OUR MISSION

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

OUR VALUES

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

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

Ethics, social equity and justice
Commitment to solid ethical principles governing internal and external relationships, financial management, the conduct of research and the communication of research findings is essential. Also required is a commitment to the promotion of equity and fairness and the pursuit of social justice through attention to the impact of the social determinants that shape substance use and the development of health inequities.

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

Harm reduction
Recognition that some people will continue to use psychoactive substances and experience addictions is critical. Strategies are needed to reduce harmful consequences in addition to those that aim to directly reduce or prevent high-risk behaviours.

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

• Message from the Chair
• Message from the Director
• Our People and Partners
• Collaborating Centres
• KEY RESULT AREA 1: Building Capacity
• KEY RESULTS AREA 2: Engaging Academic Expertise
• KEY RESULTS AREA 3: Implementing Quality Research
• KEY RESULTS AREA 4: Dissemination
• KEY RESULTS AREA 5: Knowledge Mobilization

Cover Photo Credit: John Dorocicz. Cold Creek waterfall off of the Log Train Trail, Port Alberni, BC.
Design & Layout: Melany Hallam, Maywood Design | www.maywooddesign.com
Message from the Chair

Associated with CARBC for more than a decade, I continue to be deeply impressed anew by the vitality and innovative research of this highly dedicated and outstanding group of people. CARBC continues to engage faculty, students and staff from diverse disciplines to better understand and support effective responses to substance use and related harms in Canadian society.

Increasingly, the Centre provides students at all levels with opportunities for invaluable experiences in applied research with a focus on reducing harms from substance use across many social contexts, provincially, nationally and, progressively more, internationally as well. That global recognition and reach extends to projects in Australia, Scotland, Sweden and with the World Health Organization, among others.

I am delighted to report that 31 graduate and 7 undergraduate students were engaged in our research programs while also being supervised for their dissertations. This is fundamental to our mission of building capacity and investing in academic expertise.

Hearty congratulations are in order, too, to CARBC Scientist Dr. Karen Urbanoski for securing UVic’s nomination as a Canada Research Chair, announced by CIHR in February 2016.

With respect to quality research and knowledge dissemination, CARBC Scientists authored 76 peer reviewed papers in the past year and were cited 1470 times by other researchers during 2015 in scholarly articles. This, in turn, contributes to the Centre’s presence via social media. That presence, quite literally, has taken off!

CARBC’s social media efforts invite larger and more diverse audiences to access our resources and read our research reports. One recent research publication on the subject of the wished for health benefits of moderate alcohol use generated coverage in at least 400 paper and electronic media outlets globally. The story was disseminated worldwide by Reuters and Canadian Press Agency with coverage by CNN, BBC, CBC, The Economist and The Globe and Mail among many others.

Underpinning all this fantastic work are finances. You will see in this report the continued success in winning competitive grants and contracts, which has broadened the range of research endeavours.

So, be prepared to be impressed, enlightened and drawn into the incredible array of rigorous and relevant work done at CARBC.

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

Welcome to the 2015/2016 CARBC Annual Report which is the fifth and final of this our second 5-year term as a UVic research centre. I am confident that the exciting range of research and knowledge exchange activities reported here demonstrate sufficient productivity, relevance, community engagement and societal impact that we can be hopeful of a further term.

While our present level of success attracting peer reviewed grants and contracts appears strong, in fact we are entering a period when access to grant funding is going to be much harder. The next round of peer-reviewed applications to the Canadian Institutes for Health Research is likely to have only a 5% success rate as a substantial amount of funding has been put aside to support a small number of individual scientists with large seven-year grants. There is some evidence that the kind of work we do with its more social policy and epidemiological focus fares less well in this system.

On a more positive note, however, we find increasing opportunities and interest in our research programs at a national level reflecting shifting priorities in health policy at a federal level. Our work on high risk drug using populations whom we have been monitoring for the past eight years has been informing debates about expansion of safe consumption sites beyond Insite in Vancouver. We have also been encouraged to expand our substance use surveillance systems nationally. We now have a partnership with the Canadian Centre on Substance Use to drill down and build capacity to monitor hospital admissions and deaths attributable to alcohol, tobacco, cannabis, prescribed opioids and other psychoactive substances. We are working towards achieving this in every Canadian jurisdiction.

We also experience increasing national interest in our alcohol harm reduction programs, particularly around the concept of Managed Alcohol Programs or MAPs, and Drs Benoit and Jansson are leading a new national CIHR funded study of the sex work industry in Canada.

There has also been increased interest in our work internationally. We have recently been granted contracts with government and non-government agencies in Sweden, Scotland and Australia. We are also in discussions with the Pan American Health Organization (PAHO) and WHO to become a WHO Collaborating Centre.

Thank you again to our hard-working and gifted staff, faculty, students and collaborators and supporters for another successful year. I look forward to us working together to develop a new plan for the next five years.

Tim Stockwell, PhD
Director, CARBC
OUR PEOPLE AND PARTNERS

Directors and Faculty

Dr Tim Stockwell
Director, Scientist (Psychology)

Dr Scott Macdonald
Assistant Director for Research, Scientist (Health Information Science)

Dan Reist
Assistant Director for Knowledge Exchange

Dr Cecilia Benoit
Scientist (Sociology)

Dr Cheryl Cherpitel
Scientist (Nursing)

Dr Mikael Jansson
Scientist (Sociology)

Dr Bernie Pauly
Scientist (Nursing)

Dr Eric Roth
Scientist (Anthropology)

Dr Karen Urbanoski
Scientist (Public Health & Social Policy)

Dr Jinhui Zhao
Scientist

Scientist Emeritus

Dr Gordon Barnes
Professor Emeritus (Child and Youth Care)
Staff (Victoria)

Diane Allan
Research Coordinator

Katrina Barber
Research Assistant

Stan Bersenev
Research Assistant

Meaghan Brown
Research Assistant

Randi Brown
Research Assistant

Emma Carter
Administrator

Geoff Cross
Research Assistant

Megan Deyman
Research Assistant

Stephanie Dion
Work study

Ben Donoghue
Research Assistant

John Dorocicz
IT Support

Rebecca Elliot
Work study

Amanda Farrell-Low
Research Assistant (Social Media)

Ari Franklin
Research Assistant

Catherine Hacksell
Research Assistant

Dakota Inglis
Research Associate

Andrew Ivsins
Research Assistant

Caitlin Janzen
Research Coordinator

Chantele Joordens
Research Associate

Vandana Joshi
Work Study

Chelsie Kadjgien
Transcriptionist

Alex Kent
Research Assistant

Bonnie Krysowaty
Research Assistant

Megan Lowe
Work study

Samantha Magnus
Research Assistant

Celeste Macevicius
Transcriptionist

Renay Maurice
Research Assistant

Megan Mills
Research Assistant
Staff (Victoria), Cont’d

Shane Morrissey
Research Assistant

Nadia Ouellet
Research Associate

Chris Pauley
Research Assistant

Jessica Pittman
Research Assistant

Natasha Potvin
Research Assistant

Tina Revai
Research Assistant

Jeremy Riishede
Administrative Coordinator/Research Assistant

Sana Shahram
Research Associate

Lindsay Shaw
Research Assistant

Adam Sherk
Research Associate

Michaela Smith
Research Assistant

Jen Theil
Assistant to the Director

Joanne Thompson
Research Assistant

Kate Vallance
Research Associate

Paul van Dam-Bates
Research Assistant

Jonathan Woods
Research Assistant
(Social Media)
Staff (Vancouver)

