



University  
of Victoria

*Centre for*  
**ADDICTIONS  
RESEARCH** OF BC



# Annual Report

April 1, 2006–March 31, 2007

## CARBC Strategic Plan 2006–10

Our first strategic plan was approved by the University of Victoria Senate on November 4, 2005, and by the University's Board of Governors on November 28, 2005, to accord research centre status to the Centre for Addictions Research of BC for a five-year term starting on January 1, 2006. The plan outlines four key result areas, which we will be using in this annual report to report our progress using available performance indicators.

### Our Mission

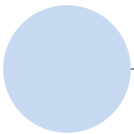
*To create an internationally recognized centre, distributed across BC, that is dedicated to research and knowledge exchange on substance use, harm reduction, and addiction.*

### Our Values

- Collaborative relationships
- Independent research
- Ethics, social equity, and justice
- Reducing risk and increasing protection
- Harm reduction
- Informed public debate

*The Centre for Addictions Research of BC (CARBC) is an official research centre at the University of Victoria, supported by a partnership with four other major post-secondary institutions in the province—University of British Columbia, Simon Fraser University, University of Northern British Columbia, and Thompson Rivers University.*

*Since its inception in 2003, CARBC has developed relationships with a large network of addictions-related agencies in BC. An independent research centre, CARBC sits at arms length from government while working on shared concerns with multiple government departments, including health, police, education and liquor licensing.*



## Table of Contents

<b>A Message from the Chair .....</b>	<b>2</b>
<b>A Message from the Director.....</b>	<b>3</b>
<b>Our People and Partners.....</b>	<b>4</b>
<b>CARBC Revenue Summary 2006–07 .....</b>	<b>6</b>
<b>Project Highlights—General .....</b>	<b>7</b>
<b>Unit Highlights.....</b>	<b>7</b>
<b>Key Results Area 1.....</b>	<b>9</b>
<b>Successful applications to research funding competitions .....</b>	<b>9</b>
<b>Commissioned research contracts won .....</b>	<b>9</b>
<b>Key Result Area 2 .....</b>	<b>11</b>
<b>Completed projects .....</b>	<b>12</b>
<b>Ongoing projects .....</b>	<b>13</b>
<b>Key Results Area 3 .....</b>	<b>22</b>
<b>Ongoing projects .....</b>	<b>22</b>
<b>Public lectures/seminars/other events.....</b>	<b>22</b>
<b>Publications.....</b>	<b>24</b>
<b>Key Result Area 4 .....</b>	<b>34</b>
<b>Committee Memberships .....</b>	<b>34</b>

*The creation of CARBC was first recommended in 2001 by a task group consisting of health practitioners, community partners, and government officials who were appointed by the BC government to make recommendations on the future of addictions services. In response to the task group's report, the government created and resourced the BC Addictions Foundation (BCAF) with a mandate to create a research centre. In 2003, the BCAF entered into an agreement with the University of Victoria to provide leadership for the centre. In 2005, following the development of a detailed strategic plan, CARBC became officially recognized as a province-wide addictions research organization.*



## A Message from the Chair

On behalf of the Advisory Board to the Centre for Addictions Research of BC, I am delighted to report that 2006–07 has been a year of achievements, expansion and continuing work. Let me mention just some of these achievements:

- The establishment of two new offices (both the Victoria and Vancouver offices moved locations)
- The arrival of Benedikt Fischer as a Michael Smith Foundation Senior Scholar and the establishment of his unit on illicit drugs, public health and policy
- A notable increase in research output in terms of peer-reviewed publications (35 this year compared to 15 last year) and a massive increase in knowledge exchange products (nearly 6,000 this year, up from 600 last year)
- Continued success in securing research funding (\$0.52 million last year and \$1.53 million this year, with a total funding for the year reaching \$2.58 million)

In just a few years, CARBC has become recognized as a leading centre of rigorous research, progressive policy analysis and thoughtful social commentary on addictions in British Columbia, the rest of Canada, and indeed internationally.

This outstanding accomplishment is due to the support, expertise and dedication of the Centre's staff, research associates and students, plus collaborators from other universities, colleges and organizations working with CARBC. On behalf of the Board, I wish to express our gratitude to all of them. As Chair, I would also like to thank the other members of the Board for their contributions.

*Michael J. Prince, PhD  
Lansdowne Professor of Social Policy  
University of Victoria  
Chair, Advisory Board  
(October 2007)*



## A Message from the Director

Welcome to the 2006–07 Annual Report for the Centre for Addictions Research of BC. This report marks the second year of our first five-year term as a University of Victoria research centre.

It has been both a successful and challenging year with two office relocations, the opening of a new research unit, an increase of our staff to over 30, and a corresponding increase in our productivity.

In addition to internal expansion, our partnership with the BC Mental Health and Addictions Research Network has grown with the establishment of an epidemiological drug monitoring hub, linking many researchers at diverse sites across BC. Also newly established is our public seminar series, shared funding of PhD scholarships, and seed grants in the addictions area. A successful review of the first two years of the network has resulted in renewed funding at a substantially higher level for a further two years.

The past year has also been a time when some important people who helped us become established have moved on. We give our best wishes and grateful thanks to Dr. Irving Rootman who stood down as Chair of our Advisory Board at the end of 2006. Irv was always generous with his time, and his wise counsel helped shape the centre's early directions. Two of our founding site directors at other campuses, Drs. Ray Corrado (SFU) and Joy Johnson (UBC), and our UVic champion, Dr. Susan Boyd, announced that the academic year of 2006/07 would be their last terms. All three have served since late 2003 when the centre was established. Their roles as CARBC representatives on various BC university campuses were not straightforward, but each made tangible contributions, such as the engagement of graduate students, the organization of public seminars and the establishment of new research programs. I am immensely grateful for their support of CARBC and look forward to maintaining connections in the years ahead.

I would also like to add a note of appreciation to all those who have remained with CARBC for continuing the work of building the Centre into a major point of reference for addictions-related research and policy in Canada.


CARBC is an exciting place to work. I look forward to another year of building our team and working with our partners to improve BC's response to problem substance use and addiction.

*Tim Stockwell, PhD*  
*Director, CARBC*



## Our People and Partners

### Staff at the Research and Administration Office (University of Victoria)

- 
- Dr. Tim Stockwell**—Director  
**Dr. Scott Macdonald**—Assistant Director, Research and Director, Epidemiology and Monitoring Unit  
**Dr. Benedikt Fischer**—Director, Illicit Drugs, Public Health and Policy Unit  
**Dr. John Anderson**—Senior Research Fellow  
**Ms. Christiane Allard**—Research Assistant  
**Ms. Angelle Brown**—Assistant to Dr. Stockwell  
**Ms. Michelle Coghlan**—Research Associate  
**Ms. Nancy Duncan**—Administrator (until August 2006)  
**Ms. Tierra Evans**—Work-study Student  
**Ms. Rita Fromholt**—Administrator  
**Ms. Joanna Henderson**—Research Assistant  
**Dr. Andy Hathaway**—A/Professor
- Mr. Andrew Ivsins**—Research Assistant  
**Ms. Kate Kalousek**—Research Assistant  
**Ms. Sari Lloyd**—Research Assistant  
**Mr. Warren Michelow**—Research Associate  
**Dr. Eugenia Oviedo-Joekes**—Visiting Research Fellow  
**Ms. Basia Pakula**—Research Associate  
**Mr. Ajay Puri**—Research Associate  
**Ms. Jo-Anne Stoltz**—Post-doctoral Fellow and Research Associate  
**Ms. Jodi Sturge**—Research Associate  
**Mr. Jinhui Zhao**—Data Analyst

### Staff at the Communication and Resource Unit (Vancouver)

- Mr. Dan Reist**—Director, Communication and Resource Unit  
**Ms. Jennifer Bond**—Administrator  
**Ms. Eugenia Didenko**—Co-op Research Assistant  
**Ms. Raluca Dogaru**—Co-op Research Assistant  
**Mr. Laverne Douglas**—IT Specialist  
**Dr. Tim Dyck**—Research Associate  
**Mr. Ian Kirkpatrick**—Stakeholder Relations Officer  
**Ms. Nicole Pankratz**—Publications Officer
- Ms. Sara Perry**—Research Coordinator  
**Ms. Lu Ripley**—Research Associate  
**Ms. Cathy Spence**—Assistant to Mr. Reist  
**Ms. Deborah Solk**—Research Associate  
**Ms. Evelyn Souza**—Information Officer

### Site Directors

- Dr. Raymond Corrado**—Simon Fraser University, Criminology  
**Dr. Joy Johnson**—University of British Columbia, Nursing
- Dr. Cindy Hardy**—University of Northern British Columbia, Psychology  
**Dr. Reid Webster**—Thompson Rivers University, Psychology/Centre for Excellence in Addictions Research

## Advisory Board

**Dr. Irving Rootman, Chair** (until October 2006)

Senior Investigator, Michael Smith Foundation for Health Research, University of Victoria, Chair of the Advisory Board

**Dr. Michael Prince, Chair** (as of November 2006)

Lansdowne Professor of Social Policy, University of Victoria

**Dr. Elliot Goldner**

Professor, Faculty of Health Sciences, Simon Fraser University

**Mr. Pat Griffin**

Executive Director, Victoria Youth Empowerment Society

**Ms. Jocelyn Harder**

Regional Addictions Advocacy Society

**Dr. Colin Jones**

Assistant Vice-President Research, Simon Fraser University

**Mr. Edgar F. Kaiser Jr.**

Chair and CEO, Kaiser Foundation

**Dr. Perry Kendall**

Provincial Health Officer, BC Ministry of Health Services

**Mr. Philippe Lucas**

Director, Vancouver Island Compassion Society

**Dr. G. Alan Marlatt**

Director, Addictive Behaviors Research Center, University of Washington

**Mr. Bill Naughton**

Deputy Chief of Police, Victoria Police Department

**Ms. Jody Paterson**

Executive Director, PEERS

**Dr. Anthony Phillips**

Institute of Mental Health, University of British Columbia

**Dr. Eric Single**

Senior Associate and Epidemiologist, Canadian Centre on Substance Abuse

**Dr. Patrick Smith**

Senior Advisor, BC Mental Health and Addiction Services, Provincial Health Services Authority

**Dr. Martin Taylor**

Vice-President Research, University of Victoria

**Dr. Richard Vedan**

Director, First Nations House of Learning, University of British Columbia

## Research Fellows

**Dr. Gordon Barnes**

Professor, School of Child and Youth Care, University of Victoria

**Dr. Susan Boyd**

Associate Professor, Studies in Policy and Practice, University of Victoria

**Dr. Jane Buxton**

Physician Epidemiologist, BC Centre for Disease Control and Assistant Professor, Health Care and Epidemiology, University of British Columbia

**Dr. Cameron Duff**

Research Lead, Youth Addiction Services, Vancouver Coastal Health, and Clinical Assistant Professor, Department of Health Care and Epidemiology, University of British Columbia

## Research Affiliates

**Dr. David Brown**

Research Scientist and Senior Project Manager, BC Mental Health and Addiction Services, Provincial Health Services Authority

**Dr. Bonnie Leadbeater**

Director, Centre for Youth and Society, University of Victoria

**Dr. Timothy Pelton**

Assistant Professor, Department of Curriculum and Instruction, University of Victoria

