OUR MISSION

To create an internationally recognized centre, distributed across British Columbia, 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
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We wish to acknowledge John Dorocicz, photographer, for his contribution of the cover photo to this report: Pease Creek, Gowlland Tod Provincial Park, Vancouver Island, BC and a collection of photos of the Victoria office personnel.
Message from the Chair

It is, once again, my genuine pleasure to introduce the latest annual report for the Centre for Addictions Research of BC (CARBC) for 2009-2010. The Centre continues to build new networks of researchers and projects as well as to enhance existing partnerships and activities, all the more impressive in the face of financial challenges resulting from the recent economic recession and budgetary constraints. As Tim Stockwell, the Centre’s indefatigable director, notes in his remarks, CARBC has welcomed new faculty and several graduate students in key programs at the University of Victoria, ensuring a vibrant community of established and emergent scholars in the increasingly decisive field of addictions research.

I am delighted to draw to your attention the Centre’s continued success with securing grants; in fact, more than $1 million in new competitive research grants for the second year running. This is a tangible testament to the reputation of the researchers associated with CARBC, along with the timely relevance and analytical rigour of the projects that are undertaken every year through the Centre. Furthermore, the scholars and students connected to the Centre carry on a highly productive level of research dissemination and knowledge translation. In 2009-2010, Centre staff had 71 peer-reviewed publications and close to 600 citations of their work. As important, I believe, are the contributions by way of health promotion activities in schools, campuses and communities; and, in policy development work, such as the harm reduction strategies for the City of Victoria and on provincial alcohol policy reform options in British Columbia, to encourage BC drinkers to make healthy choices.

Without doubt, CARBC effectively pursues a fulsome mandate as a leading network dedicated to research and knowledge in our province, nationally, and internationally.

So, welcome to the 2009-2010 annual report to learn more about this dynamic network of highly committed scholars and students.

Michael J. Prince, MPA, PhD
Lansdowne Professor of Social Policy, Chair
Message from the Director

Despite the lack of endowment funding two years in a row, CARBC has unexpectedly thrived and even expanded during 2009/2010. We now have more faculty, research and administrative staff, collaborating scientists and graduate students than in any previous year. I am most grateful for collaboration with deans, schools and departments at the University of Victoria to begin to realize the objective of hosting at least seven faculty positions closely affiliated with CARBC. Dr. Bernadette Pauly, Associate Professor with the School for Nursing and recognized locally and nationally as a leader on substance use issues and homelessness, recently agreed to take up a position as CARBC Scientist. The Department of Economics successfully recruited Dr. Christopher Auld, a highly-regarded health economist with a broad range of health research interests, including addictions and nutrition, as a CARBC-affiliated Associate Professor. A major benefit of a growing corps of first-class faculty is the ever-increasing group of excellent graduate students who now call CARBC their home. We can now count 16 masters and doctoral students based at least partly with CARBC. This adds significantly to the energy, creativity and output of the Centre.

We have been fortunate to have had two very talented administrators making calm order out of creative chaos. Rita Fromholt handed over the reins to Emma Carter in September 2009 after almost three years in the job, moving on to be UVic’s Sustainability Coordinator. Both Rita and Emma have helped create positive, productive and harmonious environments - we owe them both a huge debt of gratitude.

At the end of this first five-year term of CARBC as a University of Victoria research centre, I also gratefully acknowledge our funders, collaborators, staff and the excellent support services at the University of Victoria.

Tim Stockwell, PhD
Director, CARBC
## OUR PEOPLE AND PARTNERS

### Faculty

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
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<tbody>
<tr>
<td>Dr. Tim Stockwell</td>
<td>Director (Psychology)</td>
</tr>
<tr>
<td>Dr. Scott Macdonald</td>
<td>Assistant Director (Health Information Science)</td>
</tr>
<tr>
<td>Dr. John F. Anderson</td>
<td>Scientist (Community Medicine/Education)</td>
</tr>
<tr>
<td>Dr. Cecilia Benoit</td>
<td>Scientist (Sociology)</td>
</tr>
<tr>
<td>Dr. Cheryl Cherpitel</td>
<td>Scientist (Nursing)</td>
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<tr>
<td>Dr. Mikael Jansson</td>
<td>Scientist (Sociology)</td>
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### Staff (Victoria)

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<thead>
<tr>
<th>Name</th>
<th>Title</th>
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<tr>
<td>Ms. Emma Carter</td>
<td>Administrator (from September 2009)</td>
</tr>
<tr>
<td>Ms. Rita Fromholt</td>
<td>Administrator (to July 2009)</td>
</tr>
<tr>
<td>Mr. Andrew Ivsins</td>
<td>Research Assistant</td>
</tr>
<tr>
<td>Ms. Jiesu Luo</td>
<td>Research Assistant</td>
</tr>
<tr>
<td>Dr. Tessa Parkes</td>
<td>Research Consultant</td>
</tr>
<tr>
<td>Ms. Jen Theil</td>
<td>Secretary/Assistant to the Director</td>
</tr>
<tr>
<td>John Dorocicz</td>
<td>IT Support</td>
</tr>
<tr>
<td>Ms. Kate Vallance</td>
<td>Research Associate</td>
</tr>
<tr>
<td>Ms. Katharine Watters</td>
<td>Research Associate (to December 2009)</td>
</tr>
<tr>
<td>Ms. Cornelia Zeisser</td>
<td>Data Analyst</td>
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### Staff (Vancouver)

<table>
<thead>
<tr>
<th>Name</th>
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<tr>
<td>Mr. Dan Reist</td>
<td>Assistant Director, Knowledge Exchange</td>
</tr>
<tr>
<td>Ms. Jennifer Bond</td>
<td>Administrator (to October 2009)</td>
</tr>
<tr>
<td>Ms. Rielle Capler</td>
<td>Research Assistant (to September 2009)</td>
</tr>
<tr>
<td>Mr. Laverne Douglas</td>
<td>IT Specialist</td>
</tr>
<tr>
<td>Dr. Tim Dyck</td>
<td>Research Associate</td>
</tr>
<tr>
<td>Ms. Nicole Pankratz Bodner</td>
<td>Publications Officer</td>
</tr>
<tr>
<td>Ms. Bette Reimer</td>
<td>Research Associate</td>
</tr>
<tr>
<td>Ms. Lu Ripley</td>
<td>Research Associate (to December 2009)</td>
</tr>
<tr>
<td>Ms. Evelyn Souza</td>
<td>Information Officer</td>
</tr>
<tr>
<td>Ms. Cathy Spence</td>
<td>Assistant to Mr. Dan Reist</td>
</tr>
<tr>
<td>Dr. Gerald Thomas</td>
<td>Senior Policy Analyst (to October 2009)</td>
</tr>
</tbody>
</table>
Site Directors

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. Howard Brunt
Vice President Research, University of Victoria

Mr. Edgar F. Kaiser Jr.
Chair & CEO, Kaiser Foundation

Dr. Perry Kendall
Provincial Health Officer, Ministry of Health Services

Dr. Elliot Goldner
Professor, Faculty of Health Sciences, Simon Fraser University

Dr. Philippe Lucas
Victoria City Councillor CARBC Research Affiliate

Mr. Pat Griffin
Executive Director, Victoria Youth Empowerment Society

Ms. Jocelyn Harder
Community Representative

Dr. Norbert Haunerland
Associate Vice-President, Research Simon Fraser University

Mr. Bill Naughton
Acting Chief of Police, Victoria Police Department

Ms. Jody Paterson
Journalist

Dr. Michael Prince, Chair
Lansdowne Professor of Social Policy, University of Victoria

Dr. Eric Single
Senior Associate and Epidemiologist, Canadian Centre on Substance Abuse

Mr. Philippe Lucas
Victoria City Councillor

Dr. G. Alan Marlatt
Director, Addictive Behaviors Research Center, University of Washington

Dr. Patrick Smith
Senior Advisor, BC Mental Health and Addictions, Provincial Health Services Authority

Ms. Jody Paterson
Journalist

Dr. Richard Vedan
Director, First Nations House of Learning, University of British Columbia

Collaborating Scientists

Dr. Gordon Barnes
Professor, School of Child and Youth Care, University of Victoria

Dr. Bernadette Pauly
Assistant Professor, School of Nursing, University of Victoria

Dr. David Marsh
Clinical Associate Professor, Health Care & Epidemiology, and Psychiatry, Providence Health Centre

Dr. Susan Boyd
Professor, Studies in Policy and Practice, University of Victoria

Dr. Cameron Duff
Research Lead, Youth Addiction Services, Vancouver Coastal Health, and Clinical Assistant Professor, Department of Health Care and Epidemiology, University of BC

Dr. Eric Roth
Professor, Department of Anthropology, University of Victoria

Dr. Jeffrey Brubacher
Emergency Physician and Researcher, Vancouver General Hospital

Dr. Clay Holroyd
Associate Professor, Department of Psychology, University of Victoria

Dr. Gerald Thomas
Senior Policy Analyst, Centre for Addictions Research of BC (now with Canadian Centre on Substance Abuse)

Dr. Jane Buxton
Physician Epidemiologist, BC Centre for Disease Control, and Assistant Professor, Health Care and Epidemiology, University of BC

Dr. Bonnie Leadbeater
Co-Director of the BC Child and Youth Health Research Network

Dr. Amy Salmon
Adjunct Assistant Professor, Faculty of Human and Social Development, University of Victoria
Research Affiliates

Dr. Katherine Andersen-Schokalsky  
Psychiatrist, Vancouver Island Health Authority,  
Seven Oaks Tertiary Care Facility,  
Victoria, BC

Dr. Robinder Bedi  
Assistant Professor, Department of Educational Psychology,  
University of Victoria

Dr. David Brown  
Research Scientist and Senior Project Manager, Mental Health and Addictions Services, Provincial Health Services Authority

Mr. Dean Nicholson  
Administrator/Counsellor, East Kootenay Addiction Services

Dr. Ingrid Pacey  
Psychiatrist, Private Practice,  
Vancouver, British Columbia

Dr. Bernadette Pauly  
Assistant Professor, School of Nursing, University of Victoria

Dr. Diane Rothon  
Chief Coroner,  
Province of British Columbia

Dr. Erica Woodin  
Assistant professor, Department of psychology, University of Victoria

Mr. Philippe Lucas  
Victoria City Councillor

Graduate Students

Lynne Belle-Isle  
Department of Sociology & School of Nursing, University of Victoria

Kristina Brache  
Department of Psychology,  
University of Victoria

Connie Carter  
Department of Sociology,  
University of Victoria

Andrew Ivsins  
Department of Sociology,  
University of Victoria

Miranda Kelly  
Public Health & Epidemiology,  
University of British Columbia

Jiesu Luo  
Department of Educational Psychology & Leadership Studies, University of Victoria