Cindy Andrew
Program Consultant, Helping Schools

Nicole Bodner
Publications Officer

Dr Tim Dyck
Research Associate

Gaelle Nicolussi Rossi
Research Assistant

Bette Reimer
Research Associate

Catriona Remocker
Research Associate

Evelyn Souza
Information Officer

Cathy Spence
Assistant to Dan Reist

Post-doctoral Fellows

Dr Hasu Ghosh
Population Health

Dr Megan McLarnon
Psychology

Dr Rachel Phillips
Sociology

Dr Sana Shahram
Nursing

Dr Leah Shumka
Sociology

Dr Trudy Norman
Nursing

Site Director

Dr Russ Callaghan
Associate Professor,
Northern Medical Program,
University of Northern British Columbia

Centre for Addictions Research BC ANNUAL REPORT 15/16 | 7
Advisory Board

Lynne Belle-Isle
Project Consultant, Canadian AIDS Society

Dr Laurence Bosley
Director, Addictions Services, Island Health

Meghann Brinoni
Manager, Research, Analysis and Knowledge Management, First Nations Health Authority

Dr Russ Callaghan
Associate Professor, Northern Medical Program, University of Northern British Columbia

Chief Frank Elsner
Chief Constable, Victoria Police Department

Dr Perry Kendall
Provincial Health Officer, BC Ministry of Health

Andrea Langlois
Director of Community-based Research, Pacific AIDS Network

Philippe Lucas
Vice President, Patient Services, Tilray

Dr Michael Miller
Associate Vice President, Research, University of Victoria

Warren O’Briain
Executive Director, Communicable Disease Prevention, Harm Reduction and Mental Health, BC Ministry of Health

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

Sandra Richardson
Chief Executive Officer, Victoria Foundation

Dr Evan Wood
Director, Urban Health Research Initiative, BC Centre for Excellence in HIV/AIDS, St Paul’s Hospital

Advisory Board and CARBC staff (Left to Right): Scott Macdonald, Kate Vallance, Dan Reist, Lynne Belle-Isle, Russ Callaghan, Sandra Richardson, Andrea Langlois, Michael Prince, Philippe Lucas, Tim Stockwell.
Collaborating Scientists

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

**Dr Jane Buxton**
Professor, School of Population and Public Health, University of British Columbia, Physician Epidemiologist, Harm Reduction Lead, BC Centre for Disease Control

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

**Dr Bonnie Leadbeater**
Professor, Department of Psychology, University of Victoria

**Dr Marjorie MacDonald**
Professor, School of Nursing, University of Victoria

**Dr Lenora Marcellus**
Associate Professor, School of Nursing, University of Victoria

**Dr Amy Salmon**
Coordinator, Sheway, Vancouver Coastal Health

**Dr Amanda Slaunwhite**
Post-Doctoral Fellow, Department of Sociology, University of New Brunswick

**Dr Gerald Thomas**
Director, Alcohol & Gambling Policy, Healthy Populations and Development, BC Ministry of Health
Research Affiliates

Lynne Belle-Isle
Project Consultant, Canadian AIDS Society

Clifton Chow
Research Coordinator, Youth Addictions, Vancouver Coastal Health Authority

Dr Anne George
Associate Professor, Pediatrics, School of Population and Public Health, Faculty of Medicine, University of British Columbia

Alissa Greer
Research Coordinator, BC Centre for Disease Control

Dr Marvin Krank
Professor, Psychology, University of British Columbia, Okanagan

Dr Nathan Lachowski
Assistant Professor, School of Public Health and Social Policy, University of Victoria

Philippe Lucas
Vice President, Patient Services, Tilray

Samantha Magnus
Masters Population Health Student, School of Public Health and Social Policy, University of Victoria

Dr Megan McLarnon
Assistant Professor of Clinical Practice and Director of Clinical Training, Department of Psychology, Simon Fraser University

Dr Ingrid Pacey
Psychiatrist, Vancouver, BC

Kathleen Perkin
Manager, Harm Reduction Policy, BC Ministry of Health

Dr Rachel Phillips
Executive Director, PEERS Victoria Resources Society

Dr Diane Rothon
Physician

Dr Deborah Rutman
Adjunct Associate Professor, Faculty of Human and Social Development, University of Victoria

Dr Jackie Stokes
Assistant Professor, Faculty of Human, Social and Educational Development, Thompson Rivers University
Dr Kara Thompson  
Post-Doctoral Fellow, Dalhousie University

Dr Mikhail Torban  
Researcher

Dr Bruce Wallace  
Assistant Professor, School of Social Work, University of Victoria

Dr Zach Walsh  
Assistant Professor, Psychology, Co-Director, Centre for the Advancement of Psychological Science and Law, University of British Columbia

Ashley Wettlaufer  
Research Coordinator, Centre for Addiction and Mental Health, Ontario

Dr Erica Woodin  
Associate Professor, Department of Psychology, University of Victoria

Graduate Students

Katrina Barber  
Social Dimensions of Health Program (MA), Faculty of Human and Social Development, University of Victoria

Lynne Belle-Isle  
Social Dimensions of Health Program (PhD), Department of Sociology and School of Nursing, University of Victoria

Robert Birch  
Social Dimensions of Health Program (MA), Department of Anthropology, University of Victoria

Meaghan Brown  
School of Nursing (MN), University of Victoria

Melanie Callas  
Department of Anthropology (MA), University of Victoria

Lauren Casey  
Social Dimensions of Health Program (PhD), Department of Sociology, University of Victoria

Nozomi Franco Cea  
School of Child and Youth Care (PhD), University of Victoria

Geoff Cross  
Dispute resolution in Public Administration (MA), University of Victoria

...Continued on next page
Graduate Students (Continued)

Phuc Dang  
Social Dimensions of Health Program (PhD), University of Victoria

Megan Deyman  
School of Public Health & Social Policy (MPH), University of Victoria

Jessica Fitterer  
Department of Geography (PhD), University of Victoria

Peter Greenwell  
Department of Sociology (PhD), University of Victoria

Alexandra Holtom  
Social Dimensions of Health Program (MA), Department of Sociology, University of Victoria

Andrew Ivsins  
Department of Sociology (PhD), University of Victoria

Sarah Janewski  
Social Dimensions of Health Program (MA), Department of Anthropology, University of Victoria

Bethany Jeal  
School of Nursing (MN), University of Victoria

Chantele Joordens  
Social Dimensions of Health Program (PhD), School of Health Information Science, University of Victoria

Vandana Joshi  
Social Dimensions of Health Program (PhD), School of Health Information Science, University of Victoria

Alex Kent  
School of Public Health and Social Policy (MA), University of Victoria

Philippe Lucas  
Social Dimensions of Health Program (PhD), University of Victoria

Enock Makupa  
Department of Geography, University of Victoria

Trudy Norman  
Department of Interdisciplinary Studies in Nursing and Anthropology (PhD), University of Victoria

Renee O’Leary  
Social Dimensions of Health Program (PhD), University of Victoria
Tina Revai  
School of Nursing (MN), University of Victoria

Audra Roemer  
Department of Psychology (PhD), University of Victoria

Barbara Romano  
School of Nursing, (MN) University of Victoria

Marion Selfridge  
Social Dimensions of Health Program (PhD), University of Victoria

Adam Sherk  
Social Dimensions of Health Program (PhD), University of Victoria

Alina Sotskova  
Department of Psychology (PhD), University of Victoria

Krystal Summers  
Social Dimensions of Health Program and School of Public Health and Social Policy, University of Victoria