**Dr. Eric Roth**

Professor, Department of Anthropology, University of Victoria

**Mr. Dean Nicholson**

Administrator/Counsellor, East Kootenay Addiction Services



## Collaborating Centres and Networks

### British Columbia

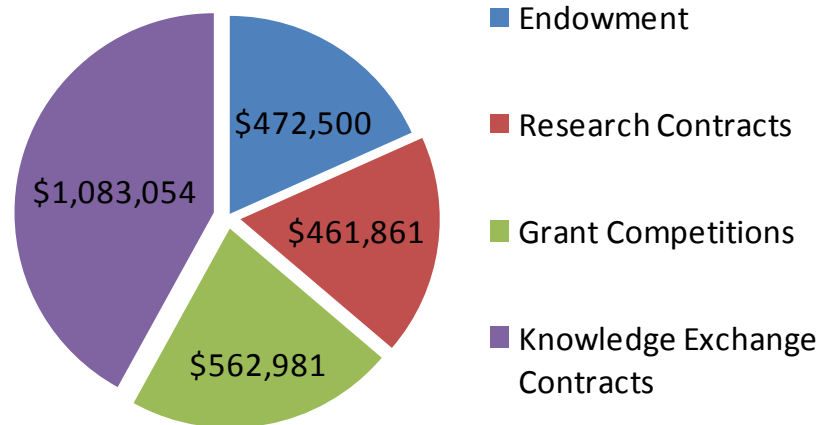
- BC Mental Health and Addictions Research Network
- Centre for Applied Research in Mental Health and Addiction, Simon Fraser University, Burnaby
- Centre for Social Responsibility, Simon Fraser University, Burnaby
- National Institute for Research in Sustainable Community Development, Kwantlen University College, Surrey

### Other Parts of Canada

- Canadian Centre on Substance Abuse, Ottawa, ON
- Centre for Addiction and Mental Health, Public Health and Regulatory Policy Division, Toronto, ON

### International

- Addictive Behavior Research Center, University of Washington, Seattle, WA, USA
- Alcohol Research Group, National Alcohol Research Center, Berkeley, CA, USA
- Prevention Research Center, Pacific Institute for Research and Evaluation, Berkeley, CA, USA
- National Drug Research Institute, Curtin University, Perth, WA, Australia



Total Revenues: \$2,580,396



## Project Highlights—General

Research projects underway or completed during 2006–07 include

- a review of the relationship between mental health and tobacco use,
- preparation of an international guide for epidemiological monitoring for World Health Organization,
- three reviews of the evidence base for effective prevention—one for Aboriginal peoples, one for youth, and one for the general population,
- brief interventions in primary healthcare for alcohol use, and for mental health disorders and alcohol use,
- meta-analyses on studies concerned with purported health benefits of moderate drinking,
- patterns of cannabis use in British Columbia, and
- a pilot study for a national alcohol and other drug monitoring system for Canada.

CARBC coordinated the preparation of a policy document on the prevention of harmful substance use, which was published in late 2006 by the BC Ministry of Health. We also coordinated an international review published in *The Lancet* in early 2007 regarding the evidence for effective prevention of harmful substance use by youth. A number of international projects were conducted, some commissioned by WHO and others reflecting ongoing international collaborations with researchers in the USA, Europe and Australia.

## Unit Highlights

### Epidemiology and Monitoring Unit

Research in the Epidemiology and Monitoring Unit includes studies that describe the nature of alcohol and other drugs in society (descriptive epidemiology) as well as those designed to better understand the causes of alcohol- or other-drug-related harms (analytic epidemiology). Our primary descriptive epidemiology project involves the documentation of alcohol and drug use and associated indicators in BC, and is described in greater detail elsewhere. Another descriptive study (which was recently completed and published) involves the prevalence of different types of substance abuse programs in Canadian workplaces.

Several analytic epidemiology projects are ongoing. Data collection has been completed on a study to better understand the relationship between cocaine and cannabis use with acute outcomes, including violence, collisions and other types of injuries (PI—Scott Macdonald). One paper has been accepted for publication, two are under review, and three others are currently being written. John Anderson was awarded a seed grant from the BC Mental Health and Addictions Research Network to assess the feasibility of conducting an intervention project in Aboriginal communities to reduce alcohol-related harms. Another project, an international collaboration headed by Dr. Cheryl Cherpitel, is designed to better understand the role of acute alcohol in injuries among Emergency Department patients. This study has resulted in five peer-reviewed publications over the past year.

Several new grant proposals are being submitted to peer-review funders: (i) Macdonald et al., Simultaneous use of cocaine and alcohol, (ii) Cherpitel et al., Alcohol and injuries among Emergency Room patients, and (iii) Giesbrecht et al., Alcohol policies and related harms in four provinces. These projects are aimed at better understanding the etiology of substance use and consequences, which in turn can pave the way for better policy initiatives.

Scott Macdonald, Director, CARBC Epidemiology and Monitoring Unit



## Illicit Drugs, Public Health and Policy Unit



The Illicit Drugs, Public Health and Policy Unit formally began its work on July 1, 2006. Since then, one of its key project activities has involved the implementation of a multi-component feasibility study for supervised drug consumption options in Victoria, the report of which was released in May 2007.

Several projects were initiated and conducted on the epidemiology of prescription opioid abuse, related supply and market dynamics, and interventions and policy options in Canada and abroad. Specifically, prescription opioid use patterns in the multi-site Canadian OPICAN cohort of illicit opioid and other drug users were analyzed and published with collaborators from the Centre for Addiction and Mental Health in Toronto (*CMAJ*, November 2006). A protocol for an exploratory study on the supply sources and market dynamics for illicit prescription opioid use in Toronto and Victoria was developed and brought to the field. A chapter on the topic of prescription opioid abuse epidemiology, harms and interventions was prepared for the international 'Drugs and Public Policy' book project.

In the area of infectious diseases, several studies with collaborators from the BC Centre for Disease Control and UBC examined the social epidemiology of Hepatitis C Virus (HCV) infection, as well as HCV treatment options and outcomes among illicit drug users and other marginalized populations in Victoria and Vancouver. Another field and laboratory study examined the presence—and possible determinants of transmission—of HCV on crack-pipe paraphernalia among high-risk crack users in Toronto.

During the report period, members of the unit published 18 peer-reviewed papers and eight reports, gave six invited conference presentations, and participated in numerous media interviews on mandate-related topics. In addition, extensive advisory board and peer-review services were provided to various funding bodies and numerous peer-review journals in the health and social sciences fields.

*Benedikt Fischer, Director, CARBC Illicit Drugs, Public Health and Policy Unit*

## Communication and Resource Unit

The Communication and Resource Unit was involved in several activities in support of the Centre's objectives related to knowledge exchange. Funding for unit activities was derived mostly from contracts with the BC Ministry of Health, Ministry of Education, several health authorities and various non-governmental agencies.



Dan Reist, Director presenting no2meth training

One primary focus of activity was promoting awareness of alcohol-related harm and low-risk drinking guidelines. The unit developed materials and provided training for community-based professionals to conduct alcohol screening and education. Our online screening tool was revised to provide more nuanced and appropriate feedback. A small multi-media promotional campaign demonstrated that there is public interest

in assessing personal alcohol consumption. A literature review and discussion paper on addressing alcohol on post-secondary campuses was prepared and will be used to support collaborative projects with communities of interest on selected campuses.

A second focus area related to schools. The unit developed a learning resource related to methamphetamine, and continued to develop a more comprehensive resource on substance use and mental health. Initial lessons of the larger resource were pre-tested, and the resource for Grades 6–10 will be ready to pilot in the fall of 2007. Teacher training was provided related to the methamphetamine resource, which is available online at [www.no2meth.ca](http://www.no2meth.ca).

Dan Reist, Director, CARBC Communication and Resource Unit

## Key Results Area 1

### Successful applications to research funding competitions

**Cannabis control in Canada: Developing a policy evaluation framework.** Fischer, B. (PI), Rehm, J., Stockwell, T. CIHR Research in Addictions: Innovative Approaches in Health Research—Policy Research Grant Competition, \$64,800 per year from April 1, 2006 to March 31, 2008.

**Cross-substance patterns of use, consequences and policy responses.** Stockwell, T. (PI), Barnes, G., Cherpitel, C., Fischer, B., Goldner, E., Johnson, J., MacDonald, S., Reist, D., Somers, J. CIHR Research in Addictions: Innovative Approaches in Health Research—New Emerging Team Grant Program, \$287,000 per year from April 1, 2006 to March 31, 2011.

**Development of chronic and violent juvenile offenders: An examination of the risk factors for serious and violent juvenile offenders.** Corrado, R., Lussier, P. Social Science and Humanities Research Grant, \$6,000, August 2006.

**Safer crack use in an urban crack-using population.** Johnson, J. (PI), Boyd, S., Buxton, J., Loudfoot, J. Health Canada, Drug Strategy Community Initiatives Fund, \$200,790 in total from March 2005 to March 2008.

### Research infrastructure awards

**BC pilot alcohol and other drug monitoring project.** Stockwell, T., Macdonald, S. A research and knowledge exchange hub of the BC Mental Health and Addictions Research Network, \$112,500, April 2006 to December 2007.

### Commissioned research contracts won

**A feasibility and pilot study for a comprehensive alcohol and other drug epidemiological monitoring system for Canada in British Columbia and Ontario.** Stockwell, T. (PI), Macdonald, S., Sturge, J., Fischer, B., and Rehm, J., Buxton, J., Corrado, R., Cohen, I., Duff, C., Marsh, D., Kerr, T., Nicholson, D., Michelow, W., Murphy, A., Saewyc, E. BC Mental Health and Addiction Services, Provincial Health Services Authority, \$378,000, July 1, 2006 to July 31, 2007.

*“To build research infrastructure and capacity across BC for the conduct of research that will increase understanding and support more effective responses to substance use.”*

**Monitoring alcohol and drug-related harm: Building systems to support better policy.** Stockwell, T. (PI). Health Canada, \$50,000. BC Mental Health and Addiction Services, \$10,000, November 2006 to September 2007.

**Feasibility study for a drug consumption site.** Fischer, B. (PI), Stockwell, T. Vancouver Island Health Authority Research Contract, \$48,000, May 2006 to June 2007.

**Narrowing the gap between men who have sex with men aware and unaware of their HIV positive status: The need for enhanced prevention for persons with acute infection.** Rekart, M. (P.I.), Borwein, P., Fischer, B., Gilbert, M., Krajden, M., Leone, P., Ogilvie, G., Purbohloul, B., Remple, V., Roth, E., Rutherford, A., Steinberg, M., Trussler, T., Wadia, R. Team Grant (Letter of Intent–approved), Canadian Institutes of Health Research.

**Comprehensive revision of the International Guide for Monitoring Alcohol Consumption and Related Harms.** World Health Organization, Management of Substance Abuse, Agreement for Performance of Work, \$14,900 USD, January 2006 to October 2006.