Anna Maruyama  
School of Health Information Sciences, University of Victoria

Warren Michelow  
Department of Health Care and Epidemiology, University of BC

Rachel Phillips  
Department of Sociology,  
University of Victoria

Laurel Sakulak-Moody  
Department of Human Ecology,  
University of Alberta

Alina Sotskova  
Department of Sociology,  
University of Victoria

Camille Stengel  
Department of Sociology,  
University of Victoria

Kara Thompson  
Department of Sociology,  
University of Victoria

Kate Vallance  
Department of Sociology,  
University of Victoria

Alina Sotskova  
Department of Psychology,  
University of Victoria
COLLABORATING CENTRES

British Columbia:

Centre for Applied Research in Mental Health and Addiction, Simon Fraser University
Centre for Social Responsibility, Simon Fraser University
National Institute for Research in Sustainable Community Development, Kwantlen University College

Other Parts of Canada:

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

International:

Alcohol and Drug Abuse Research Unit, Medical Research Council, Cape Town, South Africa
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, W.A., Australia

Income for 2009-10

The chart below identifies our major sources of income in terms of funds received for expenditure in the 2009-10 fiscal year. There were no funds from our University of Victoria CARBC endowment fund in this year, reflecting the financial downturn, but we did receive a one-time contribution of $177,000 from the Office of Research Services and, in addition, research infrastructure funds from the BC Mental Health and Addiction Research Network. Overall funding received from both research and knowledge exchange contracts was lower than in the previous fiscal year. By contrast, our income from research and knowledge exchange grant competitions from bodies such as CIHR, SSHRC and the US National Institutes of Health has increased by more than twofold. Total revenue for the 2009/2010 fiscal year was $1,889,201.

CARBC 09/10 Revenue Summary

- Grant Competitions $655,651.00
- Uvic Research Infrastructure $177,000.00
- Research Contracts $354,221.57
- Knowledge Exchange Contracts $577,090.62
- Other Research Infrastructure $225,237.59
“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.”

HIGHLIGHTS

Given the recent adverse financial climate, we have had to work harder to attract new research grants and contracts, not least because in the 2009/2010 year the CARBC endowment was not able to pay out. The Vice President of Research, Dr. Howard Brunt, was particularly supportive and flexible in enabling us to maintain our level of operations during this year. Successful funding applications to the Canadian Institutes of Health Research and the US National Institutes of Health, as well as successful bids for some contract research, were particularly important during this difficult and challenging period. Our Collaborating Centres and Scientists at the Prevention Research Center, Berkeley, CA and the Alcohol Research Group, Emeryville, CA have been strong allies in achieving these outcomes. A special mention also of our Canada-U.S.-Australia collaboration with Drs. Kaye Fillmore (UCSF) and Tanya Chikritzhs (National Drug Research Institute, Australia) on a series of meta-analytic studies concerned with the “science” of alcohol and health benefits. Last year we were ranked in the top 1% of applications for US National Institutes of Health Challenge Grants, part of the Obama government stimulus package. Some of our success in winning competitive research grants has been built on the platform of our BC Alcohol and Other Drug Monitoring Project, a large collaborative undertaking which enables us to collect a series of rich and unique data sets concerned with patterns of substance use and related harms in British Columbia.

With all the money and data in the world, we could achieve nothing without our faculty, graduate students, research, administrative and support staff. Collectively we now span the academic disciplines of sociology, community medicine, nursing, psychology, epidemiology, criminology, anthropology, economics and social work.
Successful applications to research funding competitions

**Acting together on youth and violence. Community-University Research Alliance (CURA)**
Blatt, G., Tweed, R., Dooley, S. (PI), Macdonald, S., et al. Social Sciences and Humanities Research Council of Canada, $1,000,000 from September 2009 to August 2014

**Alcohol and Cocaine Simultaneous Polysubstance Use: A Qualitative Investigation**
Brache, K., Michael Smith Foundation for Health Research, $40,000 from May 2009 to August 2010

**Alcohol Outlet Privatization: The British Columbia Experiment**

**Canada-U.S. Gender and Health Research Group**
Benoit, C., Canadian Institutes of Health Research, $15,000 from March 2010 to December 2010

**Chehalis Primary Health Care Project**
Anderson, J., Canadian Institutes of Health Research, $100,000 from January 2010 to February 2012

**Does minimum pricing reduce the burden of injury and illness attributable to alcohol?**

**Individual Differences in Substance Abuse and Addiction: At the Intersection of Brain, Cognition, Genetics and Personality**
Holroyd, C. (PI), Barnes, G., Stockwell, T., Canadian Institutes of Health Research Operating Grant, $463,620 from 2009 to 2014

**Is there a “low-risk” drinking level for youth? The harm associated with adolescent drinking patterns**
Thompson, K., Michael Smith Foundation for Health Research, $40,000 from September 2009 to August 2010

**Exploring Family Care Work at the End of Life**
Stajduhar, K., Benoit, C., Williams, A., Dumont, S., Bramadat, P., Social Sciences and Humanities Research Council of Canada, LOI funding of $20,000 from February 2010 to December 2010

**Effect of HAART expansion on community levels of HIV viral load and HIV risk behaviours among MSM in British Columbia**
Hogg, R., Moore, D., Montaner, J., Roth, E., Gilbert, M., McFarland, W., Barrios, R., Dias Lima, V., Patterson, T., Trussler T., Marchand, R., Sustak, P., Fraser, C., Fyfe, M., Gustafson P., CIHR Operating Grant, $436,000 from 2010 to 2012

**Exploring uptake, utilization and risk behaviour impact of crack use paraphernalia distribution in Victoria, BC**
Fischer, B. & Roth, E., CIHR Catalyst Grant Hep C Research Initiative, $100,000 for 2010

**Integrated Mentor Program in Addictions Research Training**
Brache, K., IMPART Training Fellowship, $5,000 from May 2009 to May 2010

**Meta-Analysis Systematic and Design Errors: Alcohol Use and Disease Outcomes**

**Point-of-Care HIV Testing for People Who Use Injection Drugs**
Roth, E., BC Network for Mental Health and Addictions Research Seed Grant, $5,000 for 2010

**Staying safe, identifying strategies by long-term injection drug users to avoid HIV and HCV**
Salmon A., Buxton J., Feidman S., Mateu-Gelabert P., Meylaks P., Money, D., Pauly, B., Snow, M., CIHR Catalyst Grant, $25,000 for 2009-2010
Commissioned research contracts won

**Alcohol aetiologic fractions for Emergency Department populations**
Chikritzhs, T. [PI], Stockwell, T., Zeisser, C. & Gardner, C., National Drug Research Institute, Western Australia, $106,000 from July 2009 to August 2010

**A systematic review of Canadian literature and data on alcohol use by women of childbearing age: identifying policy and program implications**
Barnes, G., Public Health Agency of Canada, $24,800.00 for 2008-2010

**BC alcohol and other drug monitoring project: Implementation phase III**

**BC Alcohol and Other Drug Monitoring Hub**
Stockwell, T. (PI). BC Mental Health and Addictions Research Network, $75,000 from April 2009 to March 2010

**BC Mental Health and Addictions Research Network - Co-Leader Support**

**Development of a database on per capita alcohol sales in BC**
Macdonald, S., BC Mental Health and Addictions Research Network, $2,640 from January 2010 to March 2010

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Analysis of the Canadian Alcohol and Drug Use Monitoring Survey indicated significantly more cannabis but less tobacco use in BC than the rest of Canada (Dr Cindy Hardy, for BC AOD Monitoring Project)
# KEY RESULTS AREA

## OBJECTIVE

### 1.1
Achieve increased funding for addictions research in BC.

- New funding received in 2009-2010 from applications involving CARBC faculty and students: (a) $\text{1,018,306}$ from national and international research competitions ($1,160,903$ in 2008-09, $350,518$ in 2007-08, $473,000$ in 2006-07), (b) $85,000$ from BC research competitions ($296,700$ in 2008-09, $118,671$ in 2007-08, $111,000$ in 2006-07), and (c) $\text{609,800}$ from contract research ($255,500$ in 2008-09, $835,850$ in 2007-08, $462,000$ in 2006-07).

## PERFORMANCE INDICATORS FOR 2009-10

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<th>OBJECTIVE</th>
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<td>Achieve increased funding for addictions research in BC.</td>
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<td>1.2</td>
<td>Increase funding applications for long-term research programs addressing research areas of high priority in BC.</td>
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<td>Research funding competitions: 19 (15 successful, 11 in 2008-09, 7 in 2007-08)</td>
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<td>Contracts/commissions: 6 (5 successful, 8 in 2008-09, 8 in 2007-08)</td>
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<td>Co-Leadership of the BC Mental Health and Addictions Research Network contributed many successful BC applications.</td>
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<td>1.3</td>
<td>Achieve successful collaborations with researchers and community partners.</td>
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<td>11 new projects with collaborators external to CARBC (11 in 2008-09, 18 in 2007-08, 17 in 2006-07)</td>
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<td>11 new researchers with relevant expertise introduced to addictions research (7 in 2008-09, 2 in 2007-08, 2 in 2006-07)</td>
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<td>1.4</td>
<td>Attract and retain high quality researchers from a broad range of disciplines.</td>
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<tr>
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<td>11 UVic faculty, staff and CARBC site directors with PhD’s (11 in 2008-09, 9 in 2007-08, 9 in 2006-07)</td>
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<tr>
<td></td>
<td>0 post-doctoral fellows at CARBC (0 in 2008-09, 0 in 2007-08, 1 in 2006-07)</td>
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<tr>
<td>1.5</td>
<td>Attract high quality students from a broad range of disciplines.</td>
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<td>15 graduate students under CARBC supervision working on addictions-related topics (11 in 2008-09, 12 in 2007-08, 6 in 2006-07)</td>
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<td>1.6</td>
<td>Provide training opportunities and programs for the development of additional research skills among CARBC staff, students and affiliates.</td>
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<td>19 national/international conferences for junior research staff (9 in 2008-09, 2 in 2007-08, 2 in 2006-07)</td>
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<td>7 CARBC research staff attended a statistics course (5 in 2008-09, 2 in 2007-08, 3 in 2006-07)</td>
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<td>Contributions to 6 graduate research training programs within UVic (11 in 2008-09, 4 in 2007-08, 4 in 2006-07)</td>
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<tr>
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<td>Contributions to 7 graduate research training programs at other campuses</td>
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<td>1.7</td>
<td>To provide mentorship to new and existing researchers across a range of community settings.</td>
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<td>10 new drug and alcohol researchers working on CARBC projects under supervision (2 in 2008-09, 5 in 2007-08, 5 in 2006-07)</td>
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<td>1.8</td>
<td>Improve access to data sets and platforms for addiction researchers.</td>
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<td>Continued development of a BC-wide alcohol and other drug epidemiological monitoring platform</td>
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<td>Collaboration with the BC Mental Health and Addictions Research Network to develop research “hubs” in the areas of clinical research and pharmaco-epidemiology.</td>
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<tr>
<td>1.9</td>
<td>Support provincial, national and international research capacity through editorial and peer review activities.</td>
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<td>Peer review of articles submitted to journals and grant proposals.</td>
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<tr>
<td></td>
<td>CARBC faculty hold 11 editorial positions with Addiction, Drug and Alcohol Review (Australia), Drugs: Education, Prevention and Policy (UK), Canadian Journal of Criminology, Substance Use and Misuse, Visions: BC’s Mental Health and Addictions Journal, Substance Abuse: Research and Treatment, Alcohol and Drug Abuse (Poland), Addictions (Spain), Mental Health (Mexico), Journal of Addiction and Nursing.</td>
</tr>
</tbody>
</table>
“To conduct high quality research that increases understanding of substance use and addiction and informs effective responses.”

