain Surveillance System (EHSSS)*. Public Health Agency of Canada; Accessed 2010 June 14.

81. *Update on agranulocytosis (neutropenia) associated with levamisole in cocaine in British Columbia.* British Columbia: BC Centre for Disease Control; 2009 December 10.

82. *Anthrax: information on 2010 outbreak*. UK: Health Protection Agency; 2010 August.

83. *Mexican Government Raises Figure For Drug War Deaths For Second Time In Four Months*. Latin America News Dispatch 2010; August 4.

84. *Police-reported crime statistics 2008*. Ottawa: Statistics Canada; 2009 July 21.
85. Sheridan J, Butler R. *"They're legal so their safe, right?" What did the legal status of BZP-party pills mean to young people in New Zealand*. International Journal of Drug Policy 2010; January;21(1):77-81.
86. Wood E, Werb D, Fischer B, et al *Tools for Debate: US Federal Government Data on Cannabis Prohibition*. International Centre for Science in Drug Policy; 2010.
87. European Coalition for Just and Effective Drug Policies. *Guidelines for Drug Policies in the 21st Century*. European Coalition for Just and Effective Drug Policies; 2001 March.
88. United Nations. *Political Declaration - Guiding Principles of Drug Demand Reduction and Measures to Enhance International Cooperation to Counter the World Drug Problem*. Special Session of the General Assembly Devoted to Countering the World Drug Problem Together. 8-10 June 1998.
89. *The Price and Purity of Illicit Drugs: 1981 through the second quarter of 2003*. Executive Office of the President Office of National Drug Control Policy; 2004 November.
90. National Drug Intelligence Center. *National Drug Threat Assessment 2010*. U.S. Department of Justice; 2010 February.
91. *Angus Reid Poll News Release 2010*. April 15.
92. *Angus Reid Public Opinion Poll 2009*. Dec 9.
93. *Proposition 19 Results 2010*. November.
94. *The Newspapers View: Canada could be a world leader in smarter drug strategies*. Vancouver Sun March 11, 2005.
95. *It just makes sense to end the war on drugs*. Vancouver Sun Feb 23rd, 2009.
96. *In our Opinion Legalization Needs Study*. The Province Feb 8, 2009.
97. *Is it time for society to rethink its drug laws*. Chilliwack Progress March 3, 2009.
98. *A stark reality, six shootings in the last seven days. Four dead two wounded*. Surrey Leader February 11, 2009.
99. *Gun Epidemic prescriptions*. Victoria Times Colonist February 9, 2009.
100. *Action is needed on gang menace*. Victoria Times Colonist February 13, 2009.
101. *Prescribed drugs a step forward*. Victoria Times Colonist Oct 25, 2008.
102. *Legalize drugs, put the gangs out of business*. National Post June 13, 2007.
103. Gardner D. *Losing the war on drugs*. Ottawa Citizen Sept 5 2000 – Sept 17, 2000.
104. *Mexican President Proposes Decriminalizing Some Drugs*. New York Times Oct 2, 2008.
105. *Argentina Eyes Legalizing Paco*. Toronto Sun August 19, 2008.
106. *Swiss Voters Back Legalized Heroin*. New Zealand Herald December 1, 2008.
107. *Latin American Panel Calls U.S. Drug War a Failure*. Wall Street Journal February 12, 2009.
108. Editor. *Marijuana: federal smoke clears, a little*. Canadian Medical Association Journal 2001; May 15;164(10):1397.
109. *Committee Proceedings on Bill C-15, An Act to amend the Controlled Drugs and Substances Act and to make related and consequential amendments to other Acts*. Available at: parl.gc.ca/common/Committee_SenProceed.asp?Language=E&Parl=40&Ses=2&comm_id=11. Accessed March 15, 2010.
110. Boseley S. *Leading doctor urges decriminalisation of drugs*. Guardian 2010; August 16.
111. Cheadle B. *U.S. works to reduce prison population as Canada boosts sentences*. Canadian Press 2009; September 15.
112. McKnight P. *The war on drugs has become a war against us*. Vancouver Sun 2010; March 23.
113. *War on Drugs Unsuccessful, Drug Czar Says*. CBS News, Associated Press 2010; May 13.
114. World Health Organization. *Call for action to reduce the harmful use of alcohol.* 2010; May 21.
115. Global Commission on Drug Policy. *Commission of World Leaders Urges End to Failed Drug War, Fundamental Reforms of Global Drug Prohibition Regime*. Press Release 2011, June.
116. *Anti-smoking action*. Australian Government Press Release 2010; April 29.
117. U.S. Department of Health, Education, and Welfare. *Smoking and Health: Report of the Advisory Committee to the Surgeon General of the Public Health Service*. Washington: U.S. Department of Health, Education, and Welfare, Public Health Service, Center for Disease Control; 1964. PHS Publication No. 1103.
118. Barton S. *Personal Communication*. BC Ministry of Health 2010.
119. *WHO report on the global tobacco epidemic, 2009: implementing smoke-free environments*. Geneva, Switzerland: World Health Organization; 2009.

120. Kendall P. *Public health approach to alcohol policy: an updated report from the Provincial Health Officer*. BC Ministry of Healthy Living and Sport; 2008 December.

121. Latin American Commission on Drugs and Democracy. *Drugs and Democracy: Towards a Paradigm Shift*. 2009.

122. van Laar M, et al *The Netherlands Drug Situation 2008: Report to the EMCDDA*. 2008 December 16.

123. Abraham A, Cohen p, van Til R, de Winter M. *Licit and illicit drug use in the Netherlands 1997*. CEDRO; 1999.

124. *Government clarifies rules on possession of drugs*. Prague Daily Monitor Dec 15, 2009.

125. Law Commission of New Zealand. *Controlling and Regulating Drugs*. 2010 February 11.

126. *Misuse of Drugs (Restricted Substances) Regulations 2008*.

127. *Public Health Act*. Available at health.gov.bc.ca/phact/index.html.

128. *Single Convention on Narcotic Drugs, 1961, as amended by the 1972 Protocol Amending the Single Convention on Narcotic Drugs, 1961*. 1972.

129. bcliquorstores.com/about-us. Accessed February 18, 2010.

130. *Charter of the United Nations*. Available at: un.org/en/documents/charter/intro.shtml.

131. Cunningham R. *Smoke and Mirrors: The Canadian Tobacco War*. Ottawa: The International Development Research Centre; 1996.

132. Leavitt F. *The Real Drug Abusers*. Oxford: Rowman & Littlefield Publishers Inc; 2003.

133. Irwin Toy v. Quebec Attorney General 1989;SCJ No 36 (1989), 1 SCR 927 (SCC).

134. Haden M. *Regulation of illegal drugs: An exploration of public health tools*. International Journal of Drug Policy 2004;15:225-30.

135. Open Society Foundations and the Campaign to Stop Torture in Health Care. *Treated with Cruelty: Abuses in the Name of Rehabilitation*. New York, NY. June, 2011.