

# Studying Substance Use and Improving Health: A Framework for Research and Knowledge Exchange

## A Strategic Plan for 2011-2015



**University  
of Victoria**

Centre for Addictions  
Research of BC

## **ACKNOWLEDGEMENTS**

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## **LIST OF ABBREVIATIONS**

CARBC	Centre for Addictions Research of BC
TRU	Thompson Rivers University
UVic	University of Victoria
UBC	University of British Columbia
UNBC	University of Northern British Columbia

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# Studying substance use and improving health: A framework for research and knowledge exchange

## **INTRODUCTION**

This document presents a renewed five-year strategic plan (2011 to 2015) for the Centre for Addictions Research of BC (CARBC), which was first established as an approved research centre of the University of Victoria (UVic) in 2005. The renewed Plan in many respects follows closely the original five-year plan which was deemed to have been successfully implemented following an independent review process conducted in October 2010. The renewed Plan has also been informed by recommendations emerging from a retreat held for CARBC faculty, staff, students, affiliates and community partners in May 2011, as well as by input from the CARBC Advisory Board. The Plan starts with some context regarding the host institution, discussion of key underlying concepts regarding substance use and related harms, and a brief history of the origins of the Centre. The rest of the Plan presents a revised mission and set of objectives and performance indicators across five Key Result Areas: building capacity for research and knowledge exchange, education and training, conducting high-quality research in designated priority areas, disseminating results to multiple audiences, and contributing to improved policy and practice outcomes.

## **SETTING THE CONTEXT**

### **THE UNIVERSITY CONTEXT**

CARBC is a provincial research centre whose main office is situated on the UVic campus. The university offers an intellectual environment where independent scholarly inquiry and academic freedom are embedded in its mandate. Since issues surrounding substance use in society are highly controversial and political, this environment creates a space where innovative and sometimes unpopular research can be freely carried out and appropriate recommendations articulated without undue pressure by vested interests. As well, CARBC offers a unique opportunity within the university where multi-disciplinary research can be conducted on a specific area of content. Current Centre membership is drawn from the disciplines of sociology, psychology, epidemiology, community medicine, bio-statistics, nursing, economics, geography and anthropology. The Centre provides students access to a dynamic learning environment to discuss research ideas with a range of faculty approaching substance use and related issues from diverse perspectives. Teaching by CARBC faculty members helps to provide linkages between the Centre's research, the academic departments and students in other areas of the university.

CARBC also links to and draws upon significant faculty expertise located at other universities in British Columbia. This is effected through site director agreements such as those currently in place with the University of Northern British Columbia and Thompson Rivers University. It is also made possible through collaboration on funding applications and research and knowledge exchange activities, including co-supervision of graduate students working on projects related to substance use.

## A FOCUS ON SUBSTANCE USE IN BC

*There is no society on Earth that does not in some way celebrate, depend on, profit from, enjoy and also suffer from the use of psychoactive substances. Most developed and developing societies have well established relationships with and legally sanction the use of older psychoactive substances such as ethanol and nicotine... The last 100 years has also seen an upsurge in the cultivation, manufacture and trade of other psychoactive substances, some quite ancient and others new... For almost all areas of human activity, there are psychoactive substances that are used with the intention of facilitating that activity in some way: religious ceremonies, physical exercise, battle, eating, sex, study, work, dancing, public performances and socializing make up a list indicative of the range... The difference between the enhancement of human performance in some sphere as opposed to its impairment is ... a function of the dose taken, the manner of its administration and the setting in which use occurs. (Stockwell, Gruenewald, Toumbourou & Loxley, 2005, p.4).*

CARBC's mandate involves the study of psychoactive substance use, with particular attention to the exploration of ways to minimize negative impacts on individuals and society. Substance use, like other human behaviours, is influenced by multiple factors: personal, social and environmental. Effectively addressing the negative impacts requires understanding the various factors that influence substance use and that contribute to the differential impact of that use (positive or negative). These "determinants of health" extend far beyond individual lifestyle choices or health actions to encompass social, economic and political contexts that shape health capacities and health opportunities. This necessarily involves the study of social and health inequities and their root causes as they relate to substance use, and the development of authentic community partnerships to help reduce harm and promote health.

The negative impact of substance use on health and well-being is best established in relation to tobacco and alcohol. The misuse of prescription drugs likely also has a sizeable negative contribution but this is less well established. Measures of substance use such as smoking prevalence and levels of alcohol consumption correlate with measures of substance-related harms such as hospitalization rates. Together these indicators provide a way to measure and track the relative impact of substance use on the total burden of disease in British Columbia over time.

In BC, smoking prevalence has been steadily decreasing while alcohol consumption has increased. Parallel to this trend, hospitalizations for tobacco-related illnesses have declined while hospitalizations for alcohol-related illnesses have increased. Between 2001 and 2009, alcohol consumption in BC increased faster than in the rest of Canada. Comprehensive public policy interventions for tobacco seem to be having a positive effect on smoking prevalence and the reduction of related harms. Current policy interventions related to alcohol may be having the opposite effect.

The use of alcohol, tobacco and other drugs has a high cost for residents of BC. In 2008, tobacco use was estimated to have caused approximately 5,051 premature deaths, alcohol wholly or partly caused 1,233 deaths, and 293 deaths were due to illicit drugs (see [www.AODmonitoring.ca](http://www.AODmonitoring.ca)). The latest WHO estimates regarding the burden of disease in North America suggest that alcohol is now the single leading cause of preventable death, illness and disability in the region (Rehm, 2009). The

total economic cost of substance use problems in BC was last estimated to be just over \$6 billion, including only part of the costs to the criminal justice system (Rehm et al, 2006).

The vast majority of British Columbians use alcohol. Many use it in ways that present a low risk of harm to the health and well-being of themselves and those around them. Nonetheless, 42% of alcohol consumed in BC is drunk on high risk drinking days (Stockwell et al, 2009a). Regular consumption of alcohol above low risk drinking guidelines contributes a substantial proportion of alcohol-caused deaths in the province, and 21.5% of British Columbians have five or more alcoholic drinks in a day at least once a month (Stockwell et al, 2009a).