Table 1: Performance Indicators for Key Result Area 1

Objective		Performance indicators for 2006–07
1.1	Achieve increased funding for addictions research in BC	<ul style="list-style-type: none"> <li>Funding received from applications involving CARBC staff and site directors: (a) \$473,000 from national research competitions (\$352,000 in 2005–06), (b) \$111,000 from BC research competitions (\$157,000 in 2005–06), and (c) \$462,000 received from contract research (\$378,000 in 2005–06)</li> </ul>
1.2	Increase funding applications for long-term research programs addressing research areas of high priority in BC	<ul style="list-style-type: none"> <li>Research funding competitions: 5 (4 successful)</li> <li>Contracts/commissions: 7 (7 successful)</li> <li>NB: Others contributed by co-leadership of the BC Mental Health and Addictions Research Network</li> </ul>
1.3	Achieve successful collaborations with researchers and community partners	<ul style="list-style-type: none"> <li>17 new projects with collaborators external to CARBC (9 in 2005–06)</li> <li>2 new researchers with relevant expertise introduced to addictions research (1 in 2005–06)</li> </ul>
1.4	Attract and retain high-quality researchers from a broad range of disciplines	<ul style="list-style-type: none"> <li>9 UVic faculty and CARBC site directors with PhDs (7 in 2005–06)</li> <li>1 post-doctoral fellow at CARBC (0 in 2005–06)</li> </ul>
1.5	Attract high-quality students from a broad range of disciplines	<ul style="list-style-type: none"> <li>6 graduate and 4 undergraduate students under CARBC supervision working on addictions-related topics (0 and 2 respectively in 2005–06)</li> </ul>

Objective		Performance indicators for 2006–07
1.6	Provide training opportunities and programs for the development of additional research skills among CARBC staff, students and affiliates	<ul style="list-style-type: none"> <li>• 2 international conferences for junior research staff (0 in 2005–06)</li> <li>• 3 junior CARBC research staff attended a statistics course (1 in 2005–06)</li> <li>• Contributions to 4 graduate research-training programs within UVic (4 in 2005–06) and 3 CIHR-funded graduate research-training programs accessible to students across BC (0 in 2005–06)</li> </ul>
1.7	Provide mentorship to new and existing researchers across a range of community settings	<ul style="list-style-type: none"> <li>• 5 new drug and alcohol researchers working under supervision on CARBC projects (3 in 2005–06)</li> </ul>
1.8	Improve access to data sets and platforms for addiction researchers	<ul style="list-style-type: none"> <li>• Continued development of a BC-wide alcohol and other drug epidemiological monitoring platform</li> <li>• Continued collaboration with the BC Mental Health and Addictions Research Network to develop research “hubs” in the areas of clinical research and pharmaco-epidemiology</li> </ul>
1.9	Support provincial, national and international research capacity through editorial and peer-review activities	<ul style="list-style-type: none"> <li>• Peer review of articles submitted to journals and grant proposals (approx. 75 over the year)</li> <li>• CARBC faculty hold editorial positions with <i>Addiction</i>; <i>Drugs: Education, Prevention and Policy</i>; <i>Canadian Journal of Criminology</i>; and, <i>Substance Use and Misuse</i></li> </ul>

## Key Result Area 2

### Completed projects

#### **Alcohol consumption in moderation**

**Investigators:** Kaye Fillmore (Co-PI, University of California, San Francisco), **Tim Stockwell** (Co-PI), William Kerr (National Alcohol Research Center, USA), Alan Bostrom (University of California, San Francisco) and Tanya Chikritzhs (National Drug Research Institute, Australia)

**Funding body:** Alcohol Education & Rehabilitation Foundation (AERF), Australia

**Background:** A ‘meta-analysis’ of published research on the relationship between level of alcohol use and risk of premature death was conducted in order to examine what happened to the apparent health benefits of moderate alcohol consumption when different biases were eliminated from the studies. Additional information was sought from the original authors to access original results. The results of this work were published in the March 2006 issue of *Addiction Research and Theory* and received extensive international media coverage for the critique of the theory that moderate drinking protects against heart disease. Eight commentaries of this paper were invited by

*“To conduct high quality research that increases understanding of substance use and addiction and informs effective responses.”*

the journal, and all were published in March 2007. A follow-up paper will be published shortly in the *Journal of Studies on Alcohol*. This second paper provides estimates for numbers of deaths prevented and caused by different drinking patterns in Canada under different scenarios of protection. It also investigates gender differences in the apparent strength of cardiac protection from alcohol.

### ***International guide to monitoring alcohol consumption and related harms—2nd Edition***

**Investigators:** Tim Stockwell (PI), Vladimir Poznyak (WHO), Tanya Chikritzhs (National Drug Research Institute, Australia), Scott Macdonald, Jürgen Rehm (University of Toronto), William Kerr (National Alcohol Research Center, USA), David Jernigan (Washington DC, USA), Deborah Dawson (National Institute on Alcoholism and Alcohol Abuse, USA)

**Funding body:** Department of Mental Health and Substance Abuse, World Health Organization, Geneva

**Background:** The first edition of this guide was published in 2000 and has been a popular WHO publication already translated into several languages. The second edition includes updated material and advice regarding how to: (a) conduct surveys of drinking behaviour and related harms, (b) measure per capita alcohol consumption, and (c) estimate mortality, morbidity, years of life lost and disability-adjusted years of life lost from alcohol. Recommendations for an integrated national monitoring system across multiple data domains are also made. The new edition is currently being translated into French and Spanish and will be made available to support a series on WHO programs concerned with alcohol policies following a resolution on alcohol at the 2005 World Health Assembly.

### ***What is the evidence base for the prevention of substance use and related harms by young people?***

**Investigators:** John Toumbourou (University of Melbourne, Australia), Tim Stockwell, Jodi Sturge, Alan Marlatt, Clayton Neighbor (University of Washington), Jürgen Rehm (University of Toronto)

**Funding body:** A voluntary collaboration

**Background:** *The Lancet*, an international medical journal, invited Tim Stockwell to prepare a review of the evidence base for youth alcohol and other drug use and related problems. A team of collaborators was established for the project in order to update previous major reviews conducted by the Australian team members. New estimates of alcohol, tobacco and other drug-related harms for young people worldwide were estimated for the year 2002 using the Global Burden of Disease methodology. The paper was peer reviewed and published in March 2007.

### ***Gender differences in drug use, misuse and abuse. 4th Year Bachelor of Science in Nursing Project presented during Men's and Women's Health Weeks at Thompson Rivers University (March 2007)***

**Investigators:** Students Sothear Em and Chryl Fujino. Supervisors: Reid Webster and Ms. Sherrie Bade

**Background:** The project's goals were accomplished through the creation of an addictions information booth set up during both Men's and Women's Health Week, put on by the university's Wellness Centre. Students who visited the booth were asked to fill out a quick survey to determine whether they found the booth informational and helpful,

what kinds of additional information, if any, they would like to have available, and if they would like access to this information online.

A total of 78 surveys were filled out, 39 from Women's Wellness Week and 39 from Men's Wellness Week. Fifty-one percent of the 78 respondents were male and 49% were female. Fifty-seven out of the 78 respondents reported being affected by addiction or knowing someone who suffered from addiction. An overwhelming 94% of the participants felt it would be beneficial to see the information online and linked to the TRU homepage. Students also offered suggestions: online newsletters, mailing lists and workshops to raise further awareness.

### **Arts-related harm reduction projects**

**Investigator:** Susan Boyd

**Funding body:** City of Vancouver

**Background:** Susan Boyd worked on two projects that involve film and poetry. The Drug Films, Justice and Society Study is an examination and analysis of drug-related themes (depictions of drug use, environment, drug law, criminal justice, drug treatment, etc.) and underlying assumptions imbedded within them in British, Canadian and US films. The Downtown Eastside History Project (involving Donald MacPherson, Vancouver's drug policy coordinator, and Bud Osborn, Vancouver poet and drug activist) will culminate in a book about the emergence of the harm reduction movement in the Downtown Eastside as a social justice movement from 1994–2004.

### **Ongoing projects**

#### **Factors related to traffic collisions, violence and injury risk among cannabis and cocaine clients**

**Investigators:** Scott Macdonald (PI), Robert Mann (Centre for Addiction and Mental Health), M. Chipman (University of Toronto), P. Erickson (Centre for Addiction and Mental Health), Andy Hathaway (Guelph University)

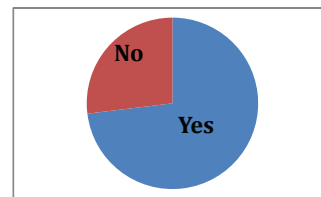
**Funding body:** Canadian Institutes of Health Research (CIHR)

**Background:** The objective of this research is to determine whether variables within three groups of factors (*drug factors*, such as patterns and amount of use, acute and chronic pharmacological actions of the drugs; *set factors*, such as sleep problems, aggression and risk-taking; and *setting factors*, such as the situations in which drug use occurs) are related to elevated risks of collisions, violence and accidental injury. The sample of over 1,000 clients in treatment for a problem of cocaine or cannabis abuse and a control group of tobacco cessation and problem gambling clients completed a self-administered questionnaire.

**Progress to date:** Data is currently being analyzed and several papers are being prepared for publication.

#### **BC pilot alcohol and other drug monitoring project**

**Investigators:** Tim Stockwell, Scott Macdonald, Warren Michelow, Ajay Puri, Jürgen Rehm (Centre for Addiction and Mental Health, Ontario), Cameron Duff, David Marsh (Vancouver Coastal Health), Jane Buxton, Thomas Kerr (BC Centre for Excellence in HIV/AIDS), Elizabeth Saewyc (McCreary Centre Society), Ray Corrado, Irwin Cohen (Dean, University College of the Fraser Valley)



Majority of students report being affected by addiction

**Funding bodies:** BC Mental Health and Addiction Services (PHSA), Health Canada, Vancouver Island Health Authority, the BC Mental Health and Addictions Research Network, Vancouver Coastal Health, Fraser Health, BC Ministry of Health and the Crystal Meth Secretariat

**Background:** CARBC has been awarded a contract to pilot a comprehensive alcohol and other drug epidemiological monitoring system for Canada. For a more detailed project summary plus some first data on regional alcohol consumption in BC, visit: [www.carbc.ca/project-summary.html](http://www.carbc.ca/project-summary.html). This work comprises a set of 12 sub-projects, with responsibility for each divided between the collaborating organizations.

**Progress to date:** The main contract between PHSA and UVic for this work was finalized in early November 2006, and data collection and report writing is underway.

### ***Cross–substance patterns of use, consequences and policy responses***

**Investigators:** Tim Stockwell (PI), Gordon Barnes, Cheryl Cherpitel (National Alcohol Research Center, USA), Benedikt Fischer, Elliot Goldner, Joy Johnson, Scott Macdonald, Dan Reist and Julian Somers (UBC)

**Funding body:** Canadian Institutes of Health Research (CIHR) under the 2005 Research in Addictions initiative

**Background:** Much of the literature that informs current understanding of psychoactive substance use and addictive behaviour, and which shapes policy responses, is based on studies that focus on a single substance type or problem outcome. This project will examine the patterns of multiple substance use, their adverse outcomes, longitudinal analysis of relationships between different substances in youth and young adults, and the population impacts of patterns of multiple substance use in BC. The multidisciplinary team will focus on three main issues: (i) transitions between different classes of substances and different patterns of use during adolescence and young adulthood, (ii) patterns of substance use that increase the risk of Emergency Department presentations for injury or overdose, and (iii) multiple substance use and risk behaviours among street drug users.

**Progress to date:** Data collection has begun for the third wave of the Victoria Healthy Youth Survey, a longitudinal study of health-risk behaviours, which will enable further analyses to be performed regarding transitions between patterns of single and multiple substance use. A core set of survey items has been developed to study patterns of multiple substance use and their consequences in multiple surveys being conducted as part of the BC Pilot Alcohol and Other Drugs Monitoring Project. An international symposium on epidemiological monitoring of alcohol and other drugs is being hosted by CARBC, partly funded by these funds.

### ***What happens when government monopolies on the retail sale of alcohol are disbanded?***

**Investigators:** Harold Holder (PI, Prevention Research Center, Pacific Institute of Research and Evaluation, Berkeley, USA), Sven Andreasson (National Institute of Public Health, Sweden), Ted Miller (Pacific Institute of Research and Evaluation, Berkeley, USA), Thor Norström (Swedish Institute for Social Research, Stockholm University, Sweden), Esa Österberg (National Research and Development Centre for Welfare and Health, Helsinki, Finland), Mats Ramstedt (Centre for Social Research on Alcohol and Drugs, Stockholm, Sweden), Ingeborg Rossow (Norwegian Institute for Alcohol and Drug Research, Oslo, Norway), **Tim Stockwell**

**Funding body:** National Institute of Public Health, Sweden



**Background:** The aim of the project is to build a model based on the empirical evidence for the relative impact of different alcohol monopolies, and to apply it to different policy scenarios. The first application of the model will be for Sweden, but there is potential to apply the model to other jurisdictions such as BC.

**Progress to date:** The group has had two face-to-face meetings to develop the methodology and begin writing the report. It is expected the public report will be completed in July 2007.