HIGHLIGHTS

Several of our more applied policy projects have been made possible by the data infrastructure established at CARBC. For example, the BC Alcohol and Other Drug Monitoring Project (www.AODmonitoring.ca) provides access to comprehensive and detailed data on alcohol consumption and alcohol- and drug-related hospitalizations and deaths across all 89 local health areas of the province. These data have been used in new analyses of the impacts of liquor privatization in British Columbia which has seen a dramatic increase in the number of liquor stores and convenience of access to these. At the local health area level of analysis, this change has been associated with increased consumption and harms. Internationally there has been considerable interest in the past year in minimum pricing policies to reduce public health and safety and order problems associated with drinking. Canada is one of a handful of countries to use such policies but they have yet to be formally evaluated. We are excited, therefore, to have led a successful international team in winning a new CIHR operating grant to evaluate the public health impacts of changes in recent years to minimum pricing in Saskatchewan, Ontario, Alberta, Nova Scotia and British Columbia.

Our CIHR New Emerging Team grant concerned with cross substance issues has continued to be effective in generating a range of studies involving collaborations with collaborating scientists from other universities and graduate students. Such diverse issues as the combined effects of alcohol and other substances on the risk of road trauma injuries, patterns of combined alcohol and cocaine use in treatment populations, injuries in general presenting to Emergency Departments, and patterns of alcohol and energy drink consumption among university students have been tackled.
RESEARCH PRIORITY 1: SUBSTANCE USE PATTERNS AND RELATED HARMs

CARBC PROJECTS

Alcohol and cocaine simultaneous polysubstance use: A qualitative investigation

Investigators: Brache, K., Stockwell, T. & Macdonald, S.

Funding Bodies: IMPART Training Fellowship and Michael Smith Foundation for Health Research

Background: This project is a qualitative investigation into the patterns, contexts, functions, harms, and risk taking behaviours associated with the simultaneous use of alcohol and cocaine. This Masters project investigates whether the age of initiation of alcohol, tobacco and marijuana each predict simultaneous polysubstance use.

Progress To Date: Masters thesis submitted and paper presented at international conference.

Alcohol aetiologic fractions for Emergency Department populations

Investigators: Chikritzhs, T. [PI], Stockwell, T., Zeisser, C. & Gardner, C.

Funding Body: National Drug Research Institute, Western Australia

Background: This is a collaborative project with the National Drug Research Institute in Australia. The aim is to estimate the proportion of emergency room attendances for injury outcomes which are causally related to alcohol consumption in economically developed countries like Canada and Australia. Furthermore, a methodology will be developed to support epidemiological monitoring of alcohol’s contribution to ER attendances in different jurisdictions. CARBC’s contribution to the project is the conduct of a meta-analysis of well-designed studies published in the international literature which quantify the risk relationship between level of drinking and changing risk of injury.

Progress To Date: The meta-analysis has been completed and a report is under preparation.
Meta-Analysis of Systematic and Design Errors: Alcohol Use and Disease Outcomes

Investigators: Fillmore, K. (Project PI), Stockwell, T., Chikritzhs, T. & Gardner, C.

Funding Body: US National Institutes of Health

Background: This is a collaborative work led by Dr. Kaye Fillmore from the University of California, San Francisco. It is funded by a prestigious Challenge Grant from the US National Institutes of Health for a two-year period. It involves the application of a methodology for critiquing the alcohol epidemiological literature positing a relationship between moderate alcohol consumption and protection against coronary heart disease to a wider range of disease conditions. The critique involves assessing whether moderate drinkers compared against a group of lifelong abstainers were a more contaminated reference group than current abstainers which includes people who have cut down or cut out drinking completely for health reasons. The latter design leads to an exaggeration of health benefits or even the appearance of false/non-existent health benefits. Surprisingly, there are a number of longitudinal studies published which suggest such protection against conditions alcohol is known to cause, e.g. liver cirrhosis and various cancers. A series of measure analyses will be conducted to explore design flaws in studies which do or do not suggest moderate drinking provides health benefits in relation to biologically implausible conditions such as cancer and some strokes.

Progress To Date: Project staff have been hired and studies have been coded. Some preliminary analyses have been conducted.

Patterns and consequences of cocaine and alcohol use for treatment clients

Investigators: Macdonald, S. (PI), Borges, G., Callaghan, R., Roth, E., Salmon, A., Stockwell, T. & Wells, S. (Co-Is)

Funding Body: Canadian Institutes of Health Research

Background: Research has shown that treatment populations frequently use alcohol and cocaine simultaneously (i.e. on the same occasion) and concurrently (i.e. on separate occasions). The aims of this study are twofold: 1) to describe the patterns, functions and contexts of alcohol and cocaine use among treatment clients, and 2) to identify acute and long-term differences among the three groups defined by their primary use of alcohol alone, cocaine alone or simultaneous use of cocaine and alcohol. Gender and sex differences will be examined among these aforementioned dimensions. Groups of treatment clients who primarily use cocaine alone (n= 200), alcohol alone (n=200) or cocaine and alcohol simultaneously (n=200) will complete a self-administered questionnaire.

Progress To Date: Initial data collection has begun at the Bellwood Institute in Toronto, Ontario, and the proposal is currently under review by the Niagara Health System for proposed data collection in New Port Treatment Centre. Negotiations are underway with treatment agencies in British Columbia as additional sites for data collection.

Cross-substance patterns of use, consequences and policy responses


Funding Body: Canadian Institutes of Health Research (New Emerging Team Grant)

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, its 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 patterns of use and different classes of substances used 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: 20 research projects initiated to date, 8 peer-reviewed publications in press or published, 2 major new grants won, 5 graduate scholarships and 18 conference presentations all facilitated or funded directly from this grant.
BC Alcohol and Other Drug Monitoring Project: Implementation phase III


Funding Body: Provincial Health Services Authority, Health Canada, BC Ministry of Health, BC Mental Health and Addictions Research Network, Vancouver Coastal Health and Northern Health

Background: CARBC was awarded a contract from PHSA and Health Canada to pilot a comprehensive alcohol and other drug epidemiological monitoring system for Canada. This is now being fully implemented in British Columbia and elements of the program are also being implemented in other Canadian provinces.

Progress To Date: Full implementation of the monitoring system is underway involving multiple data collection components and regular reports on the project website: www.AODmonitoring.ca.

Alcohol, drug use and injury in the Emergency Department

Investigators: Cherpitel, C. J. (PI), Brubacher, J., Macdonald, S., Stenstrom, R. & Grafstein, E. (Co-Is)

Funding Body: Canadian Institutes of Health Research

Background: This is a study of alcohol and other drug use and injury in two Emergency Departments in Vancouver, BC, funded through the Canadian Institutes of Health Research New Emerging Team grant.

Progress To Date: Data collection and analysis have been completed. The results were used in a funding application, a conference presentation, and are now being prepared for a paper to be submitted shortly for publication.

Alcohol and energy drinks: Patterns of use and risk behaviours

Investigators: Brache, K. & Stockwell, T.

Funding: Canadian Institutes of Health Research

Background: In recent years, there has been an increasing tendency to combine alcohol with “energy drinks” and there is increasing concern about health and safety consequences. Using a web-based survey completed by over 400 UVic students, data have been collected regarding the prevalence of combining these two kinds of drinks, prices paid, context of use, patterns and levels of use, risk behaviours and harms. The specific research hypotheses being tested are (i) when combining with energy drinks, people will usually consume more alcohol, (ii) when controlling for amount and frequency of alcohol consumption, combining with energy drinks increases risk behaviours and harm.

Progress To Date: A paper was presented at an international conference and is being prepared for submission to a journal. In addition, a special CARBC report is being prepared reviewing the regulatory status as well as patterns of use in this university population.
Quantifying cannabis consumption: the predictive validity of “standard joint” survey measures


Funding: Canadian Institutes of Health Research

Background: Because of difficulties with comparing amounts of cannabis used by different means of administration, much previous research has restricted analysis of health and safety outcomes to frequency of cannabis use. Given that some users only have small amounts and with some frequency, a scale was developed which took account of survey respondents' preferred metric for quantity consumed in terms of either joints, puffs, bong or pipe hits, or grams. Using data collected from over 600 cannabis users from the BC alcohol and other drug monitoring high-risk population surveys, the purpose of this project was to examine the predictive validity of quantity of cannabis use per day in relation to measures of harm and risk behaviours.

Progress To Date: A paper was presented at the 35th Annual Symposium of the Kettil Bruun Society in Lausanne, Switzerland, and is being prepared for submission to a journal.

Individual Differences in Substance Abuse and Addiction: At the Intersection of Brain, Cognition, Genetics and Personality

Investigators: Holroyd, C. (PI), Barnes, G., McLeod, P. & Stockwell, T.

Funding: Canadian Institutes of Health Research

Background: Why is it that only some people who use drugs actually become addicted? Can sufficient exposure to substances of abuse cause anyone to become dependent, or do addicts simply lack the will power to resist? All addictive drugs act on a neural system for reinforcement learning called the midbrain dopamine system, which projects to and regulates the brain's system for cognitive control, called the frontal cortex. Further, the development and expression of the dopamine system is determined in part by genetic factors that vary across individuals, such that dopamine-related genes are partly responsible for addiction proneness. We have recently found that young adults who are dependent on substances of abuse produce an abnormal brainwave response to reinforcing events and, further, that they behave abnormally on a decision-making task that is diagnostic of dopamine dysfunction. In this project, we propose to conduct a series of experiments that will investigate whether this atypical brain response is 1) associated with abnormal reinforcement learning, 2) elicited by drug rewards, 3) present in adolescence even before acute drug use, and 4) associated with genes that code for the expression of the dopamine system. In so doing, we hope to tease apart biological, cognitive and personality-related factors underlying substance abuse that will be amenable to treatment.