In BC, the 2008 Adolescent Health Survey indicates lower prevalence of alcohol, marijuana and tobacco use among school-aged youth compared with previous years. Heavy drinking episodes (defined as consuming five or more drinks within a two-hour time frame), while declining slightly, remains fairly common among school-aged youth. Even though the overall trend is encouraging, the risky use of alcohol remains a significant concern in the province (Stewart et al, 2009).

There also remains a substantial problem with illicit drug use in British Columbia. The BC AOD Monitoring Project's ongoing surveys of illicit drug users in Victoria and Vancouver indicate shifting and differing rates of injection drug use between the two cities. Vancouver has significantly higher rates of crystal meth, heroin and marijuana use, while Victoria has significantly higher rates of injection of dilaudid and morphine (Ivsins et al, 2010). There has also been a significant shift towards crack cocaine use in British Columbia and North America generally, which presents its own unique set of problems associated with dependence, mental health sequelae and risks of transmission of blood-borne viruses through the sharing of smoking equipment.

A particular focus of research at CARBC over the past five years has been on the patterns and consequences of combining different drugs at the same time, both legal and illegal. The mixture of alcohol with various types of stimulants has been a marked trend over the last decade, being expressed in terms of alcohol combined with cocaine or crack (Macdonald et al, 2004; Pakula et al, 2009) on the one hand and often highly caffeinated "energy drinks" on the other (Brache et al, in press). In each case, there is evidence that this pattern of use results in greater consumption of both alcohol and the stimulant than if either was consumed in isolation - with increased risks of harm. Combined use of opioid drugs with alcohol and/or other central nervous system depressant drugs increases risk of overdose, and combined alcohol and marijuana use before driving appears to increase risk of road crashes beyond the use of either substance in isolation. CARBC scholars have been involved in research that aims to identify why there are differences in substance use and health outcomes across the life course as a result of inequities in access to healthcare and other key resources, including employment, housing, training and so forth (Benoit et al, 2008). Complementary to this focus is research on the effectiveness of policy and program interventions that reduce the harms of substance use among vulnerable and marginalized populations.

In short, substance use is related to health and social problems that result in considerable economic cost to the people of British Columbia. While the bulk of this burden is contributed by legally available psychoactive drugs, a growing amount of preventable health and social problems are contributed by the use of illegal drugs and also the combined use of both legal and illegal drugs.

By investigating the distal, proximate and individual determinants of substance use, evaluating interventions, developing and promoting effective responses and monitoring trends, CARBC contributes to addressing these substantial problems and reducing the burden in terms of health, social and economic consequences. This renewed Plan has been developed to provide a statement of the broad strategic directions CARBC will take over the next five years. It sets out the principles that will govern our work and the partnerships we will build on and further develop to achieve our objectives. It also lays out the performance indicators we will use to measure progress.

### **AN INDEPENDENT CENTRE FOR RESEARCH AND KNOWLEDGE EXCHANGE**

Solutions and strategies for dealing with the problems of substance use are often controversial and can be the topic of heated public debate. In relation to pharmaceutical drugs, gambling, alcohol and tobacco, there are powerful commercial vested interests whose primary allegiance is to their shareholders, albeit within a regulatory framework. In relation to illicit drugs, harm reduction interventions and even the location of treatment services can be strongly opposed. In both instances, there is a strong case for an independent centre to provide expert commentary on the extent and nature of problems, identify evidence-based solutions, and monitor and evaluate harm reduction strategies so as to better inform the community and all involved in policy, prevention and treatment systems.

An endowment of \$10.55 million to UVic from the BC Addiction Foundation in mid-2005 created the basis for such an independent centre. The proposal from UVic was supported with an agreement from the three other major research universities in BC for the formation of a collaborative network of addictions researchers across the four campuses. The University of Victoria also committed a total of seven faculty appointments to contribute to the Centre by 2008. In early 2004, funding from the BC Ministry of Health, the Provincial Health Services Authority, the Canadian Centre on Substance Abuse, and Health Canada also enabled the creation of a Knowledge Exchange Unit under the auspices of CARBC. The University of Victoria has a strong tradition of psychosocial and community-based research in areas such as health promotion, youth, ageing and Indigenous health, and thus provided an ideal administrative base for such a new Centre to develop.

The creation of CARBC was first recommended by a task group consisting of health practitioners, scientists, community partners and government officials in the addictions field who were appointed by the BC government to study and make recommendations on the future of addiction services. The task group was led by the Kaiser Foundation, an independent, privately funded agency with a long and distinguished track record of policy development and knowledge exchange in the BC addictions field. The task group's March 2001 report, *Weaving Threads Together*, made recommendations to prevent and reduce harms from substance use and problem gambling. They also recommended investment in the infrastructure necessary to evaluate outcomes and enhance knowledge and practice. The BC Addiction Foundation was established to oversee the process of establishing CARBC, and formally approved the permanent transfer of funds for this purpose to UVic in April 2005. An extract from the memorandum of understanding between UVic and the BC Addiction Foundation is reproduced in Appendix A.



Since the inception of CARBC, a number of other agencies have adopted a research networking and dissemination role with a special focus on addictions. These include the BC Mental Health and Addictions Research Network (funded by the Michael Smith Foundation for Health Research until March 2010), BC Mental Health and Addiction Services (an agency of the BC Provincial Health Services Authority), the Centre for Applied Research on Mental Health and Addiction (Simon Fraser University), the UBC Leading Edge Chair in Addiction Medicine, and the Alcohol and Social Responsibility Unit coordinated through the University College of the Fraser Valley. CARBC has had links with each of these groups, while remaining distinct as the only provincial agency that is arm's length from government, and while working across issues of concern to multiple government departments, including health, police, education and liquor licensing. CARBC will continue to develop its role, where possible, in partnership with these and other agencies with potentially overlapping functions.