### ***Patterns of alcohol consumption in Canada and implications for policy***

**Investigators:** Tim Stockwell, Jinhui Zhao, Jodi Sturge, Gerald Thomas (Canadian Centre on Substance Abuse, Ottawa)

**Funding body:** CARBC and BC Ministry of Health

**Background:** This project is a further examination of the 2004 Canadian Addiction Survey with a view to examining the extent to which risky alcohol consumption in Canada is concentrated in just a few heavy drinkers or is spread across much of the drinking population. Risk of consumption was assessed against various Canadian and international low-risk drinking guidelines. The purpose was to determine whether alcohol policies to reduce harm should target high-risk individuals or the entire population of drinkers.

**Progress to date:** The analysis has been completed and a paper has been submitted to a prominent Canadian medical journal.

### ***Feasibility study for supervised drug consumption options in Victoria***

**Investigators:** Benedikt Fischer (PI), Christiane Allard, Michelle Coghlan, Jo-Anne Stoltz

**Funding body:** Vancouver Island Health Authority and the City of Victoria



Victoria mayor Alan Lowe, Benedikt Fischer, Christiane Allard (research assistant) and Michelle Coghlan (research associate)

**Background:** This project consists of multiple components, including interviews and focus groups with a variety of local stakeholders concerning the needs, considerations and options for supervised drug consumption measures in Victoria, as well as an international literature review on models and experiences elsewhere. Benedikt Fischer is also part of a similar feasibility study for SCS options in Toronto (Co-PIs Dr. P. Millson,

University of Toronto and Dr. C. Strike, CAMH).

**Progress to date:** The final report was submitted to funders and will be released in June 2007.

***Evaluation of a multi-disciplinary approach for the treatment of Hepatitis C in injection drug users***

**Investigators:** Dr. Brian Conway (PI, Department of Anaesthesiology, Pharmacology and Therapeutics, UBC) and his research team colleagues at UBC, **Benedikt Fischer** (Co-I)

**Funding body:** Canadian Institutes of Health Research

**Background:** Illicit drug users are by far the largest risk population for Hepatitis C infection, yet they are rarely considered for treatment. This trial will operationalize different Hepatitis C treatment models for target populations in community clinics in Vancouver and Victoria, and focus on factors influencing treatment uptake and outcomes.

**Progress to date:** Participant recruitment for this study has begun.

***Socio-epidemiological and biological study focusing on the detection of Hepatitis C Virus (HCV) on oral crack use paraphernalia***

**Investigators:** Jeff Powis (University Health Network), Mel Krajden (BC Centre for Disease Control), **Benedikt Fischer**

**Funding body:** Canadian Institutes of Health Research (ICE grant on socio-behavioural research on HCV in marginalized populations and the NCRTP-Hep C)

**Background:** This study collected recently used crack pipes from a sample of inner city crack users in Toronto and biologically tested them for the presence of HCV as one necessary piece of information to determine whether HCV may plausibly be transmitted by the sharing of oral crack use paraphernalia (as several epidemiological studies suggest).

**Progress to date:** Results from this study will be published before the end of 2007.

***Analyses of most recent follow-up and longitudinal data from the multi-site 'OPICAN' study of illicit opioid and other drug users across Canada***

**Investigators:** **Benedikt Fischer**, Jürgen Rehm and Jay Patra (both from the Centre for Addiction and Mental Health in Toronto)

**Funding body:** Canadian Institutes of Health Research (IHRT grant)

**Background:** Recent data from the OPICAN study, published in the *Canadian Medical Association Journal* in November 2006, documented a substantial shift away from heroin use to prescription opioid use among street drug user populations in Canadian cities. Pending analyses will further examine changing drug use and other key characteristics in this study population.

**Progress to date:** Several further analyses have been conducted and submitted for publication.

### **Disseminating behavioural interventions to primary care: depression and hazardous alcohol use**

**Investigators:** John Anderson, Elliot Goldner, Dan Bilsker and Joti Samra (both from CARMHA, SFU)

**Funding body:** Michael Smith Foundation for Health Research

**Background:** Researchers are evaluating a strategy to encourage family physicians to use a brief intervention for hazardous alcohol use. The strategy involves a 30-minute training session, concisely setting out the evidence base and components of the brief intervention (focused on feedback to the patient regarding their own alcohol use in relation to safe levels and support for the patient's self-management efforts, including access to a self-management workbook), along with materials to support this intervention. In October and November 2006, 80 physicians (primarily from VCHA and VIHA) were trained in this intervention (physicians were also provided with a similar training intervention focused on depression). The rates of physician and patient uptake for both the depression and hazardous-drinking interventions are being measured and compared in an attempt to assess the feasibility of implementing SBI within the general practice population of BC.

**Progress to date:** Further study will involve an intensive and systematic investigation of enabling factors and barriers to implementation in order to develop an effective dissemination approach for family physicians.

### **LE,NONET project**

**Investigators:** John Anderson, Miranda Kelly

**Funding body:** Canada Millennium Scholarship Foundation

**Background:** The LE,NONET Project is a program of support services for Aboriginal students at the University of Victoria. It is also a research project to evaluate the effectiveness of these services.

**Progress to date:** A literature review is being written in preparation for the adaptation of an earlier CARBC paper on prevention of substance use harms in the general population. The new review will highlight prevention methods that apply to Aboriginal populations.

### **Alcohol screening and education**

**Project team:** Tim Dyck (lead), Raluca Dogaru, Lu Ripley, Dan Reist

**Funding body:** BC Ministry of Health and Provincial Health Services Authority

**Background:** CARBC has done extensive research on patterns of alcohol use in BC, related risks and harms of alcohol use, and evidence related to effective strategies for intervention. The Centre has developed a set of low-risk drinking guidelines for BC, screening tools (paper-based and online), and related public education tools. Building on this earlier work, this project seeks to promote alcohol screening and education in a variety of contexts and settings.

**Progress to date:** CARBC has worked with the *Beyond the Blues* screening project for the past two years, and efforts to engage more addiction service agencies and professionals in collaborating with their mental health partners in support of this initiative has begun to reap rewards. CARBC has also initiated positive discussions with other potential partners, and has prepared a discussion paper for addressing alcohol on post-secondary campuses. Plans are being developed for taking the message to bars and other licensed establishments.



Miranda Kelly and John Anderson

**Community support and education****Project team:** Lu Ripley (lead), Nicole Pankratz, Ian Kirkpatrick, Dan Reist**Funding body:** BC Ministry of Health and Provincial Health Services Authority**Background:** As part of its commitment to knowledge exchange, CARBC has recognized the need to support communities (defined in a variety of ways) to engage with evidence on preventing and reducing harm related to substance use. This includes providing meaningful access to the available knowledge base, effective public education resources, and facilitating capacity for members of communities to interact with one another.**Progress to date:** We have developed several series of public education materials under our own name as well as through BC Partners for Mental Health and Addictions Information. Our Meth 101 fact sheet, with the aim of educating youth about methamphetamine, has been redesigned for distribution by the BC Ministry of Children and Family Development. This new version of the document was produced with input from various groups involved with at-risk youth across BC and includes a new harm reduction section.

CARBC is currently working with the Canadian Mental Health Association—BC Division to define and create a basic set of public education resources covering the comprehensive scope of mental health and substance use issues. In addition, a booklet designed to help parents understand and respond to substance use issues in their families is nearing completion.

We have been very active in providing consultation and support to communities and have helped facilitate several opportunities for dialogue. In collaboration with the national HEP program, CARBC has jointly funded a position to assist communities in developing collaborative strategies to prevent and reduce harm.

The Centre has started to engage in direct public education through media involvement that seeks to normalize key messages and correct misperceptions. In the last three months, columns have appeared 19 times in several BC newspapers. CARBC has also been asked to contribute substance-related articles to Canadian Parents Online, a bi-weekly e-zine featuring information and advice from experts in a variety of fields. Our first set of articles on methamphetamine and on prescription drug use are scheduled for publication this spring.

***The YCJA and the processing of young offenders in youth custody centres in British Columbia: An assessment of the impact of treatment programs on multi-problem youth*****Investigators:** Raymond Corrado (PI)**Funding body:** Social Science and Humanities Research Grant (2004–07)**Background:** An analysis of treatment and custody in regard to multi-problem violent youth**Progress to date:** Ongoing***Development of chronic and violent juvenile offenders*****Investigators:** Raymond Corrado, Patrick Lussier**Funding body:** Social Science and Humanities Research Grant**Background:** An examination of risk factors for serious and violent juvenile offenders**Progress to date:** Ongoing

*Newspaper articles prepared by  
CARBC staff appeared 19 times in  
BC newspapers:*

*“Why we have trouble sticking to  
our New Year’s resolutions”*

*“Is tobacco a gateway to alcohol and  
other drugs?”*

*“A health expert lives in all of us”*

**Perceived acceptability of drug use, deserved consequences for drug use, and perceived legitimacy of drug laws among offenders and non-offenders: An investigation of the “false consensus” effect**

**Investigators:** Dr. Reid Webster, Dr. Sandra Vermeulen

**Progress to date:** Proposed research has been submitted for ethical approval.

**Strategies for reducing the rate of tobacco use in BC**

**Investigators:** Dan Reist, Sara Perry

**Funding body:** BC Ministry of Health

**Background:** In providing the BC Ministry of Health with tobacco control evidence for use in their Model Core Program Paper for Healthy Living, CARBC is helping provincial health authorities reach their goal of reducing BC’s smoking rate.

**Progress to date:** CARBC continues to be involved in tobacco-related applied research projects.

**National Harm Reduction Awards**

**Investigators:** Dan Reist, Tim Stockwell

**Funding body:** BC Ministry of Health, Kaiser Foundation

**Background:** The first Harm Reduction Awards ceremony took place at a banquet in Vancouver on May 1, 2006. This project, led by the Kaiser Foundation, presented awards in six categories to individuals and organizations from across Canada who had made significant contributions in reducing the harm related to substance use and mental illness. CARBC developed the assessment criteria, helped create promotional material and facilitated the adjudication process.

**Progress to date:** CARBC continues its active support of this program. The second annual awards will be held in May 2007 in Toronto.

**Needle exchange program research**

**Investigators:** Eric Roth

**Funding body:** BC Mental Health and Addictions Research Network and CARBC

**Background:** CARBC is matching \$3,420 in seed grant funds provided by the BC Mental Health and Addictions Research Network for a pilot project entitled “Reaching AIDS Vancouver Island’s needle exchange program’s off-site and quick and busy clientele via respondent-driven sampling.” The research project is being conducted in collaboration with the education officer and outreach worker at AIDS Vancouver Island (AVI). The project findings will be used to train clients from AVI Street Outreach Services to deliver a harm reduction package using their peers’ drug-sharing networks.

**Progress to date:** The project is being implemented with the collaboration of AVI. To date, we have received support from different Victoria community organizations which run needle exchange programs, including Mobile-X, Prostitutes Empowerment Educational and Resource Society (PEERS), and the YW/MCA’s Community Outreach Services. Representatives from these organizations read and provided input into our proposed questionnaire, and will later provide the initial “seeds” for our respondent-driven sampling scheme designed to reach people who use injection drugs but do not visit the AVI on-site facilities. We have also presented our revised questionnaires to

**Categories in which awards are presented:**

- Excellence in Public Policy
- Excellence in Community Programming
- Excellence in Aboriginal Programming
- Excellence in Mental Health and Substance Use Programming
- Excellence in Leadership
- Excellence in Youth Leadership
- Excellence in Media Reporting

UVic's Human Research Ethics Board for approval, as well as addressed their concerns. We were awarded a human subjects approval certificate (protocol number 07-056) and, with this clearance, were able to recruit our initial seeds and begin data collection. We anticipate that all data will be completed and analyzed by December 2007. These data will form the MA thesis for Ms. Erin Gibson, who is now an interdisciplinary MA student at UVic, co-supervised by Benedikt Fischer and Susan Boyd.