Sarah Wojcik  
Social Dimensions of Health Program (MA), University of Victoria

**Undergraduate Students**

Casey Sharpe  
Department of Psychology, BA Honours

Brett Koenig  
Department of Sociology, BA Honours

Megan Lowe  
School of Health Information Science, BA Honours

Andrea Appollos  
School of Nursing, BA Honours

Randi Brown  
School of Nursing, BA Honours

Nate Bomans  
School of Nursing, BA Honours

Rebekah Erickson  
Department of Psychology, BA Honours
Volunteers

Kaitlin Blackwood
Andrew Boyce
Megan Deyman
Amanda Farrell-Low
Carmen Fletcher
Dakota Inglis
Jacob Koudys
Shikha Khurana
Hana Mildenburger
Alyson Miller
Katie Neale
Lindsay Shaw
Nicole Warren
Sarah Wojcik
Jonathan Woods
Janelle Wrona
Hannah Van Mook
Cathy Zwicker

Volunteers and Coordinators (Left to Right): Shikha Khurana, Kate Vallance, Sarah Wojcik, Katrina Barber, Andrew Boyce, Megan Deyman, Lindsay Shaw, Katie Neale, Nicole Warren, Dakota Inglis.
COLLABORATING CENTRES

British Columbia:

National Institute for Research in Sustainable Community Development, Kwantlen Polytechnic University, Vancouver

Other Parts of Canada:

Canadian Centre on Substance Abuse, Ottawa, ON
Centre for Addiction and Mental Health, Institute for Mental Health Policy Research, Toronto, ON
Propel Centre for Population Health Impact at the University of Waterloo, ON.

International:

Alcohol Research Group, National Alcohol Research Center, Berkeley, CA, USA
Prevention Research Center, Pacific Institute for Research and Evaluation, Berkeley, CA, USA
National Drug Research Institute, Curtin University, Perth, WA, Australia
Sheffield Alcohol Research Group, (SARG), School of Health and Related Research, University of Sheffield, UK
COMMUNITY COLLABORATIONS

We would like to gratefully acknowledge the support and collaboration of many colleagues and community agencies, including the following:

Victoria:
- Peers Victoria Resources Society
- Out of the Rain Youth Shelter
- Society of Living Intravenous Drug Users (SOLID)
- Victoria Cool Aid Society
- Victoria Youth Clinic
- Victoria Youth Empowerment Society
- AIDS Vancouver Island
- Together Against Poverty Society
- Greater Victoria Coalition to End Homelessness
- Office of the Superintendent of Motor Vehicles, BC

Vancouver:
- Eastside Illicit Drinkers for Education
- Portland Housing Society
- Vancouver Area Network of Drug Users (VANDU)
- Vancouver Coastal Health
- Positive Living Society of BC
- YouthCo AIDS Society
- Qmunity
- Health Initiatives for Men (HIM)
- Dr. Peter Centre
- Providence Health Care

British Columbia
- BC Centre for Disease Control
- BC Centre for Excellence in HIV/AIDS
- BC Ministry of Health
- Fraser Health
- Interior Health
- Northern Health Authority
- Vancouver Island Health Authority (VIHA)
- Office of the Provincial Health Officer, BC Ministry of Health
- BC Ministry of Justice
- Provincial Health Services Authority (PHSA)
- Public Health Association of British Columbia (PHABC)
- BC, National Collaborating Centre for Aboriginal Health
- BC, Poverty Reduction Coalition (through PHABC)
- BC, Healthy Living Alliance (through PHABC)
- Bridge for Health (through PHABC)

Rest of Canada:
- CAN, Canadian Centre on Substance Abuse, Ottawa
- CAN, National Collaborating Centre for Determinants of Health
- CAN, Canadian Association of People who use Drugs
- CAN, Public Health Agency of Canada, Ottawa
- ON, City of Toronto/Seaton House Annex Harm Reduction Program, Toronto
- ON, Ottawa Inner City Health, Ottawa
- ON, Centre for Addiction and Mental Health, Toronto
- ON, Canadian Mental Health Association, Sudbury Branch
- ON, Shelter House (Kwae Kii Win Centre), Thunder Bay
- ON, Wesley Urban Ministries, Hamilton
- ON, Peel Public Health
- ON, Ottawa Public Health
- ON, Sudbury Public Health
- ON, Middlesex-London Public Health
- ON, Toronto Public Health
- ON, Haldimand-Norfolk Public Health
- ON, Propel Centre for Population Health Impact, University of Waterloo
- ON, Public Health, Ontario
- ON, Art Manuel House, Toronto
- ON, Good Neighbours’ Club, Toronto
- ON, Good Shepherd Ministries, Toronto
- ON, Canadian Centre for Justice Statistics (CCJS), Statistics Canada
- ON, Ministry of Transportation, Government of Ontario
- ON, National Collaborating Centre for Methods and Tools
- ON, Public Health Ontario
- NS, National Collaborating Centre for Determinants of Health
- QC, National Collaborating Centre for Healthy Public Policy
- QC, Institut National de Santé Publique du Québec (INSPQ)
- YK, Yukon Liquor Corporation
“To build infrastructure and capacity across BC in order to conduct research and knowledge exchange that will increase the understanding of, and support more effective responses to, substance use.”

HIGHLIGHTS

We are actively collaborating with the Canadian Institute for Health Information and the Canadian Centre on Substance Abuse to create a new national resource that gives instant access to Canada-wide data on hospital admissions and deaths caused by alcohol, tobacco and different varieties of illicit drugs in an interactive format. This will be based on the Alcohol and Other Drug (AOD) Trend Analyzer developed for BC which can be viewed at http://aodtool.cfar.uvic.ca/index-aod.php. This resource provides graphic displays and data tables of annual rates of AOD-related harms between 2002 and 2013 at any geographic level from the 89 local health areas to the 16 health service delivery areas, the five health authorities, and BC as a whole. Users of the resource can choose to view the data by type of outcome, type of diagnosis, age and gender. The resource is updated annually and is the culmination of many years of collaboration with Dr Jane Buxton and colleagues at the BC Centre for Disease Control.

There has been considerable recent success for CARBC faculty in their applications for competitive grants, with CIHR success for Cecilia Benoit and Mikael Jansson, SSHRC success for Scott Macdonald and co-investigators, an Island Health grant for Karen Urbanoski and a Victoria Foundation grant for Bernie Pauly and Tim Stockwell. The new Benoit/Jansson grant will enable them to repeat a unique national study of the sex industry in Canada before and after the introduction of new legislation for its control and regulation.

We have also had considerable success winning a variety of contracts from as far afield as Sweden and Australia in order to conduct alcohol policy modelling.
### Successful applications to funding competitions

<table>
<thead>
<tr>
<th>Title</th>
<th>Funding Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex Workers as Educators. Networking HIV Prevention Strategies</strong></td>
<td>Canadian Institutes for Health (CIHR) HR Catalyst Grant, $32,506, from 2015 to 2016</td>
</tr>
<tr>
<td><strong>From Research to Practice: Addressing the Gaps in Entry-to-Practice HIV Nursing Competencies in Canada.</strong></td>
<td>CIHR, Meeting, Planning and Dissemination Grant, $14,000, from 2016 to 2017.</td>
</tr>
<tr>
<td><strong>Working Together: Evaluating an Integrated Model of Care for People Experiencing Homelessness and Substance Use Problems.</strong></td>
<td>Island Health, Collaborative Research Grant, $15,000, from 2016 to 2016.</td>
</tr>
<tr>
<td><strong>Preventing and Reducing Harms of Substance Use in Homeless Shelter Programs.</strong></td>
<td>Vancouver Foundation, Develop Research Grant, $10,000, from 2015 to 2016.</td>
</tr>
<tr>
<td><strong>An Indigenous Equity Lens for Public Health.</strong></td>
<td>CIHR, Planning and Dissemination Grant, $11,920, from 2015 to 2016.</td>
</tr>
<tr>
<td><strong>Compulsory addiction treatment: toward evidence-based policy and practice.</strong></td>
<td>Vancouver Island Health Authority, $49,575, from 2016 to 2017.</td>
</tr>
<tr>
<td><strong>The Protection of Communities and Exploited Persons Act: A structural intervention impacting health equity for sex workers.</strong></td>
<td>CIHR Operating grant, $249,834, from 2016 to 2018.</td>
</tr>
<tr>
<td><strong>Police discretion with high risk substance using youth.</strong></td>
<td>Social Sciences and Humanities Research Council, $178,557, from 2016 to 2020.</td>
</tr>
</tbody>
</table>