### **THE POLICY CONTEXT**

There are markedly different policy contexts relating to the different psychoactive substances widely used in British Columbia, with increasingly strict controls over the sale and promotion of tobacco use, loosening controls over the distribution and promotion of alcohol, a complex environment regarding cannabis which is still available on prescription and through the unique Canadian system of Compassion Clubs, and the legal prohibition of sale and use of a range of illicit substances. Against this backdrop, Canada - and British Columbia in particular - has been progressive in the development of services and resources for individuals who continue to use illicit drugs so that they minimize risks to themselves and others, e.g., of the transmission of blood-borne viruses through the sharing of drug-using equipment and of drug overdose. CARBC has contributed to a number of provincial policy statements in relation to methadone prescribing (Reist, 2010), housing and harm reduction (Pauly et al, 2011), tobacco (BC Ministry of Health, 2006a), and the prevention of harmful substance use (BC Ministry of Health, 2006b). CARBC has also contributed policy-relevant research studies and reviews regarding issues such as safe drug consumption sites (Fischer et al, 2007), privatization of the government alcohol monopoly (Stockwell et al, 2011), alcohol and public health policy (Kendall, 2008), hours of trading for bars and nightclubs (Stockwell et al, 2009b), and drug testing in the workplace (Macdonald et al, 2010).

CARBC will continue to work with its partners in the government and non-government sectors to contribute to policy development frameworks, while being cognisant of significant alcohol and other drug policy statements such as, *Healthy Minds, Healthy People: A 10-year Plan to Address Mental Health and Substance Use in British Columbia* (British Columbia, 2010) and *Towards a Culture of Moderation: Recommendations for a National Alcohol Strategy* (National Alcohol Strategy Working Group, 2007).

### **THE CARBC PARTNERSHIP**

Since the inception of CARBC, initial partnerships were established beyond the original three universities, with other individuals and agencies with significant addictions research expertise in BC and elsewhere. Formal agreements are still established and site directors are located at each of the following:

- University of Northern British Columbia
- Thompson Rivers University

CARBC has established “collaborating centre” agreements with addiction research institutions in Canada and other countries. So far, these include the Canadian Centre on Substance Abuse (Ontario), the Centre for Addiction and Mental Health (Ontario), the Prevention Research Center (USA), the Alcohol Research Group (USA), the MRC Alcohol and Drug Abuse Research Unit (South Africa) and the National Drug Research Institute (Australia). It will be important for other partnerships to be developed as CARBC’s research and networking activities expand. It will be valuable for CARBC to forge further links with other centres in Canada and internationally with expertise in tobacco, alcohol, gambling and other substance use issues.

Of equal importance are partnerships with individual researchers in BC, elsewhere in North America and overseas who have interest and expertise in addictions-related research. We are fortunate to have active collaborations with many researchers located on other BC university campuses and research agencies, including the University of British Columbia, Simon Fraser University, Kwantlen College and the University College of the Fraser Valley.

## **SOME KEY CONSIDERATIONS**

### **Concepts and terminology**

There are many terms used to describe the problematic use of psychoactive substances and problem behaviours such as gambling. The term “addiction” has wide currency even though there is no such term used in medicine or in international classifications of diseases. The common understanding of the term is of excessive and problematic use of a drug that is hard for the individual to control. The term is now frequently used for addictions or excessive attachment to a wide range of things and activities such as food, exercise and the internet. In this document, the term “addiction” will be used to refer primarily to problematic use of psychoactive substances and also to problem gambling. We avoid, however, terms referring to individuals as “addicts” or “alcoholics” as well as to the terms “drug abuse” or “alcohol abuse” as each of these can be seen to be derogatory. The problems caused by and associated with both substance use and gambling are far broader than might be suggested by the term “addiction”. They include problems partly or wholly caused by intoxication, such as injuries and some acute illnesses, long term effects on health of a pattern of substance use that does not otherwise disrupt social functioning, acute and chronic health problems caused by unsafe ways of using drugs (e.g., using dirty needles) that are otherwise unrelated to pharmacological effects and impacts on other people, and impacts of the criminal justice system on people engaging in illegal behaviours. The mandate of CARBC extends beyond an exclusive focus on what might traditionally be referred to as “addiction”.

“Policy” and “practice” are also key terms. “Policy” is used here to refer to aspects of community, private sector and government structures that can be influenced by decision makers – and which, in this context, have implications for substance use problems and addictions. Some diverse examples are the nature of sanctions for personal cannabis use, the way drink-driving laws are intended to be enforced, the recommended levels of methadone prescribed for opioid dependence, and the rate of taxation on tobacco products. “Practice” refers more specifically to the practices of individual professionals in the conduct of their work, whether this be treatment, prevention, harm reduction, law enforcement or policy development.

### **A community systems approach**

The Centre supports an ecological approach to understanding problems related to substance use. This approach acknowledges that substance use impacts on and is affected by multiple factors at all levels of society ranging from the individual to the family and social relationships, to school, workplace and local community, and through to provincial, national and even international levels. This model also requires that research is planned to support and guide policies and interventions in multiple sectors across government, non-government and private sectors.

### **Population health research**

CARBC recognizes that research, practice and policy have often been constructed to affect the entire population without specific attention to differential effects on women or, for example, on Aboriginal populations. As such, evidence is usually lacking on the impact of population level policies on many subpopulations, as well as for targeted approaches that address vulnerabilities specific to diverse groups of women and men. To this end, CARBC supports an approach to research that looks at the impacts of substance use across and within multiple populations. Population health intervention research takes such an approach. Population health intervention research aims to produce knowledge that has the potential to impact population health through the study of policies and programs in health and other sectors (Hawes & Potvin, 2009).

## **FROM MISSION TO ACTION**

### **MISSION**

The mission of CARBC is to be an internationally recognized centre dedicated to the study of psychoactive substance use and addiction in order to support community-wide efforts to promote health and reduce harm.