### **Alcohol taxation reform**

**Investigators:** Tim Stockwell, David Segal

**Funding body:** CARBC

**Background:** A paper on alcohol taxation and public health, initially prepared for the National Alcohol Strategy Working Group convened by Health Canada, was released as a CARBC report. Several of its recommendations have been adopted by the working group in its final report, including proposals to provide more incentives for the sale of beers with lower alcohol content. In further support of this proposal, CARBC has initiated research to examine consumer responses to mid-strength (3.7%) versus regular-strength (5.3%) beer, noting the very low availability and uptake of the former in Canada.

**Progress to date:** Data collection and analysis of beer study has been completed.

Table 2: Performance Indicators for Key Result Area 2

Objective		Performance indicators for 2006-07
2.1	Conduct research on the patterns, distribution, determinants and consequences of substance use	<ul style="list-style-type: none"> <li>18 projects initiated, completed or underway (7 in 2005-06)</li> </ul>
2.2	Conduct research that is valued by stakeholders as being of high quality, timely and relevant to public policy and practice	<ul style="list-style-type: none"> <li>6 policy documents prepared under commission (3 in 2005-06)</li> </ul>
2.3	Identify key strategic research opportunities that will inform policy and practice	<ul style="list-style-type: none"> <li>Several projects initiated concerning prescription opioids, Hepatitis C among IDUs, alcohol taxation policy, brief interventions by GPs, and supervised injection sites</li> </ul>

Objective		Performance indicators for 2006–07
2.4	<p>Conduct research on:</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>• 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>• 12 relevant projects (5 in 2005–06)</li> <li>• 5 relevant projects (9 in 2005–06)</li> <li>• 3 projects completed (2 in 2005–06)</li> <li>• 1 project underway (1 in 2005–06)</li> <li>• 10 projects initiated or completed (8 in 2005–06)</li> <li>• 3 projects underway (1 in 2005–06)</li> </ul>
2.5	Develop and maintain significant collaborative projects with other researchers and research centres in BC	<ul style="list-style-type: none"> <li>• 14 projects (7 in 2005–06)</li> </ul>
2.6	Develop and maintain research projects that engage researchers from several relevant disciplines	<ul style="list-style-type: none"> <li>• 24 projects involving multi-disciplinary participation with individuals and other centres (15 in 2005–06)</li> </ul>
2.7	Develop and maintain significant collaborative projects with other researchers and research centres in North America	<ul style="list-style-type: none"> <li>• 12 collaborative projects with other North American researchers and research agencies (11 in 2005–06)</li> </ul>
2.8	Develop collaborative projects with international organizations	<ul style="list-style-type: none"> <li>• 9 collaborations with international organizations, researchers or groups (3 in 2005–06)</li> </ul>

***CARBC staff collaborated with the following international organizations during this year:***

- *Addictive Behavior Research Center, University of Washington, Seattle, WA, USA*
- *Alcohol Research Group, National Alcohol Research Center, Berkeley, CA, USA*
- *Prevention Research Center, Pacific Institute for Research and Evaluation, Berkeley, CA, USA*
- *National Drug Research Institute, Curtin University, Perth, WA, Australia*

*“To disseminate research findings that increase understanding of substance use and addiction, to increase awareness of related harms and to identify effective responses.”*

## Key Results Area 3

### Ongoing projects

#### **Mental health and substance use resources for BC schools**

**Project team:** Deb Solk (lead), Eugenia Didenko, Lu Ripley, Raluca Dogaru, Dan Reist

**Funding body:** BC Ministry of Health, Provincial Health Services Authority and BC Ministry of Education

**Background:** School-based resources that address mental health and substance use tend to be fragmented, overlapping and often not well grounded in evidence. CARBC has built a coalition of partners to develop learning resources for students in Grades 6–12. The resources are intended to increase health literacy related to substance use and mental health. This project includes the development of lesson plans for the classroom, a supplementary resource guide for teachers, and a school policy handbook for administrators. It also involves building a model for teacher training and web support. Active participation from stakeholders with expertise in various areas and representatives from four pilot communities (Vancouver, Prince George, Kamloops and Vernon) is a notable strength of this project.

**Progress to date:** Several literature reviews, a scope-and-sequence document for classroom resources for Grades 6–12, and 19 lesson plans have been developed. Some of the materials were part of a methamphetamine resource developed for the Ministry of Education. Other lessons will be pilot-tested in our four partner districts. Currently, a teacher-training model is being developed.

In February, the health education team provided teacher training to 100 BC teachers who will be involved in implementing the methamphetamine resource in all BC school districts. The material includes home link ideas to engage parents in the health education process. A resource is being developed to assist schools in developing policies, creating healthy environments and responding to incidents related to substance use (alcohol, tobacco and other drugs) and other mental health related issues.

### Public lectures/seminars/other events

**Alcohol: Estimating Benefits and Harms**, May 4, 2006. Kaye Fillmore (University of California), William Kerr (Alcohol Research Group, Berkeley, CA), **Tim Stockwell**, Tanya Chikritzhs (National Drug Research Institute, Australia). Hosted by CARBC and the BC Mental Health and Addictions Research Network in Vancouver as a satellite meeting to the 17th International Conference on the Reduction of Drug-Related Harm.

**Paying the price of alcohol-related harm: How Canadian alcohol taxes could be used to promote public health and safety**, November 21, 2006. **Tim Stockwell**, **Jodi Sturge**. Hosted by CARBC and the BC Mental Health and Addictions Research Network at UVic.

**The addiction-prone personality: Is this still a useful construct within the bio-psycho-social-spiritual model of addiction**, December 6, 2006. **Gordon Barnes**. Hosted by CARBC and the BC Mental Health and Addictions Research Network at UVic.

**Harm minimization for hazardous alcohol use and Aboriginal populations**, February 13, 2007. **John Anderson**. Hosted by CARBC and the BC Mental Health and Addictions Research Network at UVic.



**Reviewing the results of the 2006 Vancouver Youth Drug Reporting System**, March 1, 2007. **Cameron Duff**. Hosted by CARBC and the BC Mental Health and Addictions Research Network at SFU's Harbour Centre in Vancouver.

**Weighing the scientific evidence for drug testing in the workplace as a safety intervention**, March 14, 2007. **Scott Macdonald**. Hosted by CARBC and the BC Mental Health and Addictions Research Network at UVic.

**Sub-typing gamblers based on underlying motivations for gambling: Implications for treatment matching**, March 22, 2007. Sherry Stewart (CIHR Investigator, and Killam Research Professor, Dalhousie University). Hosted by CARBC and the BC Mental Health and Addictions Research Network at UVic.

**With child—Substance abuse during pregnancy: A women-centred approach**, March 28, 2007 (Vancouver) and April 11, 2007 (Victoria). Book launch and presentation by editors **Susan Boyd** and Lenora Marcellus (RN and MN, Vancouver Island Health). Hosted by CARBC and the BC Mental Health and Addictions Research Network, with Fernwood Publishing, at the Segal Centre in Vancouver and at UVic's downtown campus.



Susan Boyd presenting her lecture

**Monitoring alcohol and other drug-related harms in Canada: A national workshop**, March 13, 2007. Presented by **Tim Stockwell**, Robert Hanson, **Cameron Duff**, **Jane Buxton**, David Marsh and Krista Richard for approximately 25 researchers and policy makers across Canada. Sponsored by Health Canada and CARBC, and held at the Centre for Addiction and Mental Health in Toronto.

**Changing behaviour, changing lives: Alcohol and co-occurring conditions**, March 8, 2007. A research colloquium hosted by CARBC and the BC Mental Health and Addictions Research Network at SFU's Harbour Centre in Vancouver.

**Alcohol policy and harm reduction**, April 30 to May 4, 2006. A plenary session organized by CARBC for the 17th International Conference on the Reduction of Drug-Related Harm in Vancouver.

## Publications

### Journal articles

- Borges, G., Orozco, R., Cherpitel, C., Bond, J., Ye, Y., **Macdonald, S.**, Rehm, J. & Poznyak, V. (2006) A multicenter study of acute alcohol use and non-fatal injuries in the emergency department: A research report from the WHO collaborative study on alcohol and injuries. *Bulletin of the World Health Organization* 84(6): 453–460.
- Bottorff, J. L., Kalaw, C., **Johnson, J.**, Stewart, M., Greaves, L., & Carey, J. (2006) Couple dynamics during women's tobacco reduction in pregnancy and postpartum. *Nicotine and Tobacco Research* 8(4):499–509.
- Bungay, V., Malchy, L., Buxton, J., **Johnson, J.**, Macpherson, D., & Rosenfeld, T. (2007) Life with jib: A snapshot of street youth's use of crystal methamphetamine. *Addiction Research and Theory* 14(3): 235–251.
- Cherpitel, C.J., Ye, Y., Bond, J., Borges, G., **Macdonald, S.**, **Stockwell, T.**, Room, R., Sovinova, H., Marais, S., Giesbrecht, N. (2007) Validity of self-reported drinking before injury compared with a physiological measure: Cross-national analysis of emergency-department data from 16 countries. *Journal of Studies on Alcohol and Drugs* 68(2): 296–302.
- Chikritzhs, T. and **Stockwell, T.** (2006) The impact of later trading hours for hotels on levels of impaired-driver road crashes and driver breath alcohol levels. *Addiction* 101(9):1254–1264.
- Chikritzhs, T., and **Stockwell, T.** (2005) Alcohol taxes save lives: Response to Holder. *Addiction* 100(12):1884–1888.
- Fillmore, K., Kerr, W., **Stockwell, T.**, Chikritzhs, T., and Bostrom, A. (2007) Has alcohol been proven to be protective against coronary heart disease? Response to the Eight Commentaries. *Addiction Research and Theory* 15(1):35–46.
- Fillmore, K., **Stockwell, T.**, Chikritzhs, T., Kerr, W. and Bostrom, A. (2006) Moderate alcohol use and reduced mortality risk: Systematic error in prospective studies and new hypotheses. *Annals of Epidemiology* 17(5):S16–23.
- Fischer, B.**, Rodopoulos, J., Rehm, J. and **Ivsins, A.** (2006) Toking and driving: Characteristics of Canadian university students who drive after cannabis use—an exploratory pilot study. *Drugs: Education, Prevention & Policy* 13(2):179–187.
- Fischer, B.**, Rehm, J., Haydon, E., Monga, N., **Kalousek, K.**, Tyndall, M., El-Guebaly, N. (2006) Crack across Canada: Comparing crack and non-crack users in a multi-city cohort of opioid and other street drug users. *Addiction* 101(12):1760–1770.
- Fischer, B.**, Reimer, J., Firestone Cruz, M., **Kalousek, K.**, Rehm, J., Heathcote, J. (2006) Treatment for Hepatitis C Virus (HCV) and cannabis use in illicit drug user patients: Implications and questions. *European Journal of Gastroenterology and Hepatology* 18(10):1039–1042.
- Fischer, B.**, **Kalousek, K.**, Rehm, J., Powis, J., Kraiden, M., Reimer, J. (2006) Hepatitis C, illicit drug use and public health: Does Canada really have a viable plan? *Canadian Journal of Public Health* 97(6):485–488.
- Fischer, B.**, Rehm, J. (2006) Illicit opioid use and treatment: Challenges for Canada and beyond (Editorial). *Canadian Journal of Psychiatry* 51(10):621–623.
- Fischer, B.**, Firestone, M., Rehm, J. (2006) Illicit opioid use and its key characteristics: A select overview and evidence from a Canadian multi-site cohort of illicit opioid users

*CARBC staff had articles accepted for publication in over 20 academic and professional journals including:*

*Addiction*

*Bulletin of World Health Organization*

*Canadian Journal of Public Health*

*International Journal of Drug Policy*

*Journal of Studies on Alcohol and Drugs*

*The Lancet*

*Visions: BC's Mental Health and Addictions Journal*

(OPICAN). *Canadian Journal of Psychiatry* 51(10):624–634.