### Commissioned contracts won and other grants

<table>
<thead>
<tr>
<th>Title</th>
<th>Funding Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Implementation of an Indigenous wrap around case manager in the HerWay Home Program.</strong></td>
<td>Green Shields Canada, $80,000, from 2015 to 2017.</td>
</tr>
<tr>
<td><strong>The impact of minimum pricing on low, medium and high income areas of British Columbia.</strong></td>
<td>Scottish Government, £6500, January to March 2016.</td>
</tr>
<tr>
<td><strong>An evaluation of the public health impact of the Swedish Retail Alcohol Monopoly.</strong></td>
<td>Systembolaget, $120,891, November 2015 to March 2017.</td>
</tr>
<tr>
<td><strong>A pilot project to estimate the impact of alcohol drinking on health harms and to model the effects of having different price policies in Quebec.</strong></td>
<td>Institut National de Santé Publique du Québec, $30,000, from February 2016 to March 2017.</td>
</tr>
<tr>
<td><strong>A study of unintended consequences of increased minimum alcohol prices in a population of street involved alcohol dependent drinkers.</strong></td>
<td>Victoria Foundation, $25,000, December 2015 to June 2017.</td>
</tr>
<tr>
<td><strong>An evaluation of the impact of the Sudbury Managed Alcohol Program.</strong></td>
<td>Canadian Mental Health Association, Sudbury Branch, $45,000, from March 2016 to March 2017.</td>
</tr>
<tr>
<td><strong>The development of strategies to increase engagement of primary health care providers in screening and intervention for substance use problems.</strong></td>
<td>BC Ministry of Health, $100,000, from April 2015 to March 2017.</td>
</tr>
</tbody>
</table>
Total Income for 2015/2016

The chart below identifies our major sources of income (including funds carried forward) during the 2015/16 fiscal year. Combined surpluses (or deficits) carried forward and new revenue for the fiscal year was a total of $4,644,401. Most funding came from peer-reviewed grants (mostly CIHR), closely followed by funds from knowledge exchange and other contracts.

**CARBC 15/16 Revenue and Carry Forward Summary**

- Research Grant Competitions: $2,123,459
- Other Research Grants and Contracts: $480,265
- Knowledge Exchange Grants and Contracts: $1,371,942
- Endowment: $432,034
- Overhead: $236,701

**Table 1: Performance Indicators for Key Result Area 1 (Building Capacity)**

<table>
<thead>
<tr>
<th>OBJECTIVE</th>
<th>PERFORMANCE INDICATORS</th>
</tr>
</thead>
</table>
| 1.1       | To maintain or increase funding for substance use and health research at CARBC. Maintain or increase funding for substance use research newly won by CARBC scientists from (a) Canadian and international peer-reviewed sources (b) Canadian and international contracts.  
  **Benchmarks:** (a) $750,000 (b) $150,000 per annum  
  **2015/16:** (a) $561,392 (b) $437,988 |
| 1.2       | To maintain or increase funding for knowledge exchange concerning substance use and health promotion at CARBC. Maintain or increase funding for substance use knowledge exchange newly won by CARBC from (a) Canadian and international peer-reviewed sources (b) Canadian and international contracts.  
  **Benchmarks:** (a) $250,000 (b) $750,000 per annum  
  **2015/16:** (a) n/a (b) $486,675 |
| 1.3       | To maintain or increase the number of funding applications for long-term research programs addressing research areas of high priority in BC. Maintain or increase number of funding applications for new research programs identified in one or more identified priority areas (see Key Result Area 2).  
  **Benchmark:** 15 applications  
  **2015/16:** 17 applications |
| 1.4       | To achieve successful collaborations with researchers and community partners on projects that will lead to increased capacity and increased expertise in addictions research. Number of projects initiated that involve (a) community partners (b) researchers with relevant expertise who are new to substance use and addictions research.  
  **Benchmarks:** (a) 12 (b) 6  
  **2015/16:** (a) 14 (b) 15 |
| 1.5       | To improve access to data sets and platforms for addiction researchers. Number of data sets created, developed and/or maintained for use by BC researchers.  
  **Benchmark:** 7  
  **2015/16:** 18 |
“To capitalize on the resources of BC universities—through the recruitment of high-calibre graduate and post-doctoral students from multiple relevant disciplines—to assist us in the study of substance use, addiction and harm reduction.”

HIGHLIGHTS

A major highlight has been the University of Victoria’s successful nomination for Dr Karen Urbanoski to be a Canada Research Chair (CRC) in the area of Substance Use, Addictions and Health Services Research. Dr Urbanoski joined CARBC as a Scientist in July 2015 from the Centre for Addiction and Mental Health in Toronto. Her main research focus is on the development and course of substance use problems and addiction, and the roles played by health and social service systems in recovery. She is particularly interested in evaluating processes of treatment-assisted recovery and the interplay between external mandates and client motivation. CIHR publicly announced her CRC in February 2015.

The Centre has continued to attract a wide range of graduate students from multiple disciplines to focus their dissertation research on issues relating to substance use, addiction and harm reduction. A total of 31 graduate students were under supervision of a CARBC Scientist along with 7 undergraduate and 6 post-doctoral fellows. We were able to offer $24,000 in stipends and fellowships to the students at CARBC as well as employ many of them to get first-experience of applied research and data analysis.
Table 2: Performance Indicators for Key Result Area 2 (Engaging Academic Expertise)

<table>
<thead>
<tr>
<th>OBJECTIVES</th>
<th>PERFORMANCE INDICATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1  To attract and retain high quality researchers from a broad range of</td>
<td>Maintain or increase number of a) PhD-qualified researchers b) post-doctoral fellows</td>
</tr>
<tr>
<td>disciplines to the BC substance use and addictions field</td>
<td>within CARBC each year</td>
</tr>
<tr>
<td></td>
<td>Benchmark: 11/3</td>
</tr>
<tr>
<td></td>
<td>2015/16: 16/6</td>
</tr>
<tr>
<td>2.2  To attract and retain high quality students from a broad range of</td>
<td>Maintain or increase number of CARBC students under supervision per year</td>
</tr>
<tr>
<td>disciplines to the BC substance use and addictions field</td>
<td>Benchmark: 14</td>
</tr>
<tr>
<td></td>
<td>2015/16: 31 graduate and 7 undergraduate</td>
</tr>
<tr>
<td>2.3  To provide training opportunities and programs for the development</td>
<td>Contributions to graduate research training programs within CARBC and also</td>
</tr>
<tr>
<td>of additional research skills among CARBC staff, students and affiliates,</td>
<td>university departments at UVic and other BC universities</td>
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<tr>
<td>taking advantage of existing opportunities through CIHR and research</td>
<td>Contribute to graduate training in SDHR program at UVic</td>
</tr>
<tr>
<td>partners</td>
<td>Benchmark: 4/8</td>
</tr>
<tr>
<td></td>
<td>2015/16: 11/12</td>
</tr>
<tr>
<td>2.4  To provide mentorship to new researchers and support to existing</td>
<td>Attract new substance use researchers to work on CARBC projects under supervision</td>
</tr>
<tr>
<td>researchers across a range of community settings</td>
<td>Benchmark: 6 per year</td>
</tr>
<tr>
<td></td>
<td>2015/16: 15</td>
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</table>
“To conduct high quality research that increases understanding of substance use, addiction and related harms in order to inform effective responses and promote health.”