### **GUIDING PRINCIPLES**

#### **Collaborative relationships**

Dynamic, collaborative relationships are essential for maintaining relevance to the multi-faceted concerns related to substance use and addictions. Key relationships include those with policy makers, researchers from many disciplines, practitioners and people with personal experience of substance use, addictions and related problems.

#### **Independent research**

Protection from vested interests is essential to ensure that rigorous research is conducted and communicated clearly, with a view only to furthering the public interest. This will be ensured through excluding representatives of alcohol, tobacco and gaming industries from membership of the Advisory Board and not accepting direct research funding from such sources.

#### **Ethics, social equity and justice**

Commitment to solid ethical principles governing internal and external relationships, financial management, the conduct of research and the communication of research findings is essential. Also required is a commitment to the promotion of equity and fairness and the pursuit of social justice

through attention to the impact of the social determinants that shape substance use and the development of health inequities.

### **Reducing risk and increasing protection**

Attention is required to both immediate factors (e.g., behavioural patterns and contexts) and distal factors (e.g., social, economic and developmental influences) to effectively address the harms from substance use and addictions across the life course.

### **Harm reduction**

Recognition that some people will continue to use psychoactive substances and experience related problems is critical, so strategies are needed to reduce harmful consequences in addition to those that aim to directly reduce or prevent high-risk behaviours.

### **Informed public debate**

Commitment to informing public debate to achieve effective public policy on substance use and addictions through the communication of research findings is required.

## **ACTIONS**

### **Building new capacity while complementing existing strengths**

Prior to the establishment of CARBC, there were already some exceptional strengths in specific research areas relating to addictions. BC researchers were known for their work in relation to preventing problems with injection drug use in particular, as well as research on the biology of dependence, on fetal alcohol syndrome, and on gender issues and addiction. CARBC will strive to complement these existing strengths while filling gaps in areas such as prevention, alcohol policy, program evaluation, treatment systems research and epidemiological monitoring. During the next five-year period, CARBC will need to continue to build capacity in terms of both junior and senior faculty with relevant expertise appointed to the University of Victoria, skilled research staff and increasing numbers of graduate students and postdoctoral fellows engaged in relevant research activities.

### **Multidisciplinary approaches to substance use and addictions**

Problematic substance use stems from a complex mix of biological, psychological and social causes. Research on substance use and addictions, on the other hand, has traditionally been conducted within separate disciplines singularly focused on either the biomedical and clinical or socio-cultural and prevention dimensions of addictions, limiting the exchange of knowledge across the disciplines and to the knowledge users. While the focus of the Centre's programs is on the psychosocial aspects of substance use and addictions, we will promote collaboration among researchers drawn from a broad range of disciplinary areas, including biomedical, psychological, social, epidemiological and historical perspectives. In 2011, CARBC scientists span the disciplines of sociology, nursing, health information sciences, epidemiology, community medicine, psychology and health economics. Affiliated scientists also encompass the disciplines of anthropology, emergency medicine, public health and political science.

### **Networking and partnerships**

Research centres at the University of Victoria have a strong record of fostering collaboration among a variety of institutional partners and community stakeholders. To this end, the Centre, while located at the University of Victoria, is based on a model of cooperation among the key research-based stakeholders in BC. To ensure the Centre facilitates research activities throughout the province and stakeholders have a meaningful voice in the activities, there is a commitment to involving the stakeholders in the development of the Centre's research priorities and projects. Of particular significance to the forthcoming five-year period is the opportunity for the Centre to contribute to the province's new 10-year plan to improve responses to mental health and substance use, *Healthy Minds, Healthy People* (British Columbia, 2010).

### **Knowledge exchange**

CARBC is committed to facilitating linkage and exchange between researchers, policy makers, professionals and communities, and to developing capacity as a knowledge broker within these relationships. This involves providing easy access to evidence-based information that can be used by a range of audiences in various settings (e.g., research, policy, service system, community). In particular, the Centre seeks to ensure policy makers from all levels of government have access to practical evidence provided in a clear manner.

## **KEY RESULT AREAS, OBJECTIVES AND PERFORMANCE INDICATORS**

Five Key Result Areas have been identified for the period of this Plan, each of which has a number of main objectives linked to at least one performance indicator. These are summarized below in Tables 1 to 5 for each Key Result Area. Benchmarks for these indicators have been calculated based on the period 2006-2010. Many of them are numeric indicators that focus on the amount and completion of activities in priority areas.

### **KEY RESULT AREA 1: TO BUILD CAPACITY**

*"To build infrastructure and capacity across BC to conduct research and knowledge exchange that will increase understanding and support more effective responses to substance use."*

In the first five years, CARBC experienced substantial growth in the number of core scientists and collaborating scientists at the University of Victoria, meeting commitments made when agreeing to host the Centre. It is envisaged that this growth will continue over the next five years, though at a slower pace. The development of infrastructure will become particularly focused on obtaining funds for research and knowledge exchange activities. CARBC obtains base funding through a \$10.5 million endowment that provides basic infrastructure funds for our operations. In order to conduct independent research, additional funds are needed in the form of peer reviewed grants. As well, CARBC is responsive to external priorities which are reflected by research contracts, often from governmental agencies, or through collaborations with community groups. Finally, CARBC has gained considerable expertise in data management and statistics and has established several databases that can be used by others for research purposes.

**Specific initiatives planned for 2011-2015 include:**

The appointment of two more faculty at the University Victoria, one of whom will be in the new School of Public Health, and obtaining at least two senior research fellowships or chairs in areas relevant to the study of substance use.