- Fischer, B.**, Manzoni, P., Rehm, J. (2006) Comparing injecting and non-injecting illicit opioid users in a multi-site Canadian sample ('OPICAN' cohort). *European Addiction Research* 12(4):230–239.
- Fischer, B.**, Popova, L., Rehm, J., **Ivins, A.** (2006) Drug-use-related overdose mortality in British Columbia and Ontario, 1992–2002. *Canadian Journal of Public Health* 97(05): 384–387.
- Fischer, B.**, Rehm, J., Patra, J., Firestone-Cruz, M. (2006) Fundamental changes in illicit opioid use profiles across Canada. *Canadian Medical Association Journal* 175(11):1385–1387.
- Graham, K., Osgood, D. W., Wells, S., **Stockwell, T.** (2006) To what extent is intoxication associated with aggression in bars? A multilevel analysis. US National Institute on Alcohol Abuse and Alcoholism. *Journal of Studies on Alcohol* May 2006, 67(3):382–390.
- Greaves, L., **Johnson, J.**, Bottorff, J., Kirkland, S., Jategaonkar, N., McGowan, M., McCullough, L., Battersby, L. (2006) What are the effects of tobacco policies on vulnerable populations: A better practices review. *Canadian Journal of Public Health* 97(4):310–314.
- Macdonald, S.**, Csiernik, R., Durand, P., Rylett, M. and Wild, T.C. (2006) The prevalence and factors related to Canadian workplace health programs. *Canadian Journal of Public Health* 97(2):121–125.
- Macdonald, S.**, Cherpitel, C., DeSouza, A., Stockwell, T., Borges, G. & Giesbrecht, N. (2006) Variations of alcohol impairment in different types, causes and contexts of injuries: Results of emergency room studies from sixteen countries. *Accident Analysis and Prevention* 38(6): 1107–1112.
- Macdonald, S.**, Csiernik, R., Durand, P., Rylett, M. & Wild, T.C. (2006) The prevalence and factors related to Canadian workplace health programs. *Canadian Journal of Public Health* 97(2):121–125.
- Macdonald, S.**, Csiernik, R., Durand, P., Rylett, M., Wild, T.C., and Lloyd, S. (2006) Organizational characteristics related to the adoption of employee assistance and drug testing programs in Canada. *The Canadian Journal of Community Mental Health* 25(2) 159–171.
- Macdonald, S.**, Csiernik, R., Dooley, S., Durand, P., Rylett, M., **Sturge, J.**, Wells, S. & Wild, T.C. (2006) Changes in the prevalence and characteristics of workplace health programs in Ontario: 1989 to 2003. *Journal of Workplace Behavioral Health* 22(1).
- Manzoni, P., Brochu, S., **Fischer, B.**, Rehm, J. (2006) Prevalence and predictors of property crime in a multi-site sample of illicit opiate users in five Canadian cities. *Deviant Behavior* 27(3):351–376.
- Perry, S.** and **Kirkpatrick, I.** (2007) Faith in tobacco control: How spirituality can help prevent and reduce smoking. *Visions: BC's Mental Health and Addictions Journal* 3(4):24.
- Perry, S.** and **Pankratz, N.** (2007) Getting to the bottom of a burning issue: Tobacco's top myths and facts. *Visions: BC's Mental Health and Addictions Journal* 3(4):7–8.
- Popova, L., **Fischer, B.**, Rehm, J. (2006) An overview of illegal opioid use and health services utilization in Canada: Reponse to Gatherer (letter). *Public Health* 120(11):1091.

- Popova, L., Rehm, J., **Fischer, B.** (2006) An overview of illegal opioid use and health services utilization in Canada. *Public Health* 120(4):320–328.
- Reimer, J., Lorenzen, J., Baetz, B., **Fischer, B.**, Rehm, J., Haasen, C., Backmund, M. (2007) Multiple viral hepatitis in injection drug users and associated risk factors. *Journal of Gastroenterology and Hepatology* 22(1):80–85.
- Reist, D.** (2007) The role of schools in addressing tobacco. *Visions: BC's Mental Health and Addictions Journal* 3(4):20.
- Schultz, A.S.H., Bottorff, J. L., & **Johnson, J.** (2006) An ethnographic study of tobacco control in hospital settings. *Tobacco Control* 15(4):317–322.
- Stockwell, T.** (2006) Alcohol supply, demand and harm reduction: What is the strongest cocktail? *International Journal of Drug Policy* 17(4):269–277.
- Stockwell, T.** (2006) Alcohol: Our favourite drug (Editorial). *Visions: BC's Mental Health and Addictions Journal* 2(9):4–5.
- Stockwell, T.**, Chikritzhs, T., Bostrom, A., Fillmore, K., Kerr, W. Rehm, J. and Taylor B. (2007) Alcohol-caused mortality in Australia and Canada: Scenario analyses using different assumptions about cardiac benefit. *Journal of Studies on Alcohol and Drugs* 68(3):345–352.
- Stockwell, T.** (2007). Working with the alcohol industry on alcohol policy: Should we sometimes sit at the same table? (Editorial) *Addiction*, 102(1):1–3.
- Toumbourou, J.W, **Stockwell, T.**, Neighbors, C., **Marlatt, G.**, **Sturge, J.**, and Rehm, J. (2007) Interventions to reduce harm associated with adolescent substance use: an international review. *The Lancet*, Adolescent Health Series, 4(3):41–51.

### Books

- Cherpitel, C., Poznyak, V., Borges, G., Giesbrecht, N., Hungerford, D., Peden, M., Room, R., and **Stockwell, T.** eds. (2007) *Alcohol and Injuries: Emergency Department Studies in an international perspective*. Geneva: In Press, WHO.
- Stockwell, T.** (Ed.) (2007) *International Guide for Monitoring Alcohol Consumption and Related Harm, Second Edition*. Geneva: In Press, WHO/MSD/MSB.
- Boyd, S.** and Marcellus, L. (2007) *With Child—Substance Abuse During Pregnancy: A Women-Centred Approach*. Halifax: Fernwood Publishing.

### Book chapters

- Monteiro, M.G., Rehm, J, Taylor, B., and **Stockwell, T.** (2007) International trends in alcohol consumption (MS number: 359). In: *Encyclopedia of Public Health*.
- Stockwell, T.**, **Macdonald, S.** and **Sturge, J.** (2007) Surveillance and monitoring alcohol-related injury in the ED. In: Cherpitel, C., Poznyak, V., Borges, G., Giesbrecht, N., Hungerford, D., Peden, M., Room, R., and **Stockwell, T.** eds. *Alcohol and Injuries: Emergency Department Studies in an International Perspective*. Geneva: WHO.

### Papers, commissioned reports & other

- Anderson, J.F.** (2006) Core Programs Evidence Review Paper on the Prevention of Harms Associated with Substance Use. Victoria: Centre for Addictions Research of BC. [Prepared for the BC Ministry of Health.]

### ALCOHOL AND INJURY in Emergency Departments

Summary of the Report from the WHO  
Collaborative Study on Alcohol and Injuries

World Health  
Organization

- Anderson, J.F.** (2006) Population Health Surveillance and Epidemiology: The Temporal Association of Epidemics of Infective Endocarditis and New HIV Seropositivity in Injection Drug Users: Implications for Harm Reduction Strategies in BC. Victoria: Centre for Addictions Research of BC. [Prepared for the BC Ministry of Health.]
- Bilsker, D. and **Anderson, J.F.** (2006) Behavioural Interventions in the Real World: Depression and Hazardous Drinking. Victoria: Centre for Addictions Research of BC. [Prepared for the BC College of Family Physicians Newsletter (Summer).]
- Bullock, S., Myers, T., Allmann, D., Millson, P., Calzavara, L., **Fischer, B.** (2006) Crystal: A Study of Use and Sexual Risk Among Poly-drug Users in Toronto. Toronto: HIV Social, Behavioral and Epidemiological Studies Unit.
- Fillmore, K., **Stockwell, T.**, Kerr, W.C., Chikritzhs, T., and Bostrom, A. (2006) A Systematic Error in Prospective Studies of Alcohol Use and Mortality Risk: A Meta-analysis of Prospective Mortality Studies and Re-estimation of the Impact of Alcohol on Premature Mortality in Australia. Perth, Western Australia: National Drug Research Institute.
- Fischer, B.**, Rehm, J. and **Kalousek, K.** (2006) Illicit Opioid Use, Treatment and Economic Costs: Options and Estimations for Cost Reductions. Victoria: Centre for Addictions Research of BC. [Prepared for the Drug Policy Program, City of Vancouver.]
- Fischer, B.** (2006) Determinants and State of Drug Law and Policy Reform in Canada. Victoria: Centre for Addictions Research of BC. [Prepared for the RSA Commission on Illegal Drugs, Communities and Public Policy, London, England.]
- Haines, R., **Fischer, B.**, Rehm, J. (2007) Socio-cultural Factors and Determinants Influencing Smoking Among Youth: A Literature Review. Zuerich: ISGF.
- Macdonald, S.** (2006) Indicators of Harm Attributable to the Short-term Effects of Drinking Alcohol: International Guide for Monitoring Alcohol Consumption and Related Harm. Victoria: Centre for Addictions Research of BC. [Prepared for the World Health Organization.]
- Patra, J., Rehm, J., **Fischer, B.** (2006) The Association Between Socio-economic Status and Smoking Among Young People in Canada, Sweden and Switzerland. Zuerich: ISGF.
- Perry, S.** and **Reist, D.** (2006) Core Components of Effective Regional Tobacco Control: A Review of the Evidence (Core Programs Evidence Review Paper on Tobacco Control). Vancouver: Centre for Addictions Research of BC. [Prepared for the BC Ministry of Health.]
- Perry, S.** and **Reist, D.** (2006) Vancouver Coastal Health Tobacco Strategy 2006-2010. Vancouver: Centre for Addictions Research of BC. [Prepared for Vancouver Coastal Health.]
- Perry, S.** and **Reist, D.** (2006) Words, Values and Canadians: A Report on the Dialogue at the National Symposium on Language. Vancouver: Centre for Addictions Research of BC. [Prepared for Health Canada.]
- Perry, S.** and **Reist, D.** (2006) National Symposium on Language: A Workbook. Vancouver: Centre for Addictions Research of BC. [Prepared for attendees of the National Symposium on Language on behalf of the Provincial Health Services Authority, BC Ministry of Health, CARBC and Health Canada.]
- Perry, S.** and **Reist, D.** (2006) Tobacco Taxation Policy: A Literature Review and Recommendations. Vancouver: Centre for Addictions Research of BC. [Prepared for the BC Ministry of Health.]
- Sarsh, B., **Fischer, B.**, Rehm, J. (2006) Socio-economic Status and Smoking Among

Adolescents. Zuerich: Institut fuer Sucht- und Gesundheitsforschung (ISGF).

**Stockwell, T.,** Fishbein, D., Toumbourou, T., Tarter, R., and Eldreth, E. (2006) Preventing Psychoactive Substance Use and Related Harms Among Children and Adolescents: A Review of Theory and Global Best Practices to Address Psychosocial and Neurobiological Factors. WHO: Geneva. [Prepared for the World Health Organization.]

**Stockwell, T., Reist, D.,** Balfour, K., Poole, N., Tupper, K. (2006) Following the Evidence: Preventing Harms from Substance Use in BC. Victoria: Centre for Addictions Research of BC. [Prepared for the BC Ministry of Health.]

### **CARBC publications**

**Stockwell, T., Sturge, J.,** Jones, W., **Fischer, B.** and Carter, C. (2006). Cannabis use in British Columbia: Patterns of use, perceptions and public opinion as assessed in the 2004 Canadian Addiction Survey. CARBC Statistical Bulletin #2, Victoria, BC.

**Stockwell, T.** (2006) A review of research into the impacts of alcohol warning labels on attitudes and behaviour. CARBC Technical report, Vancouver, BC.