HIGHLIGHTS

Data collection for a CIHR major study has been completed examining processes and impacts of Managed Alcohol Programs (MAPs) on the health and wellbeing of 175 unstably housed people with severe alcohol used disorders from 5 Canadian cities (Toronto, Ottawa, Hamilton, Thunder Bay, Vancouver). Outcomes examined include ER presentations, police encounters, hospital admissions and deaths which will be compared with 189 broadly matched controls recruited from local shelters and health centres. Using a system of intense monthly follow ups, over 90% of newly enrolled MAP participants and 70% of controls were successfully re-interviewed after 6 months.

Analyses have begun of data collected from a unique nationwide study of the sex work industry and a number of analyses and dissemination activities are underway, including an examination of the role of substance use as part of the context for harms experienced by sex workers and opportunities for harm reduction.

The CIHR-funded Equity Lens in Public Health (ELPH) project has continued to engage the public health system in BC to examine and learn about the application of a health equity lens in public health programs specifically those that promote mental health and prevent the harms of substance use.

Another major focus has been explorations of the role of substance use as part of the context for the spread of blood-borne viruses among men who have sex with men.

In the alcohol policy domain, we have developed a new focus investigating feared unintended consequences of pricing policies on vulnerable and low income groups. The Scottish Government commissioned an analysis of minimum alcohol prices in BC and their apparent impacts on alcohol-related hospital admissions by regional income levels. We reported that associated reductions in hospital admissions were greatest in low income regions. We are also following up a cohort of low income participants who drink heavily and seek out cheap alcohol to investigate how they cope when minimum alcohol prices increase.
RESEARCH PRIORITY 1

SUBSTANCE USE PATTERNS AND RELATED HARMs

CARBC PROJECTS

Alcohol, Energy Drinks and Other Stimulants: an Emergency Room Study Assessing the Effects of Gender, Context and Substance Use on Injury Risk

Investigators: Stockwell, T. (PI), Cherpitel, C. (Co-PI), Macdonald, S., Brubacher, J., Brache, K., Zhao, J. & Maclure, M.

Funding body: CIHR operating grant, $522,556, from 2012 to 2016.

Background: There is increasing concern about the role of energy drinks mixed with alcohol as contributors to increased risk-taking behaviour and related injuries. This study is applying a methodology previously used extensively by the research team to assess injury risk from alcohol consumption among individuals attending emergency departments to explore whether consumption of energy drinks adds to further risk. Approximately 4,000 Emergency Room attendees will be interviewed and relative risk assessed, both by using injured individuals as their own controls (case-crossover design) and also individuals presenting to the ER with illnesses as controls (case-control design). The differential effects of gender, age, personality and setting will be examined. In addition to assessing the risk of combining alcohol with energy drinks, other alcohol/drug combinations will be assessed with a focus on other stimulants such as amphetamines and cocaine.

Progress to date: Data collection completed, data have been cleaned and journal articles are under preparation.

Systematic Error and Confounding: Meta-Analyses of Alcohol and Disease

Investigators: Chikritzhs, T. (PI), Stockwell, T. (Co-PI), Naimi, T. & Zhao, J.

Funding body: US National Institutes of Health

Background: This is a collaborative work originally led by Dr. Kaye Fillmore from the University of California, San Francisco campus until her death in early 2013. It was initially funded for a two-year period by a prestigious Challenge Grant from the US National Institutes of Health. Following this, the team was successful in applying for a three-year continuation to conduct meta-analysis and explore sources of variation in the relationships reported between levels of alcohol consumption and different disease outcomes. This grant has focused on additional disease outcomes, including breast cancer, dementia, coronary heart disease, diabetes, prostate cancer, stroke and all-cause mortality. There is a particular focus on exploring reasons for heterogeneity in study findings and the continuing focus on methodological biases which may result in the false appearance of health benefits from light to moderate drinking.

Progress to date: We have completed systematic reviews and meta-analyses on alcohol use and all-cause mortality, prostate cancer, coronary heart disease and diabetes mortality. Papers are published or in press on all-cause and prostate mortality. The findings indicate that (a) there may be no net benefits to health from drinking within low-risk drinking guidelines, and (b) there is a dose response risk of prostate cancer with alcohol consumption.
Second-hand effects of alcohol consumption – can we prevent harm to others?

**Investigators:** Andreasson, S., Chikritzhs, T., Dangardt, F., Holder, H., Lemar, P., Naimi, T. & Stockwell, T.

**Funding body:** IOGT-NTO and the Swedish Society for Medicine

**Background:** This international project team meets annually to prepare a research report on a topic of current interest related to alcohol policy with a focus on Sweden. This year the study group investigated the issue of alcohol's harm to others, quantified this and considered policy implications.

**Progress to date:** The report was completed and published in Sweden. Tim Stockwell will present findings to a national conference in Sweden in June 2016.

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Clearing the Air: A Systematic Review of the Evidence on the Harms and Benefits of e-Cigarettes and Vapour Devices

**Investigators:** MacDonald, M. (PI), Stockwell, T. (Co-PI), O’Leary, R.

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

**Background:** This meta-narrative review was prompted by the rise in the use of e-cigarettes and other vapour devices, and the divide within the public health community over how vapour devices will impact the tobacco epidemic. The purpose of this one-year Knowledge Synthesis project is to conduct a meta-narrative systematic review in which we will endeavour to explain the discrepancies in the literature and contribute to resolving the conflict in public health over this issue. An integrated knowledge translation approach is central to our knowledge synthesis project.

**Progress to date:** The search strategy was developed in consultation with an expert librarian. The initial search yielded 981 included articles from 15 academic databases which were mapped into their respective research traditions, and evidence tables were extracted. Additional searches generated a total of 2,086 articles. Evidence reports are being drafted on youth transition from vapour devices to cigarettes, second-hand exposure, a toxicological comparison of vapour devices and cigarettes, and vapour devices and tobacco cessation. A protocol paper will be published in Systematic Reviews.

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2016 Greater Victoria Unsheltered and Sheltered Point-in-Time Count Substance Use Survey

**Investigators:** Pauly, B. [PI], Stockwell, T., Albert, M. [Victoria Community Council], Barber, K., Vallance, K., Chow, C., Wallace, B., Wettlaufer, A.

**Funding body:** Provost’s Community Engaged Scholar Award.

**Background:** Accurate estimates of prevalence of substance use, and harms of substance use are limited as many studies identify substance use as a criterion for participation, thus likely inflating the true prevalence estimates. In February, 2016, a federal Point-in-Time Homelessness Count occurred across the county, and in Victoria, BC, a substance use survey was piloted during the Point-in-Time Count. The brief substance use survey was optional and participants received an additional honorarium for participation. The goal of this survey was to estimate prevalence of substance use among those experiencing homelessness, with the criterion of participation being homelessness, not substance use in order to obtain more accurate prevalence estimates.