**Table 1: Performance Indicators for Key Result Area 1**

Objectives		Performance Indicators
1.1	To maintain or increase funding for substance use and health research at CARBC	<ul style="list-style-type: none"> <li>Maintain or increase funding for substance use research won by CARBC scientists from (a) Canadian and international peer reviewed sources (b) Canadian and international contracts</li> </ul> <p><i>Benchmarks: (a) \$750,000 (b) \$150,000 per annum</i></p>
1.2	To maintain or increase funding for knowledge exchange concerning substance use and health promotion at CARBC	<ul style="list-style-type: none"> <li>Maintain or increase funding for substance use knowledge exchange held by CARBC from (a) Canadian and international peer reviewed sources (b) Canadian and international contracts</li> </ul> <p><i>Benchmarks: (a) \$250,000 (b) \$750,000 per annum</i></p>
1.3	To maintain or increase the number of funding applications for long-term research programs addressing research areas of high priority in BC	<ul style="list-style-type: none"> <li>Maintain or increase number of funding applications for new research programs identified in one or more identified priority areas (see Key Result Area 2)</li> </ul> <p><i>Benchmark: 15 applications</i></p>
1.4	To achieve successful collaborations with researchers and community partners on projects that will lead to increased capacity and increased expertise in addictions research	<ul style="list-style-type: none"> <li>Number of projects initiated that involve (a) community partners (b) researchers with relevant expertise who are new to substance use and addictions research</li> </ul> <p><i>Benchmarks: (a) 12 (b) 6</i></p>
1.5	To attract and retain high quality researchers from a broad range of disciplines to the BC addictions field	<ul style="list-style-type: none"> <li>Maintain or increase number of PhD-qualified researchers and affiliates with CARBC each year</li> <li>Maintain or increase number of postdoctoral fellows with CARBC</li> </ul> <p><i>Benchmarks: 11 / 3</i></p>
1.6	To improve access to data sets and platforms for addiction researchers	<ul style="list-style-type: none"> <li>Number of data sets created, developed and/or maintained for use by BC researchers</li> </ul> <p><i>Benchmark: 7</i></p>

## KEY RESULT AREA 2: TO ENGAGE ACADEMIC EXPERTISE

*“To capitalize on the resources of BC universities through the recruitment of high-calibre graduate and postdoctoral students from multiple relevant disciplines to the study of substance use, addiction and harm reduction.”*

CARBC has contributed significantly to graduate student mentorship in the last five years and plans to enhance its activities in this area in the next five years. Centre scientists and research affiliates currently supervise 22 graduate students and three postdoctoral fellows. CARBC had contributed significantly to UVic’s newly launched Social Dimensions of Health Research (SDHR) program - currently the Centre has provided trainee grants to four SDHR students and supervision to a total of nine. The Centre also employs former and current trainees to conduct research and evaluation for its diverse projects. Priorities for future development include increasing trainee support in the Centre’s priority research areas, increasing the number of masters, doctoral and postdoctoral trainees located at the Centre, development of an interdisciplinary concentration in substance use and addictions, initially at the graduate level but eventually at the undergraduate level, increasing recruitment of undergraduate and graduate students as research assistants on the Centre’s projects.

### Specific initiatives planned for 2011-2015 include:

Collaboration with the UVic Director of the Health Research and Education Council to create (a) an undergraduate minor in the area of substance use policy and practice, (b) a special stream of the SDHR interdisciplinary program dedicated to substance use policy and practice under the support and supervision of CARBC faculty, and (c) scholarships to encourage high quality graduate students to enrol in the SDHR program while studying topics relevant to substance use and/or addiction. These initiatives would span multiple departments and faculty.

**Table 2: Performance Indicators for Key Result Area 2**

Objectives		Performance Indicators
2.1	To attract and retain high quality researchers from a broad range of disciplines to the BC substance use and addictions field	<ul style="list-style-type: none"><li>• Maintain or increase number of PhD-qualified researchers and affiliates with CARBC each year</li><li>• Maintain or increase number of postdoctoral fellows with CARBC</li></ul> <p><i>Benchmarks: 11 / 3</i></p>
2.2	To attract and retain high quality students from a broad range of disciplines to the BC substance use and addictions field	<ul style="list-style-type: none"><li>• Maintain or increase number of CARBC students under supervision per year</li></ul> <p><i>Benchmark: 14</i></p>

2.3	To provide training opportunities and programs for the development of additional research skills among CARBC staff, students and affiliates, taking advantage of existing opportunities through CIHR and research partners	<ul style="list-style-type: none"> <li>• Maintain or increase number of research staff and/or students attending conferences or training events <i>Benchmark: 15</i></li> <li>• Contribute to graduate research training programs within CARBC and also university departments at UVic and other BC universities</li> <li>• Contribute to graduate training in SDHR program at UVic <i>Benchmark: 8</i></li> </ul>
2.4	To provide mentorship to new researchers and support to existing researchers across a range of community settings	<ul style="list-style-type: none"> <li>• Attract new substance use researchers to work on CARBC projects under supervision <i>Benchmark: 6 per year</i></li> </ul>

### KEY RESULT AREA 3: IMPLEMENTATION OF QUALITY RESEARCH

*“To conduct high quality research that increases understanding of substance use, addiction and related harms in order to inform effective responses and promote health.”*

The diverse research programs already underway at CARBC build upon a strong foundation of multidisciplinary expertise, including specific expertise in research design and statistical analysis. Established areas of content expertise include alcohol and public health policy, homelessness and harm reduction, substance use by vulnerable populations, substance use in developmental context, epidemiological monitoring of trends in substance use and related harms, substance use and injury, and patterns of combined alcohol and other substance use and related harms.

#### **Specific initiatives planned for 2011-2015 include:**

Continuing to take advantage of the "natural experiments" in Canadian alcohol policy to increase understanding of the public health and safety impacts of less well studied initiatives such as minimum liquor prices and the privatization of government alcohol monopolies, the evaluation of Herway Home (a new array of services for vulnerable women with substance use problems), analysis of the unique longitudinal Victoria Healthy Use Survey which has tracked health-related behaviours of adolescents from age 12 to over age 30 to explore the interplay between risk and protection factors and patterns of substance use and health and mental health consequences, the evaluation of managed alcohol programs for individuals suffering the twin problems of unstable housing and alcohol dependence, studies of the economic costs and benefits of prevention and treatment strategies, and studies of the relationship between substance use and risky sexual behaviour and the transmission of blood-borne viruses. The appointment of a CARBC scientist with a faculty appointment in Department of Economics will facilitate in the factoring in of economic costs and benefits in our evaluations of policies and programs.