Progress To Date: One study completed and a paper accepted for publication in Addiction Biology (a journal with the highest citation index in the addictions field). Data collection for a large genetics study completed and several publications are planned. A study in a large private treatment facility is being negotiated which will study changes in neuropsychological responses during a period of several weeks abstinence.
CARBC AFFILIATED PROJECTS

Driving under the influence of drugs

**Investigators:** Brubacher, J., Schreiber, W., Martz, W., Fang, M., Wilson, J. & Pursell, R.

**Funding:** BC Mental Health and Addictions Research Network and Transport Canada

**Background:** Alcohol impairment has been convincingly demonstrated to increase the risk of car crashes. Marijuana use is known to adversely affect the skills required for safe driving, but the role of marijuana intoxication in causing motor vehicle crashes is less well demonstrated. This planned project will further define the contribution of marijuana and other drug use to car crashes causing injury.

**Progress To Date:** Pilot data have been collected on 56 injured drivers and were presented in abstract form at the 2009 Annual Scientific Meeting of the Canadian Association of Emergency Physicians. Additional grant funding has been applied for to continue the project.

Cross-national analysis of alcohol and injury

**Investigators:** Cherpitel, C. (PI)

**Funding Body:** National Institutes of Alcohol Abuse and Alcoholism

**Background:** The study consists of a cross-national analysis of Emergency Departments from 25 countries for analysis of alcohol and injury.

**Progress To Date:** Data have been merged to date from ER studies covering 38 ER sites across 18 countries for continuing analysis of the Emergency Room Collaborative Alcohol Analysis Project and the WHO Collaborative Study on Alcohol and Injury (ERCAAP/WHO) merged data set.

Investigating The Prevalence of Methamphetamine and Polydrug Use by Youth in Grades 8 to 12 In Northern British Columbia: The Development of a Student Drug and Alcohol Use Survey

**Investigators:** Mitchell, J., Low, B. & Schmidt, G. (UNBC CARBC site)

**Background:** This project involved the development and implementation of a pilot survey tool for assessing the prevalence of methamphetamine and polydrug use among northern British Columbia secondary school students. Most research to date has been urban-based and may not accurately represent the situation in northern locations. Funding decisions in the north are often based on southern urban data regarding mental health and addiction, especially among youth. Evidence from urban centres and marginalized or segmented populations such as injection drug users or treatment centres does not provide the information necessary to assess the impact on smaller rural or remote communities.

**Progress To Date:** The results of the pilot survey suggested that alcohol was the major drug used by the students. The survey tool proved to be useful but will need to be modified to capture additional information.
RESEARCH PRIORITY 2: 
EDUCATIONAL, LEGISLATIVE AND REGULATORY STRATEGIES

CARBC PROJECTS

Does minimum pricing reduce the burden of injury and illness attributable to alcohol?

**Investigators:** Stockwell, T., Buxton, J., Giesbrecht, N., Meier, P., Brennan, A. & Macdonald, S.

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

**Background:** The availability of cheap alcohol is a promising strategy to prevent and reduce many kinds of alcohol-related harm. We address the following research questions: How is the price paid for alcohol in Canada related to gender, age, level of drinking and experience of alcohol-related problems? How effective have Canadian minimum pricing regulations been at reducing alcohol consumption and the related burden of disease and injury? How would alternative minimum pricing regulations impact on the burden of disease and injury from alcohol in a Canadian jurisdiction? The research will explore the public health and safety impacts of minimum pricing regulations variously introduced in Alberta, British Columbia, Nova Scotia and Ontario over the past two decades. Alternative impacts of either stricter or more relaxed minimum pricing policies in these jurisdictions will be modelled, applying an econometric model recently developed for the UK Department of Health. The research is timely given increasing alcohol consumption in Canada over the past decade, a 2007 World Health Assembly resolution on alcohol calling for action from member countries to monitor and address the growing burden of injury and disease, and a National Alcohol Strategy for Canada which stresses the importance of pricing and taxation strategies. The research builds on and extends international collaborative work between the applicant organizations and their study teams over the past five years - in both research and its dissemination to policy makers.

**Progress To Date:** Ethics clearance has been received and the preliminary meeting of the international collaborating group took place at the annual symposium of the Kettil Bruun Society meeting in Lausanne, Switzerland.

Is there a “low-risk” drinking level for youth? The harm associated with adolescent drinking patterns

**Investigators:** Thompson, K. (Masters thesis), Stockwell, T. (Supervisor)

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

**Background:** Significant proportions of Canadian youth are consuming alcohol above the current low-risk drinking guidelines for adults, and are at significant risk of harm. However, little is known about the harms experienced by youth consuming alcohol within the low-risk drinking guidelines. The objective of this study is to contribute to discussions about how great the risk of harm is for youth at different drinking levels, specifically at low frequency and quantity levels, relative to abstainers. Is there a threshold of risk for harm?

**Progress To Date:** Masters thesis submitted, a paper presented at an international conference and now being prepared for submission to a journal.
Patterns of substance use and risk behaviours among injecting drug users in Victoria and Vancouver before and after the closure of Victoria fixed site needle exchange

**Investigators:** Ivsins, A., Chow, C., Stockwell, T., Marsh, D., Duff, C., Macdonald, S. & Vallance, K.

**Funding Body:** BC Mental Health and Addiction Services, Health Canada, CIHR, Vancouver Coastal Health

**Background:** Amid much public debate, a fixed site needle exchange located in downtown Victoria and servicing a growing number of injecting drug users was closed following complaints of nuisance and disturbance by local residents and business people. Data from the BC high-risk monitoring surveys were analyzed to examine shifts in patterns of substance use and injection behaviour among adult injecting drug users in Victoria and Vancouver before and after the closure.

**Progress To Date:** A sixth CARBC statistical bulletin reporting the results has been prepared for public release in August 2010. The results suggest continuing concern about unsafe injection drug use in Victoria, and also concern about high rates of use of crack cocaine in both cities.

### RESEARCH PRIORITY 3:
### COMMUNITY-BASED PREVENTION PROGRAMS

**CARBC PROJECTS**

**Community-based mental health and addiction research collaboration with Aboriginal communities**

**Investigators:** Anderson, J. F. (PI)

**Funding Body:** Centre for Applied Research in Mental Health and Addiction

**Background:** The objective for this project is to establish a community-based mental health and addiction research collaboration with an Aboriginal community. Through meetings and discussions with Aboriginal community leaders, the intent is to establish a list of community-focused research priorities for addressing the impact of hazardous alcohol use (i.e. binge drinking) on alcohol-related mental and physical health outcomes, including suicide, motor vehicle accidents, accidental poisonings, falls and fire-related mortality and morbidity, and liver cirrhosis.

**Progress To Date:** Researchers have travelled to Chehalis, BC, to establish a community action research collaboration with the Chehalis Indian Band.
Her Way Home Health Intervention Program, BC

**Investigators:** Benoit, C., Marcellus, L., Anderson, J., Hallgrimsdottir, H. & MacKinnon, K.

**Funding Bodies:** Queen Alexandra Hospital Foundation, United Way of Greater Victoria, and a private donation

**Background:** This is a first-stage intervention that recently emerged in the capital regional district of Victoria, BC, to deliver better care to pregnant and early parenting women facing substance use, mental health and other life challenges. The HWHP involves a diverse network of health and social care professionals and grassroots organizations attempting to provide better continuity of care across the prenatal, birthing, postpartum and early parenting periods, and at the same time take action to reduce other determinants of health inequities. A donor has agreed to provide operation funds for the next five years to help move the HWHP from a virtual network to a full-fledged operation. The local health authority, government ministries and the array of community agencies have agreed to dedicate provider time and expertise. The HWHP provides a social laboratory to shed light on the strengths and weaknesses of collaboration at the initial stages of this primary health care intervention.

**Progress To Date:** The research team is just beginning to gather qualitative and quantitative data on barriers to and facilitators of teamwork among the mix of providers, with the ultimate aim of developing a ‘primer’ that articulates a shared conceptual framework based on the principles of health equity and social justice, as well as human resource strategies, to support the implementation of such principles. Applications have been made to CIHR for research support.

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**CARBC AFFILIATED PROJECTS**

“Sir Ringe” program evaluation

**Investigators:** Webster, R., (PI) & Stockwell, T. (Co-PI)

**Funding Body:** BC Ministry of Health and Interior Health Authority

**Background:** The “Sir Ringe” program is designed to teach children and youth about “good” needles and “bad” needles. It was developed through the Interior Health Authority and has been piloted in Kamloops and several other small communities in BC. Dr. Reid Webster, CARBC site director with Thompson Rivers University, has worked with the Interior Health Authority and the BC Ministry of Health to develop the objectives and goals of the project. The program will be delivered and evaluated during 2009 in two comparable communities: Vernon and Salmon Arm.

**Progress To Date:** Data collection has been completed and the final report presented to funders.
RESEARCH PRIORITY 4:
TREATMENT SYSTEMS AND PROGRAMS

CARBC PROJECTS

Evaluation of the BC methadone maintenance treatment program

Investigators: Parkes, T. (PI), Reist, D. & Stockwell, T. (Co-PI)

Funding Body: BC Ministry of Healthy Living and Sport

Background: The Ministry has asked CARBC to evaluate the BC Methadone Maintenance Treatment Program (MMTP) and report back key findings and recommendations for improvement. The purpose and objectives of the evaluation were to examine MMTP systems and identify factors related to treatment access, retention, quality, effectiveness and inequalities, investigate the fiscal issues and accountabilities related to the MMTP, and summarize findings and make recommendations for improvement. The evaluation was conducted throughout 2008 and resulted in a comprehensive report for the BC Ministry of Health submitted in May 2009. A qualitative approach to gathering views from a wide range of stakeholders across the province, including methadone clients and consumers, was utilized.

Progress To Date: The report has been completed and the Ministry of Healthy Living and Sport is developing a dissemination plan.

CARBC AFFILIATED PROJECTS

Quality of service assessment of Health Canada’s Marijuana Medical Access Division

Investigators: Lucas, P. & Hathaway, A. (Co-Is)

Funding Body: McMaster Arts Research Council

Background: Consisting of an online survey coupled with 25 semi-structured interviews of federally-authorized medical cannabis patients, this is the first attempt to solicit feedback on Canada’s federal medical cannabis program from end-users.

Progress To Date: Data gathering for this project is complete.