**Progress to date:** Data collection completed, data have been cleaned and analyses and articles are under preparation.
Canadian Student Tobacco, Alcohol and Drug Survey


Funding Body: Health Canada

Background: The Canadian Student Tobacco, Alcohol, and Drugs Survey (CSTADS) is a survey conducted in grades 6-12 (grade 6-secondary V in Quebec) every other year. CSTADS (formerly the Youth Smoking Survey (YSS)) collects data on youth substance use, and other areas identified by schools as priorities, such as bullying, mental health and how connected students feel to their school.

CSTADS will provide Health Canada, provinces, schools, communities, and parents with timely and reliable data on tobacco, alcohol and drug use in addition to other related issues about Canadian students. School-aged children and youth are generally recognized as most at risk for experimenting with tobacco products, alcohol and drugs. With a consistent measure of student substance use it is possible to examine the factors that influence youth behaviour with respect to tobacco, alcohol and drug use.

The Propel Centre for Population Health Impact at the University of Waterloo has been centrally coordinating the implementation of CSTADS since 2004, and works with provincial partners to implement the project in each province.

Progress to Date: This will be the second year that CSTADS in BC has been affiliated with CARBC. Recruitment of schools will take place this year in the spring and fall with data collection beginning in October and continuing through to April or May of 2017.

BC Alcohol and Other Drug Monitoring Project


Funding bodies in 2014/15: BC Provincial Health Services Authority and the BC Ministry of Health

Background: CARBC was awarded a contract from the Provincial Health Services Authority and Health Canada to pilot a comprehensive alcohol and other drug epidemiological monitoring system for Canada in 2007. Subsequently a number of other funding partners contributed to the full roll-out of this system for British Columbia and some elements were implemented in other Canadian provinces. Key components include rates of hospitalization and death caused by different substances, both legal and illegal, all by local health area; types of drugs seized by police; per capita alcohol sales by local health area; substances used by individuals attending emergency rooms in Victoria and Vancouver; patterns and contexts of use and harms experienced by high-risk drug-using populations in Victoria and Vancouver.
Progress to date: Rates of hospital admissions and deaths from alcohol, tobacco and illicit drugs are reported on the project website for BC’s 89 local health areas, 16 health service delivery areas and 5 health authorities. Data on per capita sales of alcohol are similarly reported across the province. Over 5,000 interviews have been completed since 2008 on high-risk populations of substance users to monitor patterns of use, related harms and use of harm reduction services. Numerous journal articles, in-house statistical bulletins and reports have been completed. Data sets have been made available to faculty and graduate students at UVic, other post-secondary institutions and to visitors to our website via an interactive web-based tool: http://aodtool.cfar.uvic.ca/index-aod.php.

CARBC Volunteers:

We were very lucky to have close to 20 volunteers work on a variety of CARBC projects over the past year. Volunteers conducted face-to-face interviews for the High Risk Populations Monitoring Study and contributed in many other ways including helping with data cleaning and data entry, conducting literature reviews and assisting with bulletins. Thank you all of our wonderful volunteers – we couldn’t do it without you!
CARBC AFFILIATED PROJECTS

Systematic review of cannabis as a complement to or substitute for alcohol and opioids

**Investigators:** Lucas P., Walsh, Z., Reiman, A.

**Background:** There is a growing body of evidence that cannabis may act as a substitute for the use of other drugs, particularly alcohol and opiates. This research is a Systematic Review of longitudinal studies in humans examining the complementary or substitutive relationships between cannabis/marijuana and licit and illicit opioids and alcohol.

**Progress to date:** Core search of Medline/PubMed and Web of Science conducted; independent review of the study results done, and analysis of qualifying studies underway.

Tilray Observational Patient Survey (TOPS)

**Investigator:** Lucas, P.

**Background:** TOPS is a multi-site, longitudinal study of the impact of medical cannabis use on the quality of life and prescription drug use of both cannabis naïve and cannabis experienced patients. The study will take place at medical clinics and physicians’ offices (>20 sites) and aims to recruit over 1000 patients. Data gathering will be online through REDCap, and measures are the WHO Quality of Life Short Form, as well as a custom Cannabis Use Survey and Prescription Drug Questionnaire.

**Progress to date:** Ethics approval received from private REB; UVic ethics review underway.

The Prominence of Smoking-related Mortality among Individuals with Alcohol- or Drug-use Disorders

**Investigators:** Callaghan, R., Gatley, J., Sykes, J., & Taylor, L.

**Funding:** Partially funded by the Northern Medical Program

**Background:** Even though individuals with substance-use disorders have a high prevalence of tobacco smoking, surprisingly little is known about smoking-related mortality in these populations. The current retrospective cohort study aims to address this gap. The study sample included cohorts of individuals hospitalized in California 1990-2005 with alcohol-, cocaine-, opioid-, marijuana-, or methamphetamine-use disorders. Death records were linked to inpatient data. Age-, race-, and sex-adjusted standardized mortality ratios (SMRs) were generated for 19 smoking-related causes of death. Smoking-attributable mortality (SAM) was estimated. Smoking-related conditions comprised 49% of total deaths in the alcohol, 40% in the cocaine, 39% in the opioid, 42% in the methamphetamine, and 36% in the marijuana cohorts. The SMRs for all smoking-linked diseases were: alcohol, 3.57; cocaine, 2.40; opioid, 4.26; marijuana, 3.73; and methamphetamine, 2.58. Cohort SAM estimates ranged from (male %; female %): alcohol (27.6%; 27.2%), cocaine (23.3%; 23.2%), opioid (21.0%; 24.7%), methamphetamine (20.2%; 25.0%), and marijuana (21.3%; 22.9%).

**Progress to date:** This study was submitted to the journal Drug and Alcohol Review for review.
Preventing or Reducing Pharmaceutical Opioid-Related Harms in BC

**Investigator:** McLarnon, M.

**Funding body:** Michael Smith Foundation for Health Research and CIHR (Science Policy Fellowship Program)

**Background:** Addressing morbidity and mortality associated with pharmaceutical opioids is a critical public health issue in British Columbia. Balancing the availability of pharmaceutical opioids for medical use with efforts to prevent or reduce problematic use and associated harms is a complex issue that requires a coordinated and evidence-based response. The purpose of this research was to investigate unintentional overdose deaths involving prescribed pharmaceutical opioids in BC. The research involved a retrospective review of pharmaceutical opioid-associated overdose fatalities between 2009 and 2013 and linkage between Coroner’s Service files and administrative health datasets, including prescription drug dispensation history, medical services utilization, and hospitalizations. The primary goals of this work were to describe the rate of unintentional prescribed pharmaceutical opioid overdose deaths in BC and any discernable trends over time, to explore the geographical distribution of deaths, to identify factors characterizing decedents, and to describe contexts and characteristics of fatal unintentional prescribed pharmaceutical opioid overdoses.

**Progress to date:** Final report for this project was submitted to the BC Ministry of Health in March 2016. Preliminary results were presented at the Canadian Public Health Association conference in May 2015 in Vancouver.

Cannabis and Motor Vehicle Crashes: A Multi-Centre Culpability Study

**Investigators:** Brubacher, J., Asbridge, M., Brant, R., Mann, R., Martz, W., Andolfatto, G., Bryan, S., Drummer, O., Macdonald, S., Pursell, R. & Schreiber, W.

**Funding body:** CIHR

**Background:** Cannabis is the most commonly used illicit drug in Canada and many drivers, especially young adults, report driving after using cannabis. Although there is abundant experimental evidence that cannabis, either alone or in combination with alcohol, impairs the psychomotor skills required for safe driving, epidemiological data on the contribution of cannabis to car crashes is mixed. This uncertainty hinders the ability of traffic safety policymakers to develop effective, evidence-based, traffic laws or road safety campaigns targeting people who drive while impaired by cannabis. The primary objective of the study is to determine whether injured drivers who used cannabis before an MVC are more likely to have caused the crash than those who did not. Our aim is to improve traffic safety by providing current North American data that can be used to inform the development of evidence-based road safety policy targeting people who drive while impaired by cannabis.