## Cannabis Use in British Columbia: patterns of use, perceptions, and public opinion as assessed in the 2004 Canadian Addiction Survey

Tim Stockwell<sup>1</sup>, Jodi Sturge<sup>1</sup>, Wayne Jones<sup>2</sup>, Benedikt Fischer<sup>1</sup> and Connie Carter<sup>1</sup>

<sup>1</sup> Centre for Addictions Research of BC, University of Victoria, British Columbia, Canada

<sup>2</sup> Centre for Applied Research on Mental Health and Addictions, Simon Fraser University, British Columbia.

### **Invited presentations**

**Anderson J.,** Screening and brief intervention for hazardous alcohol use and Indigenous populations: Culturally congruent concept or wishful Western whim? Paper presented at the 3rd INEBRIA Annual Conference, Lisbon, Portugal, October 26–27, 2006.

**Boyd, S.** The war on drugs: Its deadly consequences and possible alternatives. Paper presented at a public forum at the Carnegie Community Centre, Vancouver, Canada, February 15, 2006.

Chen, W., Bottorff, J.L., and **Johnson, J.** Understanding adolescent non-smokers: Reasons for currently not smoking and susceptibility to smoking in the future. Paper presented at the 13th World Conference on Tobacco and Health Conference. Washington, DC, USA, July 2006.

Firestone-Cruz, M. and **Fischer, B.** Hepatitis C and illicit drug use: A research update. Paper presented at the Hepatitis C Workshop: Train the Trainer, Toronto, Canada, February 19–20, 2007.

**Fischer, B.** Harm reduction: A brief overview. Paper presented at the 3rd Addictions Medicine Conference (Vancouver Island Health), Victoria, Canada, March 30, 2007.

**Fischer, B., Kalousek, K.,** Rehm, J. Characterizing an awakening giant: The phenomenon of prescription opioid abuse in North America. Paper presented at the 1st Meeting of the International Society for the Study of Drug Policy (ISSDP), Oslo, Sweden, March 22–23, 2007.

**Fischer, B.,** Marsh, D., Brissette, S., Anis, A., Lauzon, P., Brochu, S., Rehm, J., Schechter, M. The North American Opiate Medications Initiative (NAOMI)—An update. Paper presented at the 16th International Addiction Congress “Von Heroin-gestützter Behandlung bis zu Drogenkonsumräumen,” Hamburg, Germany, September 13–15, 2006.

**Fischer, B.,** Rehm, J., Brands, B. Changing profiles of illicit opioid and other drug users: Implications for the treatment system. 16<sup>th</sup> International Addiction Congress “Von Heroin-gestützter Behandlung bis zu Drogenkonsumräumen,” Hamburg, Germany, September 13–15, 2006.

**Johnson, J.** Tobacco use in the context of mental illness. Paper presented at the BC Tobacco Network and Clean Air Coalition of BC, Vancouver, Canada, October 2006.

**Kalousek, K., Fischer, B.,** Firestone, M., B., Rehm, J., Newton-Taylor, Tyndall, M. Prevalence and associated factors of Hepatitis C infection (HCV) in a population of illicit opioid and other drug users (OPICAN). Presented at the Canadian Association of the Study of the Liver (CASL)/NCRTP-HepC Annual Meeting, Toronto, Canada, March 30–April 1, 2006.

Marsh, D., Brissette, S., Anis, A., Lauzon, P., Brochu, S., **Fischer, B.,** Rehm, J., Schechter, M. The North American Opiate Medications Initiative (NAOMI). Paper presented at the 17th International Conference on the Reduction of Drug-related Harm, Vancouver, Canada, May 1–4, 2006.

**Macdonald, S.** Substance use and injuries. Paper presented at the Health Canada Seminar Series, Ottawa, Canada, February 23, 2007.

**Reist, D.,** Patterns and risks: Substance use among older adults. Paper presented at the Handle with Care Conference, Nanaimo, Canada, March 9, 2007.

**Stockwell, T.** Monitoring alcohol-related harm on global, regional and country levels: Background and introduction to the WHO Guide on alcohol monitoring, and The National Alcohol Indicators Project: Lessons from Australian implementation of the WHO Guide on alcohol monitoring. Papers presented at the 1st Meeting of WHO Reference Group on Alcohol Epidemiology, Geneva, Switzerland, September 15, 2006.

**Stockwell, T. and Sturge, J.** Alcohol pricing and public health in Canada: Issues and opportunities. Paper presented at the Canadian Public Health Association Conference, Vancouver, Canada, November 28, 2006.

**Stockwell, T.** Alcohol and drug information system to support policy: Lessons from international experiences. Paper presented at the UVic School of Health Information Science Research Seminar, Victoria, Canada, November 3, 2006.

**Stockwell, T.** Alcohol taxation and pricing: Opportunities to advance public health policy. Presented at the University of California, Berkeley, Advanced Alcohol Research Seminar (Health & Human Development, School of Public Health), Berkeley, USA, November 14, 2006.

**Stockwell, T.** From NCRPDA 1988 to NDRI 2004 (Or, unreliable memoirs of an ex-director). Key note address presented at the NDRI 20th Anniversary Symposium, Perth, Australia, September 25–26, 2006.

- Stockwell, T.** Alcohol and health: A scenario analysis of estimated costs and benefits in Canada and Australia. Paper presented at the Alcohol: Estimating Benefits and Harms Research Symposium, Vancouver, Canada, May 4, 2006.
- Stockwell, T.** What does it mean to have “community-based” services? Paper presented at the Kirby Commission Symposium, Wosk Centre, SFU, Vancouver, Canada, May 16, 2006.
- Stockwell, T.** A comprehensive alcohol and other drug monitoring system for Canada: A pilot project in British Columbia & Ontario. Paper presented at the Network Advisory Committee of the BC Mental Health and Addiction Research Network, UNBC, Prince George, Canada, June 29, 2006.

### ***Other conference and seminar presentations***

- Ala-Leppilampi, K., Roerecke, M., Rodopoulos, J., Mann, R., Smart, R., **Fischer, B.**, Rehm, J., Stoduto, G. Anti-social driving behaviour: Cannabis use and road rage. Paper presented at the Auto 21 Network of Research Excellence Highly Qualified Personnel (HQP) Conference, Barrie, Canada, May 12–14, 2006.
- Cavalieri, W., Dery, L., Dinner, K., Donaldson, T., **Fischer, B.**, Fontaine, J., Kendall, P., Lavoie, F., Liepold, H., Palmer, D., Rothfuchs, S., Steer, L., Stewart, D., Taylor, M. National working meeting on crack cocaine and Hepatitis C. Paper presented at the 17th International Conference on the Reduction of Drug-Related Harm, Vancouver, Canada, May 1–4, 2006.
- Chikritzhs, T., and **Stockwell, T.** The impact of later trading hours for hotels on levels of impaired-driver road crashes and driver breath alcohol levels. Paper presented at the 17th International Conference on the Reduction of Drug-Related Harm, Vancouver, Canada, April 30–May 4, 2006.
- Linden, R., Mann, R., Smart, R., Asbridge, M., Backhouse, C., Boase, P., Brantingham, P., Brantingham, P., Butters, J., **Fischer, B.**, MacDonald, S., Rehm, J., Solomon, R., Vingilis, E., Wiesenthal, D. Automobile-linked crime in Canada. Paper presented at the Auto 21 Scientific Conference, Vancouver, Canada, June 13–14, 2006.
- Macdonald, S.** The legal justification of drug testing in the workplace in Canada: What is the research evidence? Paper presented at the 17th International Conference on the Reduction of Drug-Related Harm, Vancouver, Canada, April 30–May 4, 2006.
- Macdonald, S.**, Erickson, P., Wells, S., and Hathaway, A. Explaining the relationships between alcohol/drug use with physical aggression. Paper presented at the Kettil Bruun Society 32nd Alcohol Epidemiology Symposium, Maastricht, The Netherlands, May 29–June 2, 2006.
- Rudzinski, K., **Fischer, B.**, Powis, J., Firestone, M., and Rehm, J. Hepatitis C virus detection on crack pipes. NCRTP-HepC and CASL Annual Meeting, Banff, Canada, February 17–18, 2007.
- Stockwell, T.**, Chikritzhs, T., Bostrom, A., Fillmore, K., Rehm, J., and Kerr, W. Lives lost and saved from alcohol consumption in Australia and Canada: Scenario analyses using different assumptions about purported health benefits. Paper presented at the Kettil Bruun Society 32nd Alcohol Epidemiology Symposium, Maastricht, The Netherlands, May 29–June 2, 2006.
- Stockwell, T.** Alcohol and health: A scenario analysis of estimated costs and benefits in Canada and Australia. Paper presented at the Alcohol: Estimating Benefits and Harms Research Symposium, Vancouver, Canada, May 4, 2006.



**Sturge, J., Stockwell, T., and Macdonald, S.** Methods for national monitoring of alcohol and other drug use patterns and problems. Paper presented at the Kettil Bruun Society 32nd Alcohol Epidemiology Symposium, Maastricht, The Netherlands, May 29–June 2, 2006.

### **Media releases**

**April 11, 2006—UVic Conducts Nation-Wide Survey on Workplace Health.** UVic Communications media release regarding a study led by **Scott Macdonald**, which revealed increasing prevalence of workplace drug testing in Canada. The results were published in the *Canadian Journal of Public Health* (March/April 2006).

**April 20, 2006—Estimating Alcohol's Benefits and Harms.** UVic Communications media release announcing a public research symposium regarding the results of a study by an international team of researchers, including **Tim Stockwell**, debunking the myth that moderate drinking helps prevent heart disease. The research symposium was held on May 4, 2006 in Vancouver.

**April 27, 2006—Decriminalizing Pot Down Under.** UVic Communications media advisory announcing a public lecture hosted by CARBC featuring Dr. Simon Lenton, Deputy Director, National Drug Research Institute, Australia, held on May 12, 2006 at UVic.

**July 18, 2006—Harm Reduction.** City of Victoria media release and news conference on harm reduction. Held at Victoria's City Hall by Mayor Alan Lowe, joined by Dr. Richard Stanwick, Chief Medical Health Officer, VIHA, Paul Battershill, Chief of Police, and **Benedikt Fischer**.

**October 4, 2006—Cannabis Use Highest in BC.** UVic Communication media release regarding the results of a joint study conducted by **Benedikt Fischer** and the Centre for Applied Research on Mental Health and Addictions, SFU, published in CARBC's bulletin, "Cannabis Use in British Columbia: Patterns of Use, Perceptions and Public Opinion as Assessed in the 2004 Canadian Addiction Survey" (September 2006, revised January 2007).

**November 16, 2006—Change Liquor Taxes to Reduce Alcohol Problems, Urges Study.** UVic Communications media release regarding the results of a study led by **Tim Stockwell**, published in the CARBC report entitled, "Alcohol Pricing and Public Health in Canada" (February 2006).

**November 21, 2006—Prescription Opioid Abuse More Prevalent Than Heroin.** UVic Communications and Canadian Institutes of Health Research media release regarding the results of a study led by **Benedikt Fischer**, published in *the Canadian Medical Association Journal* (November 21, 2006).

**March 27, 2007—Kids Dying From Drugs: It's All About Supply and Demand.** UVic Communications media release regarding the findings from a paper co-authored by **Tim Stockwell**, entitled, "Interventions to Reduce Harm Associated with Adolescent Substance Abuse" published in *The Lancet* (March 2007).

### **Newspaper columns**

**January 2007—Why we have trouble sticking to our New Year's resolutions.** Column was written by **Nicole Pankratz** and published in 3 community newspapers in BC.

**February 2007—Is tobacco a gateway to alcohol and other drugs?** Column was written by Nicole Pankratz and published in 8 community newspapers in BC.

**March 2007—A health expert lives in all of us.** Column was written by **Nicole Pankratz** and published in 10 community newspapers in BC.