A transdisciplinary approach to understanding and modelling injection drug risk behaviour in Victoria, BC

Investigators: Roth, E. & Exner, H. (Co-PIs), Cowen, L., Ma, J. & van den Driessche, P. (Co-Is)

Funding Body: Vancouver Foundation

Background: Research Question: Why do people who use injection drugs still share injection equipment even though they are enrolled in a long-standing needle exchange program?

Progress To Date: Conducted survey of 105 clients of AIDS Vancouver Island’s Needle Exchange Program, coded data, and submitted one paper to Journal of Harm Reduction. Published results in Journal of Harm Reduction and Drug and Alcohol Review, and presented results to injection drug users at Aids Vancouver Island’s Street School Session. Wrote final report for grant.
**Alcohol risk assessment and identification (ARAI) update**

**Investigators:** Brown, D. & Anderson, J. F. (Co-PIs)

**Funding Body:** BC College of Family Physicians

**Background:** Dr. Brown has been asked by the CFPC and the CCSA to upgrade this package, both in form and content. He is assisted by Dr. John F. Anderson. The project will take place over the next 12 months, and will be guided by an expert advisory panel that includes several physicians from across Canada. Minimal alcohol screening facilitates the identification and appropriate treatment of both at-risk and probable dependent cases, including referral to specialized care. Primary care brief intervention has been demonstrated to be efficacious and cost-effective in reducing non-dependent harmful drinking and associated health adversities. This project is an important step toward expanding the practice of screening and brief intervention by Canadian family physicians.

**Progress To Date:** A primarily web-based prototype, ‘Clinical Guide for Reducing Alcohol Risks and Harms’, has now been developed, with a emphasis on basic screening and brief intervention. The prototype has gone through a preliminary field assessment with family medicine physicians and residents. Further refinement of this resource package will now be undertaken by CCSA in collaboration with CFPC.

**A comparison of the effects of smoked whole-plant cannabis of different THC concentrations in non-treatment naive patients with chronic pain – The Vancouver Island Compassion Society**

**Investigators:** Lucas, P. (PI)

**Funding Body:** Marijuana Policy Project

**Background:** This research is an ongoing examination of the effects of smoked cannabis on chronic pain.

**Progress To Date:** Funded by the Marijuana Policy Project, this protocol has passed human ethics review and is awaiting final approval by Health Canada.

**North American opiate medication initiative (NAOMI): Multi-Centre randomized controlled trial of heroin-assisted therapy for treatment refractory injection opiate users**


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

**Background:** Randomized clinical trial comparing injectable opioid agonist treatment to optimized methadone maintenance treatment for long-term treatment refractory heroin-dependant patients.

**Progress To Date:** Clinical trial has been completed and five papers published or in press.

**Cannabis as a Substitute for Alcohol and Other Drugs: A Compassion Club-Based Survey of Substitution Effect in Canadian Medical Cannabis Patients**

**Investigator:** Lucas, P.

**Background:** This is a study examining self-assessed changes in licit and illicit substance use of 400 medical cannabis patients in BC.

**Progress To Date:** The protocol has passed ethics review and data collection will begin shortly.
RESEARCH PRIORITY 5:
SOCIAL DETERMINANTS AND CONTEXTS OF SUBSTANCE USE

CARBC PROJECTS

An examination of drug use patterns among high-risk illicit substance users in Victoria, BC

**Investigator:** Ivsins, A.

**Funding Body:** MITACS

**Background:** The sharing of crack pipes is common among users of crack cocaine and is associated with unique negative health harms and costs. This study is exploring social, contextual and environmental factors that mediate and influence crack pipe sharing among illicit substance users on Vancouver Island, BC.

**Progress To Date:** Completed.

Risky business: Experiences of street youth

**Investigators:** Benoit, C., & Jansson, M. (Co-PIs)

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

**Background:** This project, funded by three separate sources, focused on the risky behaviours, health and well-being of street-involved youth. By repeatedly interviewing these vulnerable youth over time, we collected data with the aim to better understand the impact of disadvantages in early childhood and subsequent life transitions on current substance use patterns, as well as long-term health and well-being.

**Progress To Date:** This youth project has been completed and the sample has transitioned into a subsequent study focused on street youth transition into adulthood. Over 250 youth aged 14 through 18 were interviewed at least once, with up to six interviews conducted by youth willing and able to participate for the length of the study. The team has presented a large number of conference papers and published peer reviewed articles and book chapters based on data, research ethics and methods from this study. We have also prepared analyses for, and in other ways worked closely with, our community partners to support their frontline work with street-involved and other marginalized populations.

Street youth’s transitions to adulthood

**Investigators:** Jansson, M. (PI), Benoit, C., Hallgrimsdottir, H., & Roth, E. (Co-Is)

**Funding Body:** Social Sciences and Humanities Research Council

**Background:** This project focuses on the risky behaviours and health and well-being of former and current street-involved youth as they transition to adulthood. We aim to better understand the long-term consequences of disadvantages in early childhood and youth. Extensive qualitative and quantitative data are being collected on current substance use patterns, as well as long term health and well-being. Youth were aged 14-18 when they originally joined the research project, and are interviewed every few months for as long as they are willing to participate. Over 750 interviews have been conducted with more than 275 different youth. We work with five community partners: Victoria Youth Clinic, Victoria Youth Empowerment Society, Greater Victoria Child and Family Counselling Association, Prostitutes Empowerment, Education and Resource Society, and Victoria Native Friendship Centre.

**Progress To Date:** Interviewing, coding and data entry are proceeding as planned and the research team, including community partners, have presented a number of conference papers based on preliminary data gathered for the project and also published papers in peer-reviewed journals. Other presentations and papers are in preparation.
The Implications of Adolescent Health and Health Risk Behaviours for Health in Early Adulthood: Sources of Continuities and Discontinuities in Developmental Trajectories Over 10 Years

Investigators: **Leadbeater, B. (PI), Barnes, G., Jansson, M., Macdonald, S. & Stockwell, T. (Co-Is).**

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

**Background:** This project extends a longitudinal study of youth in Victoria initiated in 2000, when participants were aged between 12 and 17, to a fourth and fifth wave of data collection. Included in the many measures of health, mental health, social well-being, educational and occupational attainment, family and community variables and addiction-prone personality are measures of substance use and related harms. At CARBC, a number of investigators and graduate students have been exploring variables such as the age of onset of drinking and drunkenness as predictors of later problematic substance use.

**Progress To Date:** The fourth wave of data collection has been completed. Papers on the role of addiction-prone personality and age of onset of substance use have been presented at conferences and are being prepared for journal submission.

FASD Action Fund program evaluation

**Investigators:** George, A., **Hardy, C. & Clark, E. (Co-Is)**

**Funding Body:** Victoria Foundation

**Background:** The $7M Fetal Alcohol Spectrum Disorder (FASD) Action Fund administered by the Victoria Foundation provided grants to 22 demonstration projects, with the goal of preventing and improving care for FASD-affected children and youth and their families.

**Progress To Date:** Ongoing.

Students with FASD: Adapting environments, instruction and curriculum to improve their school experience

**Investigators:** Hughes, K., Anserello, C., George, A., MacMillan, P. & **Hardy, C. (Co-Is)**

**Funding Body:** Victoria Foundation

**Background:** This project is an evaluation of the school-based intervention being conducted by the Provincial Outreach Program for FASD (POPFASD). Special education teachers with expertise teaching children with FASD are mentoring classroom teachers regarding modifications to environments, instruction, and curriculum for supporting children with FASD.

**Progress To Date:** Completed.
The impact of stigma on marginalized populations’ work, health and access to services, and Work, health and health care access in the U.S. and Canada


*Funding Body for Both Projects*: Canadian Institutes of Health Research

*Background*: These inter-related studies aim at furthering knowledge of the impact of social factors and stigma on the health of sex workers compared to other low-prestige workers.

*Progress To Date*: The international research team has completed interviews with just under 600 participants from Victoria, BC, and Sacramento, California, at four points in time. Data collection has been completed. Data entry and cleaning is in the final stage. One Masters thesis, *Depression on the frontline: An examination of the impact of working conditions and life stressors on sex workers, stylists and servers*, has been completed using some of the data, and a post-doctoral student, funded by CIHR and the Intersections of Mental Health Perspectives in Addictions Research Training (IMPART) mentorship program, has been recruited to analyze data on the impact of gender, violence and trauma on substance use among the three occupational groups. Presentations drawing on various segments of the data set have also been presented at 14 national or international conferences to date, and a number of papers have been drafted or submitted to peer-reviewed journals.

**CARBC AFFILIATED PROJECTS**

**Drug normalization and stigma: Canada’s experience with cannabis and tobacco**


*Funding Body*: Social Sciences and Humanities Research Council

*Background*: Multi-modal qualitative and quantitative cross-sectional evaluation of the impact of cannabis and tobacco use on socially stable individuals aged 25-50, with a focus on public policy and perception of social acceptance.

*Progress To Date*: Data collection has been completed and analyses are ongoing. A book chapter and a peer-reviewed paper are in print, and other papers are being planned.

**Vancouver inter-disciplinary collaboration of injection drug use researchers**


*Funding Body*: Canadian Institutes of Health Research

*Background*: This project coordinates combined analyses from several ongoing cohort studies of injection drug users.