**Progress to date:** The study is running in 7 trauma centres from across BC. We have collected data from over 2500 injured drivers and are on target for reaching our recruitment goal of 3,000 drivers by the end of 2016. Analysis of blood samples from the first 1,097 injured drivers showed a high prevalence of alcohol (17.8%), cannabis (7.3%) and a broad range of other impairing drugs, including both prescription medications (19.9%) and illicit recreational drugs (10.0%). Many drivers took combinations of drugs or drugs in combination with alcohol. These findings were published in the British Medical Journal Open.
Cross-National Analysis of Alcohol and Injury

**Investigator:** Cherpetel, C.

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

**Background:** The study consists of a cross-national analysis of admissions for alcohol and injury at emergency departments in 30 countries.

**Progress to date:** This grant has been funded for another five years, with continuing analysis of alcohol and injury. Analysis is focusing on the risk of injury from alcohol, controlling for context of drinking and injury and the impact of regional/local policies on prevalence and risk of alcohol-related injuries across ERs in 30 countries.

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**RESEARCH PRIORITY 2**

**STUDIES OF THE NEUROSCIENCE AND LEARNING BASES FOR DRUG-SEEKING BEHAVIOUR**

**CARBC AFFILIATED PROJECTS**

Experiencing the Effects of Alcohol Misuse on the Neuropsychological and Neuropathological Outcome from Traumatic Brain Injury: A Longitudinal Study

**Investigators:** Lange, R. (PI), Brubacher, J., Iverson, G., Madler, B., Heran, M., McKay, A. & Andolfatto, G.

**Funding body:** CIHR

**Background:** Traumatic brain injury (TBI) is a leading cause of death and disability in persons under the age of 50 and alcohol misuse is a significant risk factor. Between 37-53% of patients presenting to the emergency department with a TBI are intoxicated. Day-of-injury alcohol intoxication has significant implications for the diagnosis, management, treatment and recovery from TBI. Patients who are intoxicated at the time of injury are more difficult to manage and treat, have a slower acute recovery, and place an increased economic burden on the healthcare system. However, the mechanism for these effects is poorly understood. Some researchers have suggested that patients who are intoxicated at the time of injury experience an increased magnitude of brain injury due to a variety of negative physiological responses to ethanol (e.g., hemodynamic and respiratory depression). Others have suggested that worse outcome following intoxicated-TBI simply reflects the negative effects of pre-injury alcohol misuse that is common in these patients. The diagnostic, management and treatment implications of these two explanations are vastly dissimilar. A greater understanding of their relative contribution to TBI outcome will facilitate the development of more effective treatment and rehabilitation options for these patients. The objective of this project was to disentangle the contributions of day-of-injury alcohol intoxication and pre-injury alcohol misuse on outcome from TBI. We studied outcome from TBI during the first 12 months post-injury (i.e., the most critical period of the recovery trajectory) using a multidisciplinary approach that examined neurocognitive (e.g., attention, memory), neurobehavioural (e.g., emotional and quality of life factors), and neuropathological (i.e., white matter integrity in the corpus callosum) outcome variables.

**Progress to date:** Recruitment for this study is complete and several manuscripts have now been published. The main finding is that lifetime alcohol consumption (LAC) and blood alcohol level (BAL) at time of injury did provide a unique contribution toward the prediction of attention and executive functioning abilities; however, the variance accounted for was small. In this study, BAL and LAC were not predictive of mental health symptoms, post-concussion symptoms, cognition, or white-matter changes at 6-8 weeks following TBI. Other publications arising from this project study the relationship between post-concussion symptoms and brain imaging.
RESEARCH PRIORITY 3

EDUCATIONAL, LEGISLATIVE AND REGULATORY STRATEGIES

CARBC PROJECTS

Evaluating the Impact of Minimum Pricing in Saskatchewan on Crime and Health Outcomes

**Investigators:** Stockwell, T., Zhao, J., Callaghan, R., Macdonald, S. & Sherk, A.

**Funding body:** CARBC Endowment Fund

**Background:** This set of studies continues a recent research tradition of evaluating public health and safety impacts of minimum pricing policies in Canada, the topic of a recently completed CIHR funded project. There is strong interest in minimum pricing internationally, and Canada is one of the few countries in the world that sets “floor prices” on alcohol products. Saskatchewan has been identified as an example of best practice in that it has progressively introduced comprehensive minimum prices for all types of alcoholic beverage, updated them at intervals to maintain relatively high minima and, since 2010, have adjusted rates according to the alcohol strength of beverages within each major category. We have sourced national crime data from Saskatchewan, Manitoba and Alberta, including outcomes likely to be alcohol-related such as violence, disorderly conduct and traffic violations. We have also secured data for Saskatchewan on presentations to emergency departments by time of day.

**Progress to date:** A paper was presented at an international conference and is under submission with a journal.

Assessing the Impacts of the Minimum Legal Drinking Age on Alcohol-Impaired Driving in Canada

**Investigators:** Callaghan, R., Gatley, J., Sanches, M., Asbridge, M. & Stockwell, T.

**Funding body:** CIHR Operating Grant

**Background:** Recently, the Canadian Public Health Association and the expert-panel, Canadian National Alcohol Strategy (NAS) working group, have recommended increasing the Minimum Legal Drinking Age (MLDA) to 19 years of age across all provinces, with acknowledgment of a national MLDA of 21 years as ideal. The current study aims to assess the impacts of Canada’s drinking age laws on alcohol-impaired driving arrests in Canada. We utilized data from the Uniform Crime Reporting (UCR) Incident-Based Survey, 2009-2013 - a Statistics Canada database of substantiated police-reported crimes. Our study found that, in comparison to males slightly younger than the MLDA, those just older than the MLDA had abrupt increases in impaired driving incidents of 35.1% nationally. Among females, Alcohol-Impaired Driving (AID) incidents increased immediately following the MLDA by 19.4% at the national level.

**Progress to date:** Published in *Addiction*
Impacts of Drinking-Age Legislation on Police-Reported Motor Vehicle Collisions in Canada


Funding body: CIHR Operating Grant

Background: Given that the recent Canadian National Alcohol Strategy has recommended raising the minimum legal drinking age (MLDA), it is critically important to assess the impact of current drinking-age laws on motor vehicle collisions – one of the most prominent outcomes measured to assess the effectiveness of MLDA legislation. The current study aims to assess the impacts of drinking-age legislation on police-reported motor vehicle collisions in provinces and territories across Canada.

Progress to date: The manuscript has been submitted to Preventative Medicine and a revision and resubmission has been requested.

Evaluation of the Impacts of Canada’s Minimum Legal Drinking Age Legislation on Sexual Assault Crimes among Youth

Investigators: Gatley, J., Sanches, M. & Callaghan, R.

Funding body: CIHR IMPART Fellowship (to graduate student Jodi Gatley) and CIHR Operating Grant

Background: This study adds to the evidence of the effect of Canadian Minimum Legal Drinking Age (MLDA) laws on alcohol-related harms among youth. Sexual assault is common among young adults, and approximately 50% of sexual assaults involve alcohol consumption by the perpetrator, victim or both. Only a few studies have addressed the relation between MLDA legislation and non-traffic-related crimes, and only one of these studies specifically examined sexual assault crimes. We utilized data from the Uniform Crime Reporting (UCR) Incident-Based Survey, 2009-2013—a Statistics Canada database of substantiated police-reported crimes for the primary outcomes sexual assault crimes and other sexual violations, as well as a control category of fraud crimes. In comparison to males slightly younger than the MLDA, those just older than the MLDA had abrupt increases in sexual assault crimes (31.9%) and other sexual violations (17.4%). There was no evidence of MLDA-related increases in sexual crimes committed by women.