**Table 3: Performance Indicators for Key Result Area 3**

Objectives		Performance Indicators
3.1	To conduct research on the patterns, distribution, determinants and consequences of substance use	<ul style="list-style-type: none"> <li>Number of epidemiological projects initiated, ongoing and/or successfully completed each year in this area</li> </ul> <p><i>Benchmark: 15</i></p>
3.2	To conduct research that is valued by stakeholders as being of high quality, responsive to emerging issues and relevant to public policy and practice	<ul style="list-style-type: none"> <li>Number of CARBC special reports and commissioned reports focused on policy and practice</li> </ul> <p><i>Benchmark: 5</i></p>
3.3	To identify key strategic research opportunities that will inform policy, practice, strategy development and implementation	<ul style="list-style-type: none"> <li>Number of research projects initiated in response to emerging issues and opportunities that are consistent with this Plan</li> </ul> <p><i>Benchmark: 5</i></p>
3.4	<p>To conduct research in the following key priority areas:</p> <ul style="list-style-type: none"> <li>Province-wide monitoring of alcohol, tobacco, gambling and other drug use patterns and related harms</li> <li>Studies of the neuroscience and learning bases for drug-seeking behaviour</li> <li>The impact of educational, legislative and regulatory strategies to minimize alcohol and other drug-related harms</li> <li>Development and evaluation of more effective community prevention programs</li> <li>Development and evaluation of more effective treatment systems and programs</li> <li>Investigation of the influence of structural determinants and the social contexts of drug use on the implementation of strategies designed to reduce and prevent harmful drug use</li> <li>Research and evaluation of effectiveness of knowledge translation and exchange activities and strategies</li> </ul>	<ul style="list-style-type: none"> <li>Number of research projects ongoing and completed</li> </ul> <p><i>Benchmark: 10</i></p> <p><i>Benchmark: 2</i></p> <p><i>Benchmark: 6</i></p> <p><i>Benchmark: 5</i></p> <p><i>Benchmark: 8</i></p> <p><i>Benchmark: 10</i></p> <p><i>Benchmark: 5</i></p>

3.5	To develop and maintain significant collaborative projects with other researchers and research centres in BC working on harm reduction, substance use and related areas	<ul style="list-style-type: none"> <li>Number of collaborative projects with other BC-based researchers and research agencies each year</li> </ul> <i>Benchmark: 20</i>
3.6	To develop and maintain research projects that engage researchers from several relevant disciplines and which integrate different disciplinary perspectives	<ul style="list-style-type: none"> <li>Number of collaborative projects involving multi-disciplinary participation with individuals and other centres both at UVic and other BC campuses and research settings</li> </ul> <i>Benchmark: 25</i>
3.7	To develop and maintain significant collaborative projects with other researchers and research centres in North America	<ul style="list-style-type: none"> <li>Number of collaborative projects with other North American researchers and research agencies each year</li> </ul> <i>Benchmark: 10</i>
3.8	To develop collaborative projects with international organizations such as WHO and the International Harm Reduction Association	<ul style="list-style-type: none"> <li>Number of collaborations with WHO and other international organizations each year</li> </ul> <i>Benchmark: 5</i>

#### **KEY RESULT AREA 4: DISSEMINATION**

*“To disseminate knowledge that increases understanding of substance use and addiction, raises awareness of related harms and identifies effective responses.”*

CARBC will continue to use a diverse range of media and outlets for disseminating results of research programs. For research to be useful to decision makers, practitioners and the broader community, it is essential that relevant information is communicated effectively and in ways targeted appropriately for specific audiences. On the one hand, it is vital for the credibility of a university-based research centre that its work is published in peer reviewed journals. There is also value in promoting new publications through the use of media releases as well as for documenting more detailed methodological aspects of studies in technical reports. CARBC has produced a series of more locally relevant statistical bulletins designed to be widely accessible to many audiences. Similarly, a series of policy reports have been prepared by CARBC, often initially commissioned by provincial or federal government departments. The CARBC websites ([www.carbc.ca](http://www.carbc.ca) and [www.AODmonitoring.ca](http://www.AODmonitoring.ca)) have been carefully developed to maximize electronic access to information about CARBC publications, to provide up-to-date information about trends in the patterns of substance use and related harm in British Columbia, and to provide access to data sets for other researchers. Many CARBC researchers also strive to reach, with our dissemination strategies, user groups and individuals personally affected in different ways by substance use and related problems. We see this as one way to reduce the stigma experienced by many individuals who have problematic substance use.

**Specific initiatives planned for 2011-2015 include:**

Increasing the number of CARBC peer reviewed publications in high impact journals, continuing the series of focused CARBC statistical bulletins and policy reports on topical issues, introducing an interactive component to the BC Alcohol and Other Drug Monitoring website to facilitate the creation of tailor-made reports for local areas on particular topics of interest.

**Table 4: Performance Indicators for Key Result Area 4**

Objectives		Performance Indicators
4.1	To publish research findings in articles in peer reviewed journals	<ul style="list-style-type: none"> <li>Number of articles published each year by CARBC researchers and students in peer reviewed journals</li> </ul> <p><i>Benchmark: 70</i></p>
4.2	To publish research findings in book chapters, books and research monographs	<ul style="list-style-type: none"> <li>Number of book chapters, books or research monographs published by CARBC researchers and students each year</li> </ul> <p><i>Benchmark: 25</i></p>
4.3	To disseminate research findings through reports, systematic reviews and other resources	<ul style="list-style-type: none"> <li>Number of reports, systematic reviews or other resources published each year</li> </ul> <p><i>Benchmark: 36</i></p>
4.4	To achieve a high academic impact for BC addictions-related research so that it is well known, frequently requested and often cited	<ul style="list-style-type: none"> <li>Number of citations in peer reviewed journals of research by CARBC scientists and graduate students per year</li> </ul> <p><i>Benchmark: 500</i></p>
4.5	To conduct seminars, lectures and occasional conferences on the state of knowledge and its application to policy, practice and the research agenda	<ul style="list-style-type: none"> <li>Number of public research seminars, symposia or conferences convened or co-convened by CARBC</li> <li>Number of invitations to CARBC researchers to present at conferences or symposia each year</li> <li>Number of papers accepted for presentation by CARBC researchers and students at conferences or symposia each year</li> </ul> <p><i>Benchmarks: 5 / 25 / 35</i></p>
4.6	To contribute to teaching programs on substance use and addictions for undergraduate and graduate courses/programs	<ul style="list-style-type: none"> <li>Number of courses in addictions issues taught by CARBC members at UVic</li> <li>Number of courses in addictions issues taught by CARBC members at other campuses</li> </ul> <p><i>Benchmarks: 6 / 3</i></p>