*Progress To Date*: Several papers have been submitted and others are in preparation.
### Table 2: Performance Indicators for Key Result Area 2

**Objectives**

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<th>Objective</th>
<th>Performance Indicators for 2009-10</th>
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| 2.1       | Conduct research on the patterns, distribution, determinants and consequences of substance use.  
50 projects initiated, completed, or underway (62 in 2008-09, 32 in 2007-08, 18 in 2006-07). |
| 2.2       | Conduct research that is valued by stakeholders as being of high quality, timely and relevant to public policy and practice.  
CARBC has 6 prepared policy documents under commission (6 in 2008-09, 7 in 2007-08, 6 in 2006-07). |
| 2.3       | Identify key strategic research opportunities that will inform policy and practice.  
CARBC helped initiate 6 projects in 2009-2010 concerned with: developing a harm reduction strategy for the City of Victoria, public support for alternative alcohol policies, impact of minimum liquor pricing, public health and safety impact of closure of a fixed site needle exchange, public opinion coalition to end homelessness, improved support for substance-using mothers. |
| 2.4       | Conduct research on province-wide monitoring of alcohol, tobacco, gambling and other drug use patterns and related harms,  
the impact of educational, legislative and regulatory strategies to minimize alcohol and other drug-related harms,  
development and evaluation of more effective community prevention programs,  
development and evaluation of more effective treatment systems and programs,  
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, and research and evaluation of effectiveness of knowledge translation and exchange activities and strategies.  
26 relevant projects (28 in 2008-09, 20 in 2007-08, 12 in 2006-07)  
[ NB: This includes 10 components of the BC AOD Monitoring Project and five studies underway from the cross substance studies' CIHR new emerging team grant.]  
3 relevant projects (6 in 2008-09, 8 in 2007-08, 5 in 2006-07).  
3 relevant projects (5 in 2008-09, 4 in 2007-08, 3 in 2006-07).  
8 relevant projects (10 in 2008-09, 3 in 2007-08, 1 in 2006-07).  
9 relevant projects (13 in 2008-09, 15 in 2007-08, 10 in 2006-07).  
7 projects underway (3 underway in 2008-09, 3 in 2007-08, 3 in 2006-07). |
| 2.5       | Develop and maintain significant collaborative projects with other researchers and research centres in British Columbia.  
29 projects (23 in 2008-09, 17 in 2007-08, 14 in 2006-07). |
| 2.6       | Develop and maintain research projects that engage researchers from several relevant disciplines.  
| 2.7       | Develop and maintain significant collaborative projects with other researchers and research centres in North America.  
12 collaborative projects with other North American researchers and research agencies each year (17 in 2008-09, 10 in 2007-08, 12 in 2006-07, 11 in 2005-06). |
| 2.8       | Develop collaborative projects with international organizations.  
6 collaborations with international organizations, researchers or groups (8 in 2008-09, 7 in 2007-08, 9 in 2006-07). |
“To disseminate research findings that increase understanding of substance use and addiction, to increase awareness of related harms, and to identify effective responses.”

HIGHLIGHTS

Scott Macdonald first-authored a significant new review on the scientific basis for drug testing in the workplace which was published in the international journal Addiction, one of 70 CARBC peer-reviewed articles last year. We also publish statistical bulletins and special reports which are made available on our website and often announced with a media release. In 2009/10, one highlight was a controversial paper concerning alcohol pricing and the HST, funded by the Mental Health and Addiction Research Network. This report received significant media attention over several weeks. More importantly, with the support of community organizer Lembi Buchanan and her new BC Coalition for Alcohol Policy Reform as well as members of our Advisory Board, our proposals have been considered by numerous BC municipal councils and government ministries. The Vancouver office have substantially enhanced our websites as a means of providing information and support for the health promotion practices around substance use in schools, workplaces and communities.
Successful applications for knowledge exchange funding


BC Partners for Mental Health and Addictions Information. Reist, D., BC Mental Health Society Branch, $243,750 from April 2009 to March 2010

Canadian Drug Policy Consortium. Reist, D., Open Society Institute, $26,000 from May 2009 to June 2009

Core Competencies. Reist, D., Canadian Centre on Substance Abuse, $19,525 from June 2009 to August 2009

Housing and Harm Reduction Action Plan. Pauly, B. & Reist, D., Greater Victoria Coalition to End Homelessness, $8,960 from February 2010 to May 2010


Preventing Problematic Substance Use. Reist, D., Ministry of Healthy Living and Sport, $200,000 from April 2009 to March 2010

Buxton, J. & Malchy, L., Canadian Institutes of Health Research, $20,000 from May 2009 to March 2009

Tobacco Resource Centre. Reist, D., Ministry of Healthy Living and Sport, $42,000 from April 2009 to September 2009

Youth Justice - AME Program. Reist, D. & Stockwell, T., Ministry of Children and Family Development, $62,500 from October 2009 to March 2010

COMPLETED PROJECTS

National Awards for Excellence 2010

Investigators: Reimer, B., Dyck, T. & Reist, D.

Funding Body: Kaiser Foundation

Background: The National Awards for Excellence Program is a project of the Kaiser Foundation that recognizes the tremendous work of individuals and organizations throughout Canada that are promoting both physical and mental health by reducing the harm resulting from substance use.

Summary: CARBC facilitates and coordinates the adjudication process. In 2009-10, this involved recruiting and supporting 16 adjudicators from eight jurisdictions in Canada. A total of 115 nominations were processed. Scoring results and recommendations, together with 14 profiles on the leading nominees, were submitted to the Kaiser Foundation for final selection of award recipients.

Tobacco Resource Centre

Investigators: Bond, J., Spence, C. & Reist, D.

Funding Body: Ministry of Healthy Living and Sport

Background: CARBC distributed health promotion products related to tobacco on behalf of the Ministry of Healthy Living and Sport. A catalogue of these materials was available at www.carbc.ca where products could be downloaded or ordered online.

Summary: This service was discontinued in August 2009.
CURRENT PROJECTS

Addressing Alcohol in the Community

**Investigators:** Dyck, T., Thomas, G., Reimer, B. & Reist, D.

**Funding Body:** Ministry of Healthy Living and Sport and BC Mental Health and Addictions Research Network

**Background:** Ministry of Healthy Living and Sport provided funding to supplement support provided to communities in addressing alcohol issues. The project involved working with BC communities to identify and develop alcohol-specific tools and resources that can be made available through our website.

**Progress To Date:** The knowledge exchange team worked with research colleagues to develop improved presentation of information on alcohol that is of interest and value to local communities in addressing alcohol-related harm. Plans were put in place for changes to the Helping Communities section of our website that will make it easier for communities to employ promising practices and access evidence, tools and stories. In addition, this initiative provided an impetus to begin revising our Alcohol Reality Check website to improve the specificity of responses offered to those who complete the screen.

Alcohol Screening and Education

**Investigators:** Dyck, T., Reist, D., Thomas, G., Reimer, B. & Ripley, L.

**Funding Body:** Ministry of Healthy Living and Sport and BC Mental Health Society Branch

**Background:** This project seeks to provide the public with pertinent educational materials on alcohol-related issues, particularly in regard to low-risk drinking guidelines, and promotes opportunities for short screening and brief intervention in order to encourage healthier patterns of consumption. CARBC has done extensive research on the patterns of alcohol use in BC, the related risks and harms, and the evidence related to effective strategies for intervention.

**Progress To Date:** The Centre again supported the Beyond the Blues education and screening day, in which 62 community sites provided education and screening related to alcohol as well as depression and anxiety. A major review of our online screening and brief advice tool was completed and plans put in place for a revision of the advice given to respondents. The goal is to provide responses that are more tailored to gender and age distinctions. The Centre also provided 10,000 low-risk drinking cards for distribution at the 2010 Winter Olympics.

BC Partners Network

**Investigators:** Thomas, G., Reimer, B. & Reist, D.

**Funding Body:** BC Mental Health Society Branch

**Background:** CARBC has been a long-time member of BC Partners for Mental Health and Addictions Information. Through this network, CARBC promotes health literacy related to substance use and addiction.

**Progress To Date:** In 2009-10, our team participated in a major process of re-branding the materials of the network under the “Here to Help” brand and in developing plans for a provincial resource hub to function as a one-stop-shop for the public and professionals to access BC resources related to mental health and substance use literacy.
Helping Campuses

Investigators: Reist, D. (PI), Thomas, G., Dyck, T., Reimer, B. & Ripley, L.

Funding Body: Ministry of Healthy Living and Sport and BC Mental Health Society Branch

Background: This project works with partners on post-secondary campuses to plan and implement effective strategies for reducing harm related to alcohol and other drugs. We participate in the “Campus Project” of BC Partners for Mental Health and Addictions Information and engage in other campus-related activities linked to that project in a loose-coupled way.

Progress To Date: This is an ongoing project, and activity this year included facilitating a planning day at Thompson Rivers University and consultation to other campuses. A toolkit that provides campus communities with support in developing comprehensive strategies related to alcohol was developed and is being incorporated in the planned Helping Campuses section of our website.

Helping Communities

Investigators: Reimer, B., Reist, D., Thomas, G. & Ripley, L.

Funding Body: Ministry of Healthy Living and Sport and University of Victoria

Background: Communities are struggling to understand and respond to substance use in a context where the nature and treatment of substance use problems is poorly understood. As a result, many well-intentioned initiatives do not reflect the best available evidence. This project began with a symposium in Vancouver in collaboration with Keeping the Door Open: Dialogues on Drug Use.

Progress To Date: CARBC committed to developing tools and materials that would be accessible and useful to community stakeholders throughout the province. In 2009-10, the Centre launched version 1 of a web-based resource to help communities access information and tools, and began plans for version 2 which will involve parallel sites for community, school and campus settings.

Helping Schools

Investigators: Reist, D., Souza, E., Capler, R., Bodner, N. & Ripley, L.

Funding Body: Ministry of Healthy Living and Sport and BC Mental Health Society Branch

Background: CARBC is developing policy and classroom resources for BC schools that promote a comprehensive school health approach. The materials have a solid theoretical foundation, draw on the best available evidence, and are designed for ease of application in real-world schools.

Progress To Date: CARBC has developed a set of classroom resources (iMinds) for Grades 6-10 that use a constructivist educational approach, promote health literacy related to behaviour, substance use and mental wellness, and seek to enhance social and emotional competence. In 2009-10, these resources were used in 11 BC school districts and one school in Ontario. CARBC also promotes a whole-school approach using a series of knowledge kits developed for the Joint Consortium for School Health. In 2009-10, CARBC provided teacher training to 72 teachers and conducted several workshops and seminars with parents, teachers, counsellors and administrators.
Here to Help

Investigators: Bodner, N., Capler, R., Thomas, G., Reimer, B. & Reist, D.

Funding Body: BC Mental Health Society Branch

Background: CARBC is working with the Canadian Mental Health Association-BC Division on a project to develop a comprehensive series of public education materials related to substance use and mental health. These resources are made available on www.heretohelp.bc.ca as well as from our website at www.carbc.ca.

Progress To Date: During 2009-10, CARBC completed several products that were in development, and began transitioning all products to the newly developed “Here to Help” brand standards. To date, a total of 33 products have been developed by CARBC for this collection.

Visions Journal

Investigators: Reimer, B., Thomas, G., Capler, R., Macdonald, S. & Lucas, P.

Funding Body: BC Mental Health Society Branch

Background: CARBC contributes to the production of the Visions journal, a project of BC Partners for Mental Health and Addictions Information, by participating on the editorial advisory group and by providing at least one article to most issues. The Centre also seeks to increase the profile of the journal within the substance use community.

Progress To Date: In 2009-10, five articles by CARBC staff were published in the journal, and a CARBC graduate student was the guest editor of the issue on cannabis.
CARBC-SPONSORED CONFERENCES & SEMINARS

**Supping with the Devil: Promoting tobacco harm reduction using snus and other smokeless tobacco products.** Dr. Wayne Hall, April 15, 2009, Victoria, BC.

**Participatory and community-based research with women who use drugs: Examples from three studies.** Dr. Amy Salmon, October 30, 2009, Victoria, BC.