### Media coverage

Story/Topic	Print	TV	Radio	On-line	Total
Teen substance use	27	2	1	0	30
Marijuana	55	0	1	0	56
Alcohol	162	0	8	5	175
Tobacco	10	0	0	0	10
Opioids & prescription drugs	93	8	11	2	114
Miscellaneous	18	0	2	0	20
Harm reduction	39	2	0	0	41
Methamphetamine	4	0	0	0	4
<b>Total</b>	<b>408</b>	<b>12</b>	<b>23</b>	<b>7</b>	<b>450</b>

Table 3: Performance Indicators for Key Result Area 3

Objective		Performance indicators for 2006-07
3.1	Disseminate research findings to policy makers, practitioners, public health professionals, other researchers, community interest groups and the general public	<ul style="list-style-type: none"> <li>8 national policy committee memberships (3 in 2005-06)</li> <li>14 reviews of evidence for effectiveness for different types of intervention and policy (7 in 2005-06)</li> <li>13 new resources developed by CARBC and made available on-line and in print (28 in 2005-06)</li> </ul>
3.2	Publish research findings in articles in peer-reviewed journals	<ul style="list-style-type: none"> <li>35 articles published by CARBC researchers in peer-reviewed journals (15 in 2005-06)</li> </ul>
3.3	Publish research findings in book chapters, books, research monographs and technical reports	<ul style="list-style-type: none"> <li>1 book chapter (2 in 2005-06), 1 bulletin (1 in 2005-06), and 11 technical reports published by CARBC researchers (2 in 2005-06)</li> </ul>
3.4	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>2,028 citations in peer-reviewed journals in 2006 of research on substance use issues by CARBC researchers (1,933 in 2005-06)</li> </ul>

Objective		Performance indicators for 2006–07
3.5	Provide balanced factual information on drug-related harms and prevention approaches through a variety of knowledge exchange strategies, including media releases and the internet	<ul style="list-style-type: none"> <li>• 407 articles in the print media (160 in 2005–06), 35 on-line articles (28 in 2005–06), and 26 interviews used by the electronic media (25 in 2005–06)</li> <li>• 2 CARBC newsletters (2 in 2005–06)</li> <li>• 14 articles from CARBC in magazines, newsletters, websites, and unrefereed journals (5 in 2005–06)</li> <li>• 5,651 orders for information products responded to by the CARBC resource centre (658 in 2005–06)</li> </ul>
3.6	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>• 10 public research seminars (9 in 2005–06), 1 national symposium convened or co-convened by CARBC (1 in 2005–06), and 1 international symposium (0 in 2005–06)</li> <li>• 32* invitations to CARBC researchers to present at conferences and symposia were accepted (45 in 2005–06), of which 12 were held in BC (25 in 2005–06), 12 were national (13 in 2005–06), and 10 were international (7 in 2005–06)</li> <li>• 21* papers accepted for presentation from CARBC researchers and students (17 in 2005–06), of which 6 were held in BC (3 for 2005–06), 6 were national (7 for 2005–06), and 11 were international (7 for 2005–06)</li> </ul> <p>* International meetings held in BC counted in each category.</p>
3.7	Contribute to teaching programs on substance use and addictions for undergraduate and graduate courses/programs	<ul style="list-style-type: none"> <li>• 4 courses in which addictions issues were taught by CARBC members at UVic (3 in 2005–06)</li> <li>• 6 courses in which addictions issues were taught by CARBC members at other campuses (1 in 2005–06)</li> </ul>
3.8	Cultivate communities of practice that disseminate knowledge among policy makers, practitioners, public health professionals, researchers, community interest groups and the general public in order to increase awareness of drug-related harms and effective prevention strategies	<ul style="list-style-type: none"> <li>• CARBC personnel were represented on 8 networks active in BC (4 in 2005–06) which link researchers, policy makers, practitioners, and members of the wider community, with the aim of disseminating knowledge on substance use and addiction</li> </ul>

***CARBC participated in teaching on addictions issues at the following campuses:***

*University of Victoria*

*University of British Columbia,  
Island Medical Program and  
Faculty of Medicine*

*Simon Fraser University*

*University of Toronto*

*University of California, Berkeley*

*CIHR Strategic Training initiatives  
spanning multiple Canadian  
Universities*

*“To contribute to the implementation of evidence-based policy and practice.”*

## Key Result Area 4

The ultimate purpose of the research undertaken at CARBC is to inform the policy and practice responses to the problems of substance use and addiction in BC and elsewhere in Canada. It is rare for a piece of research to contribute directly to a more effective policy response without the involvement of numerous partners to assist in design, interpretation and dissemination. We can, however, show that we have continued to participate in the process of designing, implementing and communicating research in association with partners in policy and practice, and that we have tackled some important applied research questions. The work of Benedikt Fischer on the feasibility of a safe drug consumption site in Victoria is one such example—this may or may not lead to improved harm reduction responses in our host city, but we have worked hard with those who make and negotiate that policy to ensure it is well informed by evidence.

Another highlight was the publication of the BC Ministry of Health document “Following the Evidence: A framework for preventing harm from substance use in British Columbia,” which was a collaborative effort coordinated by CARBC that has been approved as a policy document by the ministry and which outlines directions for evidence-based prevention policy in the province in the years ahead. A companion document developed by John Anderson to provide specific advice to health authorities on the implementation of prevention policies is also being used as a policy tool at different levels of government.

During 2006–07, Tim Stockwell worked as a member of the National Alcohol Strategy Working Group to the National Alcohol Strategy. He has also worked with interested parties in BC to make the case for alcohol tax reforms to promote the consumption of lower alcohol content drinks.

Scott Macdonald provided advice to the Canadian Human Rights Commission regarding the efficacy of drug testing in the workplace. He also appeared as an expert witness in some high-profile court cases on the same issue.

The Communication and Resource Unit also sought to increase the probability of research findings being applied to policy in almost all aspects of its work. In support of this objective, several projects were undertaken to provide policy advice. The largest of these was the preparation of a paper for the BC Ministry of Health on the core components of a comprehensive tobacco control program.

The unit also seeks to support communities in developing and implementing effective strategies related to substance use. This involves participation in a variety of networks and linkages with numerous stakeholders. The unit provided educational activities in several communities throughout the province, and continues to develop tools and resources as well as provide access to a range of materials through the resource library at [www.silink.ca](http://www.silink.ca).

## Committee Memberships

Anderson, J. Advisory Committee on Opioid Dependence, College of Physicians and Surgeons of BC.

Anderson, J. Addictive Diseases Committee, BC Medical Association.

Boyd S. Member of National Coordination and Advisory Committee for the National Research Agenda for Substance Use and Abuse, Health Canada. Two-year membership starting March 2006.

Fischer, B. Member, Scientific Institutional Advisory Board, Institute for Neuroscience, Mental Health and Addictions (INMHA), Canadian Institutes of Health Research (CIHR).

- Macdonald, S. BC Workplace Mental Health and Addictions Scientific Committee.
- Reist, D. Member, National Advisory Group on Workforce Development, Canadian Centre on Substance Abuse.
- Reist, D. Member, National Treatment Strategy Working Group. National policy group formed jointly by the Canadian Centre on Substance Abuse, the Centre for Addictions and Mental Health and BC Mental Health and Addiction Services.
- Reist, D. Member, Keeping the Door Open: Dialogues on Drug Use, a multi-stakeholder coalition of leaders and organizations addressing substance use in BC.
- Reist, D. Co-chair, BC Addictions Network, network of policy and practice leaders formed to engage in joint planning, action, and knowledge exchange and to advise the BC Mental Health and Addictions Planning Council on matters related to substance use.
- Reist, D. Member, Canadian Executive Council on Addictions.
- Reist, D. Member, BC Partners for Mental Health & Addiction Information, a coalition committed to improving mental health literacy in BC and supported by BC Mental Health and Addiction Services.
- Reist, D. Coordinator, National Awards for Excellence Selection Committee.
- Reist, D. Member, Kaiser Foundation Board of Directors.
- Reist, D. Member, Action on Addictions Advisory Committee, Vancouver Foundation.
- Reist, D. Member, Vancouver Youth Prevention Network, Vancouver Coastal Health.
- Stockwell, T. Co-chair with Dr. Bill Honer (UBC) of BC Mental Health and Addictions Research Network Planning and Advisory Committee.
- Stockwell, T. President of Kettil Bruun Society for Social and Epidemiological Research at the Alcohol Annual Symposium, Riverside, CA, and Chair of the Coordinating Committee.
- Stockwell, T. Served as member of National Surveillance Advisory Committee, organized by the Office of Research and Surveillance, Drug Strategy and Controlled Substances Program, Health Canada. The purpose is to identify high priority information needs and key indicators in support of the National Research Agenda and the National Framework for Action to Reduce the Harms Associated with Alcohol, Other Drugs and Substances.
- Stockwell, T. Member of National Alcohol Strategy Working Group, national policy committee formed jointly by Health Canada, CECA and CCSA. The outcome from four meetings is a draft National Alcohol Strategy for Canada.
- Stockwell, T. Member of panel of Social and Economic Impact of Gambling (SEIG). Expert panel will provide advice to an inter-provincial initiative to develop methodology for estimating the social and economic impact of gambling.
- Stockwell T. Member of Planning Executive Committee for the 17<sup>th</sup> International Conference on the Reduction of Drug-Related Harm, organizing an alcohol policy stream. Conference held in Vancouver in April 2006.

**CARBC staff sat on 10 national and international committees and advisory boards**

Table 4: Performance Indicators for Key Result Area 4

Objective		Performance indicators for 2006-07
4.1	Plan the evaluation of new public health and safety measures designed to minimize harms from substance use and gambling prior to their implementation	<ul style="list-style-type: none"> <li>9 studies related to harm reduction (3 in 2005-06)</li> </ul>
4.2	Work in partnership with policy makers and practitioners in the planning, execution and dissemination of some applied research projects	<ul style="list-style-type: none"> <li>24 projects involving policy makers and/or practitioners in planning, execution and/or dissemination (not recorded in 2005-06)</li> </ul>
4.3	Increase the probability of research findings from CARBC, its partners and other related sources being applied to policy and practice development at national, provincial and local community levels	<ul style="list-style-type: none"> <li>Contributed towards 5 significant policy proposals (2 in 2005-06)</li> </ul>
4.4	Provide regular briefings and submissions to government and parliamentary inquiries, policy advisors, and relevant provincial and national committees on emerging issues in the prevention of drug-related harms	<ul style="list-style-type: none"> <li>6 invitations received to make submissions to policy forums, select committees, or other such bodies (5 in 2005-06)</li> <li>Membership in 12 BC and national policy committees concerned with substance use and addictions (5 in 2005-06)</li> </ul>
4.5	Compete for commissioned research opportunities with the potential to make direct contributions to the development of new policies, programs and service delivery systems	<ul style="list-style-type: none"> <li>8 successful submissions in response to requests of CARBC members for commissioned work in relevant areas (11 in 2005-06)</li> <li>8 commissioned projects undertaken and completed (8 in 2005-06)</li> <li>\$1.55 million successfully secured for commissioned research and knowledge exchange activities (\$1.63 million in 2005-06)</li> </ul>

Picture on front cover by courtesy of UVic Photographic Services  
Picture page 8 of Benedikt Fischer taken by David Kock

**Research and Administration Office:**

University of Victoria  
PO Box 1700 STN CSC  
Victoria, BC V8W 2Y2  
Phone: 250-472-5445  
Fax: 250-472-5321  
Email: [carbc@uvic.ca](mailto:carbc@uvic.ca)

**Communication and Resource Unit:**

909-510 Burrard Street  
Vancouver, BC V6C 3A8  
Phone: 604-408-7753  
Toll free: 866-677-LINK  
Fax: 604-408-7731  
Email: [info@carbc.ca](mailto:info@carbc.ca)

Web: [www.carbc.ca](http://www.carbc.ca)

Revised January 2008