## KEY RESULT AREA 5: KNOWLEDGE MOBILIZATION

*“To contribute to constructive communication and cooperation between producers, intermediaries and users of various types of knowledge for the implementation of evidence-based policy and practice.”*

CARBC has contributed significantly to knowledge exchange related to substance use in a variety of ways. The Centre maintains a team dedicated to knowledge exchange that nurtures relationships, facilitates dialogues, develops information products, and contributes to provincial, national and international discussions related to the application of knowledge and evidence. Priorities for future development include focusing efforts around key audiences and settings, and creating improved linkages between the Centre’s research and knowledge exchange efforts.

### Specific initiatives planned for 2011-2015 include:

Initiating a major new symposium to be held in BC on alternate years to the Issues of Substance conference which will be designed to bring together networks of researchers, policy makers, practitioners, users and other community groups. The first symposium will be organized for the fall of 2012 and on alternate years thereafter. Collaboration with other research centres, government and community partners will be sought.

**Table 5: Performance Indicators for Key Result Area 5**

Objectives		Performance Indicators
5.1	To ensure access to relevant knowledge while working in partnership with policy makers and practitioners in planning and implementing projects to address substance use	<ul style="list-style-type: none"> <li>Number of projects in which CARBC members collaborate with policy makers or practitioners</li> </ul> <p><i>Benchmark: 15</i></p>
5.2	To provide proposals, briefings and submissions to government and parliamentary inquiries, policy advisors and relevant provincial and national committees on emerging issues related to substance use	<ul style="list-style-type: none"> <li>Number of policy proposals contributed to by CARBC members each year</li> <li>Number of invitations received each year to make submissions to policy forums, select committees or other such bodies</li> <li>Number of provincial or national committees, advisory boards or other such bodies on which CARBC members are active</li> </ul> <p><i>Benchmarks: 5 / 5 / 20</i></p>
5.3	To develop and promote resources with the potential to make direct contributions to policies, programs or service delivery systems	<ul style="list-style-type: none"> <li>Number of resources completed in any one year</li> </ul> <p><i>Benchmark: 10</i></p>

5.4	To facilitate mechanisms that increase the sharing of knowledge among policy makers, practitioners, researchers and community members related to challenges, trends and effective interventions for promoting health and preventing harm related to substance use	<ul style="list-style-type: none"> <li>• Number of networks or communities of practice in which CARBC members are active</li> <li>• Number of multi-sectoral symposia or knowledge exchange events each year</li> </ul> <p><i>Benchmarks: 20 / 1</i></p>
5.5	To provide access to balanced factual information on substance use and related harms and health promotion approaches through a variety of knowledge exchange strategies	<ul style="list-style-type: none"> <li>• Number of visits to CARBC websites each year</li> <li>• Number of presentations/workshops/displays each year</li> <li>• Number of articles in the print media and interviews used by the electronic media annually as a result of CARBC activities</li> <li>• Number of e-bulletins/blog articles published each year</li> <li>• Publication of articles from CARBC members in magazines, newsletters, websites and unrefereed journals each year</li> <li>• Number of consultations provided each year</li> </ul> <p><i>Benchmarks: 30,000 / 15 / 150 / 10 / 5 / 10</i></p>

## STRUCTURES AND RESOURCES TO IMPLEMENT THE STRATEGIC PLAN

### ADVISORY BOARD

The CARBC Advisory Board meets annually and is chaired by Prof. Michael Prince of the University of Victoria, a distinguished Canadian scholar in the field of disability and public policy. Membership of the Board includes people with a wide range of relevant expertise from the fields of healthcare, academia, addiction research, community organizations, advocacy for drug users and administration. The Board contributes to the development of overall strategic direction, receives financial reports and performance data, and will advise on the implementation of this Plan. See Appendix B for full terms of reference and membership.