**Up-to-date II: Alcohol and other drug use and related harms in BC.** Half-day symposium convened by CARBC. December 11, 2009, UBC Robson Square, Vancouver, BC.

**Genetics, drugs, and cognitive control: Individual differences underlying substance dependence.** Mr. Travis Baker, January 25, 2010, Victoria, BC.

**Substance Use during Pregnancy and Early Childrearing: Implications and Prevention Possibilities.** Dr. Erica Woodin, February 22, 2010, Victoria, BC.

PUBLICATIONS

**Journal Articles and Book Reviews**

Andreuccetti, G., Barbosa de Carvalho, H., Cherpitel C. J., Kahn, T., de Carvalho Ponce, J., & Leyton, V. (In Press). The right choice at the right moment [letter to the editor]. *Addiction*.


Books & Reports


**Book Chapters**


**CARBC Graduate Student Dissertations and Theses**

**Brache, K.** (June 2009). Alcohol and Cocaine Simultaneous Polysubstance Use: A Qualitative Investigation. M.Sc., Department of Psychology, University of Victoria.

**Murray, K.** (June 2009). Is There a “Low-Risk” Drinking Level for Youth? Exploring the Harms Associated with Adolescent Drinking Patterns. M.Sc., Department of Psychology, University of Victoria.


**CARBC Reports and Bulletins**


**Invited Presentations**


**Marsh, D.** (2009, September). Normalization and Stigmatization of Cannabis and Tobacco Use in Young Canadian Adults. Invited speaker at the Canadian Society of Addiction Medicine Annual Scientific Meeting, Calgary, AB.


Reist, D. (2009, November). Reflecting on Our Relationship with Alcohol. Invited presentation at a public event hosted by the Comox Valley Drug Strategy Committee, Courtenay, BC.


Reist, D. (2009, November). iMinds Drug Education. Invited presentation at the Professional development session for elementary teachers in SD#22, Vernon, BC.


Stockwell, T. (2009, August). To regulate or deregulate? A case for policy informed by local as well as international research. International Seminar on Alcohol Retail Monopolies, Seattle, WA.


Thomas, G. (2010, June). Using Evidence to Reduce Harms and Costs from Alcohol, Our Favourite Drug. Invited presentation as part of the BC Ministries of Health Services and Healthy Living and Sport’s Policy Rounds, Victoria, BC.


Other Conference and Seminar Presentations


MEDIA COVERAGE

Last year our media coverage covered a wide range of topics, although coverage of harm reduction issues in relation to illicit drug use, alcohol policy and reports from our BC Alcohol and Other Drug Monitoring Project were the most numerous.

<table>
<thead>
<tr>
<th>Story/Topic</th>
<th>Print</th>
<th>TV</th>
<th>Radio</th>
<th>On-line</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol - health risks</td>
<td>4</td>
<td>2</td>
<td>6</td>
<td>2</td>
<td>14</td>
</tr>
<tr>
<td>Alcohol policy</td>
<td>15</td>
<td>12</td>
<td>19</td>
<td>1</td>
<td>47</td>
</tr>
<tr>
<td>Drug testing</td>
<td>1</td>
<td></td>
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<td>1</td>
</tr>
<tr>
<td>Harm reduction</td>
<td>28</td>
<td>12</td>
<td>1</td>
<td></td>
<td>41</td>
</tr>
<tr>
<td>Homelessness</td>
<td></td>
<td>1</td>
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<tr>
<td>Marijuana</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
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<tr>
<td>Policing and violence (incl. late night drinking)</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Supervised injection sites</td>
<td>1</td>
<td></td>
<td></td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Teen substance use, parents</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>Alcohol &amp; Other Drug trends</td>
<td>30</td>
<td></td>
<td></td>
<td>1</td>
<td>31</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>9</td>
<td></td>
<td>2</td>
<td></td>
<td>11</td>
</tr>
<tr>
<td>Totals</td>
<td>91</td>
<td>27</td>
<td>32</td>
<td>11</td>
<td>161</td>
</tr>
</tbody>
</table>

Table 3: Performance Indicators for Key Results Area 3

<table>
<thead>
<tr>
<th>OBJECTIVE</th>
<th>PERFORMANCE INDICATORS FOR 2009-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 Disseminate research findings to policy makers, practitioners, public health professionals, other researchers, community interest groups and the general public.</td>
<td>• 26 BC and national policy committee memberships (14 in 2008-09, 11 in 2007-08, 8 in 2006-07)</td>
</tr>
<tr>
<td></td>
<td>• 14 reviews of evidence for effectiveness for different types of intervention and policy (11 in 2008-09, 14 in 2007-08, 14 in 2006-07)</td>
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<tr>
<td></td>
<td>• 38 new resources developed by CARBC and made available online and in print (29 in 2008-09, 28 in 2007-08, 13 in 2006-07)</td>
</tr>
<tr>
<td>3.2 Publish research findings in articles in peer-reviewed journals.</td>
<td>• 71 articles published by CARBC researchers in peer reviewed journals (101 in 2008-09, 43 in 2007-08)</td>
</tr>
<tr>
<td>3.3 Publish research findings in book chapters, books, research monographs and technical reports.</td>
<td>• 9 books (3 in 2008-09, 2 in 2007-08), 17 book chapters (11 in 2008-09, 7 in 2007-08), 1 bulletin (1 in 2008-09, 1 in 2007-08), and 2 other report published by CARBC researchers (1 in 2008-09, 6 in 2007-08)</td>
</tr>
</tbody>
</table>
### OBJECTIVE

#### 3.4 Achieve a high academic impact for BC addictions-related research so that it is well-known, frequently requested and often cited.

- 587 citations in peer-reviewed journals in 2009-10 of research on substance use issues by CARBC faculty (609 in 2008-09, 317 in 2007, 353 in 2006)

#### 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.

- 91 articles in the print media (61 in 2008-09, 343 in 2007-08), 11 online (9 in 2008-09, 21 in 2007-08), and 59 interviews used by the electronic media (21 in 2008-09, 140 in 2007-08)
- 0 newsletters (1 in 2008-09, 2 in 2007-08)
- 2 articles from CARBC in magazines, newsletters, websites, and unrefereed journals (6 in 2008-09, 18 in 2007-08)
- 1000+ copies of reports distributed and 611 orders for information totalling 30,505 products were responded to by the CARBC resource centre (2,156 in 2008-09, 3,616 in 2007-08)
- 27,959 unique visitors to our online resource centre and 3,538 to AOD Monitoring website (5,405 in 2008/9), making over 31,497 visits (11,000 in 2008/9)

#### 3.6 Conduct seminars, lectures and occasional conferences on the state of knowledge and its application to policy, practice and the research agenda.

- 5 public research seminars (8 in 2008-09, 5 in 2007-08), 0 national symposia convened or co-convened by CARBC (0 in 2008-09, 1 in 2006–07), and 0 international symposium (1 in 2008-09, 1 in 2006–07)
- 28 invitations to CARBC researchers were accepted to present at conferences and symposia (21* in 2008-09, 36* in 2007-08), of which 21 were held in BC (8 in 2008-09, 19 in 2007-08), 3 were national (4 in 2008-09, 10 in 2007-08), and 4 were international (9 in 2008-09, 16 in 2007-08)
- 37* papers accepted for conference presentations from CARBC researchers and students (88* in 2008-09, 25 in 2007-08), of which 7 were held in BC (42 in 2008-09, 7 in 2007-08), 12 were national (19 in 2008-09, 9 in 2007-08), and 18 were international (15 in 2008-09, 8 in 2007-08)
- **NB**: International meetings held in BC counted in each category.

#### 3.7 Contribute to teaching programs on substance use and addictions for undergraduate and graduate courses/programs.

- 7 courses in which addictions issues were taught by CARBC members at UVic (6 in 2008-09, 5 in 2007-08)
- 4 courses in which addictions issues were taught by CARBC members at other campuses (5 in 2008-09, 1 in 2007-08)
<table>
<thead>
<tr>
<th>OBJECTIVE</th>
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<tbody>
<tr>
<td>Cultivate communities of practice that disseminate knowledge among</td>
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<tr>
<td>policy makers, practitioners, public health professionals, researchers,</td>
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<tr>
<td>community interest groups and the general public in order to increase</td>
</tr>
<tr>
<td>awareness of drug-related harms and effective prevention strategies.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>PERFORMANCE INDICATORS FOR 2009-10</th>
</tr>
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<tbody>
<tr>
<td>CARBC personnel are represented on the following 20 networks active in</td>
</tr>
<tr>
<td>BC (14 in 2008-09, 10 in 2007-08) which link researchers, policy makers,</td>
</tr>
<tr>
<td>practitioners, and members of the wider community with the aim of</td>
</tr>
<tr>
<td>disseminating knowledge on substance use and addiction:</td>
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<tr>
<td>• BC Mental Health &amp; Addiction Research Network</td>
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<tr>
<td>• BC Partners for Mental Health and Addictions Information</td>
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<tr>
<td>• BC Addictions Network</td>
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<tr>
<td>• Health Improvement Project Committee</td>
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<tr>
<td>• UBC Undergraduate Medicine Community Service Learning Option</td>
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<tr>
<td>• Provincial Academic Detailing Network (PHSA)</td>
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<td>• BC Health Literacy Network</td>
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<td>• Keeping the Door Open</td>
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<td>• BC AOD Monitoring Project Group</td>
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<td>• CARBC Program Committee</td>
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<td>• BC Women's Health Research Network</td>
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<tr>
<td>• IMPART</td>
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<tr>
<td>• CIHR NET Grant on Cross-Substance Studies</td>
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<tr>
<td>• BC Centre for Disease Control group concerned with injecting drug use</td>
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<tr>
<td>and infectious diseases</td>
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<tr>
<td>• Vancouver CCENDU</td>
</tr>
<tr>
<td>• BC Coalition for Alcohol Policy Reform</td>
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<tr>
<td>• Representative for Children and Youth</td>
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<tr>
<td>• Women’s Health Research Network</td>
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<tr>
<td>• BC Centre of Excellence on Women’s Health</td>
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<tr>
<td>• Institute for Critical Studies in Gender and Health</td>
</tr>
</tbody>
</table>
HIGHLIGHTS

In December 2009, our report on Alcohol Pricing and the HST generated much public debate. CARBC has been working with the Provincial Health Officer and the BC Coalition of Alcohol Policy to make the case against allowing liquor to become cheaper with the advent of the Harmonized Sales Tax. While the need to preserve revenue may have been the driving influence in the government raising markups on liquor by an equivalent amount, it is also possible that this public debate helped as well. This public debate and CARBC data have also been credited with stimulating the addition of the responsible consumption of alcohol as a fourth pillar of the BC ActNow initiative (in addition to diet, exercise and smoking cessation). (See figure below.)