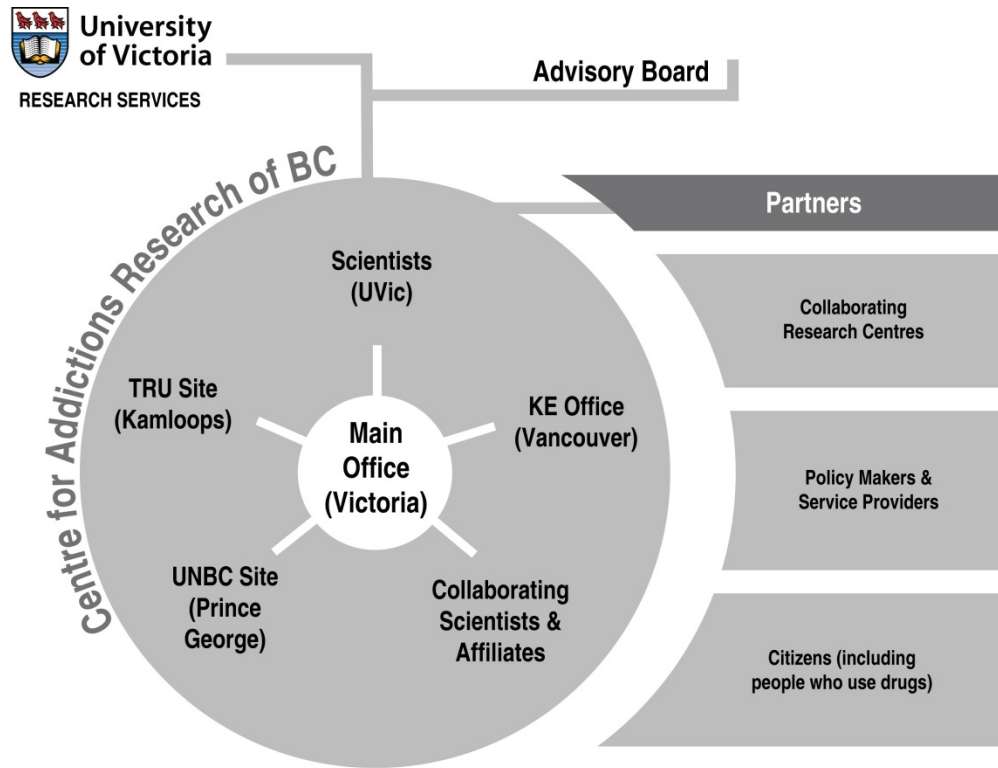
### FACULTY COMMITTEE

Membership on the CARBC Faculty Committee includes directors, scientists and the CARBC administrator. Meetings occur every four to six weeks. The responsibilities of the CARBC Faculty Committee include:

- Planning the implementation of strategic research directions
- Developing priorities for Centre activities and establishing working groups to implement these
- Promoting research initiatives, projects and applications for funding
- Reviewing applications for membership
- Reviewing policies and procedures
- Planning public seminar series

## CARBC OPERATIONAL STRUCTURE

The chart below illustrates the relationship between various operational elements within CARBC and the Centre's relationships with UVic, the CARBC Advisory Board, and external partners.



### Main Administration and Research Office

The main office of CARBC is located on campus at UVic. The CARBC Director, Assistant Director (Research), Administrator, support staff and many CARBC researchers are based in this office. Core functions of this office include:

- Oversight of the implementation of the Strategic Plan
- Reporting progress and outcomes to the Advisory Board and University of Victoria
- Oversight of contractual arrangements with funding bodies
- Responsibility for the smooth running of CARBC activities and events

### **Knowledge Exchange Office**

A satellite knowledge exchange office operates in downtown Vancouver. The Assistant Director (Knowledge Exchange) and support staff are based in this office and are responsible for:

- Maximizing access for policy makers, professionals and the public in BC to evidence and knowledge to support health promotion and harm reduction related to substance use and addiction
- Developing information products and policy documents that reflect the best available evidence and communicate them clearly to intended audiences
- Facilitating the multi-directional flow of information between research, policy and practice communities in BC

### **CARBC SITE DIRECTORS**

CARBC Site Directors are based at partner universities and research agencies. CARBC Site Directors are chosen on the basis of already being research leaders with significant interests in addiction research. They play a number of essential functions:

- Maintaining a profile for CARBC at their host institutions
- Linking specialist and non-specialist researchers from their campus/workplace to the CARBC network
- Organizing occasional addiction research forums, seminars and public lectures at their institutions
- Advising on potential collaborators at their institutions for emerging research projects
- Leading addiction research initiatives
- Contributing to CARBC and jointly branded research reports
- Supporting CARBC communication and resource development objectives

CARBC Site Directors not only represent CARBC at their university but also contribute a range of special expertise spanning different disciplines and research interests. At the present time, we are fortunate to have Dr. Cindy Hardy (UNBC, Psychology) and Dr. Reid Webster (TRU, Psychology).

### **CARBC SCIENTISTS**

CARBC Scientist status is granted to researchers who are actively engaged in relevant research that will contribute to CARBC's core activities. Scientist status will be considered upon receipt of a completed application in writing to the Centre, and would be granted for a limited term with approval from the Director and a majority vote of the CARBC faculty. The application form will carry a statement regarding conflicts of interest, commercial and other, and exclude people who work for or are in receipt of research funds from tobacco, alcohol or gambling commercial enterprises. Opportunities for residency in the Centre may accompany status as a Scientist. Research and networking activities of a Scientist is regarded as part of CARBC's outputs and Scientists are requested to note this affiliation in their published work.

## **CARBC COLLABORATING SCIENTISTS**

This category of membership of the Centre is designed to recognize strong collaborative relationships with researchers who may be located at the University of Victoria or on other Canadian campuses who are not in residence at the CARBC office. The process of acquiring CARBC Collaborating Scientist status involves nomination by a CARBC Scientist, completion of an application form, and a statement indicating support for the mission and values of the Centre. Applications are discussed and voted on at meetings of the CARBC faculty.

## **CARBC AFFILIATES**

This category of membership is open to individuals who are supportive of the Centre's mission and values and who are actively engaged in applying knowledge in the field of addictions and substance use. This category is open to researchers, students, policy makers, treatment and prevention workers, as well as members of the general public. Membership will involve completion of an application form with a declaration that excludes people with financial interests in tobacco, alcohol, gambling or other addictive behaviours.

## **FINANCIAL RESOURCES**

### **Endowment from BC Addiction Foundation**

An endowment of \$10.55 million was provided to the University of Victoria for the purpose of initiating CARBC. Some core CARBC expenses are covered by annual interest payments, set at least at 4% in future years. The interest payments currently cover the salaries of the Director, Administrator, a part-time secretary, some office equipment, travel and research network expenses.

### **Policy research partnerships**

Additional funds are received from commissioned research and knowledge exchange contracts. These are partnerships that provide policy research capacity to inform and provide advice to national, provincial, municipal and local governments. They require CARBC to deliver various research and information products and services.

### **Funding competitions**

CARBC and its partners make submissions to provincial, national and international research funding agencies to conduct projects that are consistent with this Plan.

### **Private donations**

Finally, CARBC seeks additional funds from private donations to supplement Centre operations and ensure that the draw on endowment earning remains as low as possible.



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