We gratefully acknowledge the support of community partners and colleagues on our advisory board and collaborating centres in promoting policy and practice implications of our research. Philippe Lucas, Victoria City Councillor and CARBC affiliate, has been active and effective in promoting support for a wide range of harm reduction and alcohol pricing initiatives. Chief Jamie Graham of the Victoria Police has also championed some of our alcohol policy and pricing initiatives. Several members of CARBC have been active in assisting the City of Victoria to develop a harm reduction strategy.

Dr. Cecilia Benoit’s ongoing program of research with women with substance use problems and their health needs during pregnancy and early parenting has contributed directly to substantial new investment in services for this vulnerable population. Her achievements were recognized recently by two significant BC honours.
COMMITTEE MEMBERSHIPS

Anderson, J.  Advisory Committee on Opioid Dependence, College of Physicians and Surgeons of BC
Anderson, J.  Addictive Diseases Committee, BC Medical Association
Benoit, C.  Chair, Porter Book Prize Committee, Canadian Sociological Association
Benoit, C.  University Delegate, Canadian Institutes of Health Research
Benoit, C.  Panelist, Grand Challenge in Global Mental Health Initiative, Office for Research on Disparities and Global Mental Health, National Institute of Mental Health
Benoit, C.  Member, Program Advisory Committee, IMPART: Intersections of Mental Health Perspectives in Addictions Research Training
Benoit, C.  International Scientific Advisory Board member, NIHR King’s Patient Safety and Service Quality Research Centre, King’s College, London, UK
Benoit, C.  Member, Graduate Studies Executive Committee, Faculty of Graduate Studies, University of Victoria, BC
Benoit, C.  Graduate Committee Chair, Department of Sociology, University of Victoria, BC
Cherpitel, C.  International Network on Brief Interventions for Alcohol Problems
Dyck, T.  Healthy Minds/Healthy Campuses Provincial Steering Committee
Dyck, T.  Alcohol and Youth Working Group
Jansson, M.  Steering Committee, BC Inter-University Research Data Centre, UVic Branch
Jansson, M.  Human Research Ethics Board, University of Victoria
Jansson, M.  Capital Region Action Team on Sexually Exploited Youth (CRAT)
Lucas, P.  Board of Directors, Multidisciplinary Association of Psychedelic Studies Canada
Lucas, P.  Board of Directors, Canadian Students for Sensible Drug Policies
Macdonald, S.  Canadian Alcohol and Drug Use Monitoring System (CADUMS), Health Canada
Macdonald, S.  Canadian Community Epidemiology Network on Drug Use
Reist, D.  Co-Chair, BC Addictions Network
Reist, D.  BC Health Literacy Network
Reist, D.  Canadian Drug Policy Consortium
Reist, D.  Board of Directors, Kaiser Foundation
Reist, D.  School-Based Mental Health and Substance Use Consortium
Reimer, B.  BC Partners for Mental Health and Addictions Information
Stockwell, T.  Co-Chair, BC Mental Health and Addictions Advisory Committee
Stockwell, T.  National Surveillance Advisory Committee, Health Canada
Stockwell, T.  National Alcohol Strategy Advisory Committee
Stockwell, T.  Canadian Low-Risk Drinking Guidelines Expert Working Group
Stockwell, T.  Advisory Board, Alcohol Research Group, Emeryville, USA
Thomas, G.  BC Partners for Mental Health and Addictions Information
COMPLETED PROJECTS

**Canadian Drug Policy Consortium**

**Investigators:** Reist, D. & Dyck, T.

**Funding Body:** Open Society Institute

**Background:** Following the work of CARBC and others to coordinate Canadian involvement in the Beyond 2008 review of international drug policy, CARBC has been supporting the development of a new coalition to represent civil society in Canadian discourse on drug policy.

**Summary:** CARBC hosted a two-day working session in May 2009 in which representatives of Canadian civil society hammered out a framework for the Canadian Drug Policy Consortium. The Centre’s contribution included preparing discussion documents prior to the event and writing a report entitled “One Step Further: Toward a Canadian civil society voice on drug policy” that was released in September 2009.

**Evidence Review for Core Technical Competencies**

**Investigators:** Reist, D., Reimer, B. & Thomas, G.

**Funding Body:** Canadian Centre on Substance Abuse

**Background:** In 2007, the Canadian Centre on Substance Abuse led a process to identify core competencies for workers in the substance use field. However, no literature review was conducted during the project.

**Summary:** Staff at CARBC conducted a literature review of competency-based models on behalf of the Canadian Centre on Substance Abuse and prepared a report that set out the findings and offered suggestions related to options for moving forward.

**Methadone Policy Review**

**Investigators:** Parkes, T. & Reist, D.

**Funding Body:** Ministry of Healthy Living and Sport

**Background:** Since 1996, the Methadone Maintenance Program in BC has experienced rapid growth. Nonetheless, the system continues to face challenges related to capacity and operations, public and professional confidence in the program has been undermined by reports of misconduct and poor practices, and the experience of patients has resulted in numerous complaints. In light of these and other factors, the Ministry of Healthy Living and Sport asked CARBC to review methadone treatment in the province.

**Summary:** In 2008-2009, Tessa Parkes conducted an original qualitative study that collected perspectives from a wide range of stakeholders, including clients, services providers and system managers, representing a variety of settings, professions and responsibilities. This rich collection of material was analyzed and a comprehensive report as well as a briefer summary report were prepared in the summer and fall of 2009. A further report, looking at the policy implications of this study together with a quantitative study done at UBC, was prepared and submitted to the Ministry of Healthy Living and Sport in the spring of 2010.
Youth Justice - AME Program

**Investigators:** Reist, D., Thompson, K., Coleman, P. & Bodner, N.

**Funding Body:** Ministry for Children and Family Development

**Background:** The Ministry for Children and Family Development commissioned CARBC to develop a program to help youth probation officers to address substance use issues with young offenders.

**Summary:** CARBC has developed a web-based resource that incorporates a central motivational script for screening and brief intervention that is supplemented by tools, articles, self-help materials and other resources to guide probation officers in meeting the individual needs of the young people they work with. An evaluation framework for piloting and implementing this program was also developed. Training and implementation will begin in the fall of 2010.

CURRENT PROJECTS

Housing and Harm Reduction Action Plan

**Investigators:** Reist, D., Pauly, B., Belle-Isle, L., Schactman, C. & Bodner, N.

**Funding Body:** Greater Victoria Coalition to End Homelessness

**Background:** The Greater Victoria Coalition to End Homelessness Society is a non-profit community-based organization that engages community organizations, governments, business and individuals to work in partnership with each other and the broader community to lead and drive the commitment to end homelessness.

**Progress To Date:** CARBC has completed an evidence review, environmental scan and community consultations and is preparing an action plan for the coalition. This plan will set out a series of specific recommendations for implementing harm reduction principles within a “housing first” approach in Greater Victoria within the context of existing strategies and mechanisms.

Development of low risk drinking guidelines for Canadians

**Investigators:** Butt, P. (Chair), Beirness, D., Cesa, F., Gliksman, L., Paradis, C. & Stockwell, T.

**Funding Body:** Canadian Centre on Substance Abuse

**Background:** CARBC contributed significantly to the development of the first set of national low-risk drinking guidelines for Canadians. A national expert working group met over a 12-month period to review evidence and compile recommendations for low-risk levels of consumption for adults and young people and advice on situations when complete abstinence is essential.

**Progress To Date:** A near final draft has been prepared and is being considered for endorsement by many government and non-government agencies across Canada.
### Table 4: Performance Indicators for Key Result Area 4

<table>
<thead>
<tr>
<th>OBJECTIVE</th>
<th>PERFORMANCE INDICATOR 2009-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1 Plan the evaluation of new public health and safety measures designed</td>
<td>• 5 relevant CARBC studies (2 in 2008/09, 5 in 2007/08, 7 in 2006/07, 3 in 2005/06)</td>
</tr>
<tr>
<td>to minimize harms from substance use and/or gambling prior to their</td>
<td></td>
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<tr>
<td>implementation.</td>
<td></td>
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<tr>
<td>4.2 Work in partnership with policy makers and practitioners in the</td>
<td>• 17 projects involved policy makers and/or practitioners in planning, execution and/or</td>
</tr>
<tr>
<td>planning, execution and dissemination of some applied research projects.</td>
<td>dissemination (14 in 2008/09, 17 in 2007/08, 24 in 2006/07)</td>
</tr>
<tr>
<td>4.3 Increase the probability of research findings from CARBC, its partners</td>
<td>• CARBC has contributed towards 7 significant policy proposals (10 in 2008/09, 7 in 2007/08,</td>
</tr>
<tr>
<td>and other related sources being applied to policy and practice development</td>
<td>5 in 2006/07, 2 in 2005/06)</td>
</tr>
<tr>
<td>at national, provincial and local community levels.</td>
<td></td>
</tr>
<tr>
<td>4.4 Provide regular briefings and submissions to government and</td>
<td>• 6 invitations received to make submissions to policy forums, select committees, or other</td>
</tr>
<tr>
<td>parliamentary inquiries, policy advisors and relevant provincial and</td>
<td>such bodies (10 in 2008/09, 6 in 2006/07, 5 in 2005/06)</td>
</tr>
<tr>
<td>national committees on emerging issues in the prevention of drug-related</td>
<td>• Membership of 31 BC and national policy committees concerned with substance use and</td>
</tr>
<tr>
<td>harms.</td>
<td>additions (13 in 2008/09, 12 in 2007/08, 12 in 2006/07, 5 in 2005/06)</td>
</tr>
<tr>
<td>4.5 Compete for commissioned research opportunities with the potential to</td>
<td>• 11 successful submissions by CARBC members for commissioned work in relevant areas (8 in</td>
</tr>
<tr>
<td>make direct contributions to the development of new policies, programs and</td>
<td>2008/09, 8 in 2007/08, 8 in 2006/07, 11 in 2005/06)</td>
</tr>
<tr>
<td>service delivery systems.</td>
<td>• 14 commissioned projects undertaken and completed (11 in 2008/09, 7 in 2007/08, 8 in</td>
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<tr>
<td></td>
<td>2006/07, 8 in 2005/06)</td>
</tr>
<tr>
<td></td>
<td>• $1,586,963.19 successfully secured for commissioned research and knowledge exchange</td>
</tr>
<tr>
<td></td>
<td>activities ($1.72 million in 2008/09, $1.55 million in 2006/07, $1.63m in 2005/06)</td>
</tr>
</tbody>
</table>
Research and Administration Office
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