Progress to date: This study was presented as a poster at the 27th meeting of the Association for Psychological Science annual convention, May 21-24, 2015, in New York. The manuscript is near completion and will be submitted to a journal in the near future.

The impacts of minimum alcohol pricing on alcohol attributable morbidity in regions of British Colombia, Canada with low, medium and high mean household income

Investigators: Stockwell, T. (PI) & Zhao, J.

Funding body: Scottish Government

Background: CARBC research has demonstrated major population level health and safety benefits from the introduction and raising of minimum alcohol prices with studies in British Columbia and Saskatchewan. Scotland passed legislation in 2012 to introduce a minimum price for a “unit” of alcohol (or standard drink) but this has been held up by legal challenges in both European and UK courts led by drinks companies. One objection to the policy is the fear that it might have adverse effects on low income drinkers. To investigate aspects of this concern, CARBC was commissioned to reanalyse a previously published BC study which found significant and substantial reductions in alcohol-related hospital admissions associated with increases in the minimum alcohol prices. The focus of the reanalysis was to explore how this public health impact was distributed across regions with low, medium and high income.

Progress to date: A report was completed which identified substantially larger health benefits for regions of British Columbia with low income in relation to both acute and chronic alcohol-related hospital admissions.
Supporting Successful Implementation of Public Health Interventions: A Realist Synthesis

**Investigators:** MacDonald, M., Pauly, B & Paton, A. (Co-PI’s), Buchner, C., Hancock, T., Lee, V., O’Briain, W., Carroll, S., Jackson, B., Manson, H., Makaroff, K., Smith, K., Kothari, A., Martin, C. & Valaitis, R.

**Funding body:** CIHR Knowledge Synthesis

**Background:** Despite the growing emphasis in public health on the importance of evidence-based interventions to improve population health and reduce health inequities, a gap remains between the development of these interventions and their successful implementation. While traditional reviews have been conducted to examine effective implementation in health care, the relevance to public health is unclear. Furthermore, these exclude bodies of evidence that may inform on factors unique to the public health context. As realist synthesis draws on diverse data from different study designs to explain how and why observed outcomes occur in different contexts, it allows these factors to be examined. Thus, the purpose of this project is to conduct a realist synthesis of research on effective strategies to support implementation of public health interventions and better inform on factors that influence the implementation process. An integrated knowledge translation approach has been used which includes collaboration with knowledge users at every stage of the process to increase the relevance of the review to stakeholders.

**Progress to date:** PROSPERO registration has been obtained (CRD42015030052) and an initial protocol paper is in press in Systematic Reviews. Initial meetings were held with investigators and knowledge users to define the scope and process of the review, and to refine the research questions with a realist perspective. A multiday workshop was organised to train investigators, knowledge users, staff and graduate students in the realist synthesis process. An initial program theory was developed to guide the review process, informed by existing implementation frameworks and theories in public health. A comprehensive search of the literature was developed, piloted and revised in collaboration with a library scientist returned 5386 articles were identified for review. Graduate students have been included in training workshops and the screening process in order to contribute to the development of researchers in this field.

Evaluation of the public health impacts of Systembolaget, the Swedish government alcohol monopoly

**Investigators:** Stockwell, T. & Chikritzhs, T. (PIs), Andreasson, S., Angus, C., Holder, H., Holmes, J., Lemar, P., Makela, P., Meier, P., Norstrom, T., Ramstedt, M., Sherk, A.

**Funding body:** Systembolaget, Sweden.

**Background:** CARBC has been commissioned to co-lead this international project which aims to estimate the public health impacts of Sweden’s government alcohol monopoly. This is the third in a series of reports on this topic. Over the course of 12 months, we will oversee systematic reviews of the effectiveness of the types of policies implemented by Systembolaget; the extent of implementation of these policies in Sweden will be estimated against a counterfactual scenario of the liquor distribution system being totally privatised; various analytic approaches will be used to estimate firstly changes in per capita alcohol consumption and then resulting impacts on health and social outcomes in two scenarios involving liquor privatisation.

**Progress to date:** Staff have been hired to conduct systematic reviews and the first face-to-face planning meeting was held outside Stockholm in December 2015.
A study of unintended consequences of increased minimum alcohol prices in a population of street involved alcohol dependent drinkers

**Investigators:** Stockwell, T. & Pauly, P. (PIs), Barber, K., Chow, C., Ivsins, A., Vallance, K.

**Funding body:** Victoria Foundation

**Background:** CARBC research has demonstrated major population level health and safety benefits from the introduction and raising of minimum alcohol prices with studies in British Columbia and Saskatchewan. A number of Canadian provinces and also jurisdictions overseas are considering either introducing or further strengthening minimum alcohol prices. However, the fear is often expressed that there may be adverse impacts on vulnerable populations who have severe alcohol use disorders. It is speculated that it may drive such individuals to seek out more dangerous non-beverage alcohol, to re-budget money for groceries and family necessities and possibly also commit crimes in order to afford to keep drinking. We were advised that the BC government intended to update minimum prices and ensure their enforcement in private liquor stores which are generally the source of the cheapest available alcohol in BC. A cohort of 60 street involved drinkers with severe alcohol dependence was recruited, half in Victoria and half in Vancouver, who are being followed up on three occasions prior and then one month after the proposed increases in the minimum alcohol prices to test the veracity of these concerns.

**Progress to date:** Peer researchers were recruited in Victoria and Vancouver and the first two waves of interviews were completed in March 2016.

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Municipal Alcohol Policies in BC: Exploring Best Practices

**Investigators:** Vallance, K. & Stockwell, T.

**Funding body:** BC Ministry of Health & BC Healthy Communities

**Background:** CARBC was commissioned to assess the extent of uptake of Municipal Alcohol Policies (MAPs) in BC, highlight best practices to facilitate their development and implementation as well as identify possibilities for expanding their scope. Interviews were conducted with informants who were involved in the development of 11 MAPs across 16 communities with localities selected for more in-depth follow-up.

**Progress to date:** Data collection is complete and a final report was submitted to BC Healthy Communities in January of 2016.
Central Access to Supportive Housing (CASH): Evaluation of Centralized Access to Supported Housing.

**Investigators:** Norman, T. & Pauly, B.

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

**Background:** The City of Victoria, like many other cities in Canada, is facing ongoing concerns related to homelessness. Social and supported housing are resources for people who are homeless or at risk of homelessness. However, individuals and families must often find their way through complex and fragmented systems to access social housing. Centralized or 'single point access' programs have been developed in the United States and the United Kingdom to help people navigate complex systems. In an attempt to improve access and efficient use of available supported housing units in Victoria, a collaborative and multi-stakeholder program, CASH (Central Access to Supported Housing), was established in May 2012. The purpose of this project was to evaluate the CASH program and the extent to which it was meeting its objectives. We used a descriptive case study design to evaluate the CASH program. This approach allowed us to integrate data from individual interviews (n=21), observations of CASH Selection Committee meetings, program documents, and databases.

**Progress to Date:** This project was completed in fall of 2015. We found that there are 277 people on the waiting list for approximately 976 supportive units and a 250 day median wait time. Additionally, CASH was identified as a waiting list for housing rather than a housing program, and that getting on the CASH waiting list was like getting a ticket in the housing lottery. Concerns about lack of transparency and client engagement in the CASH process were identified by clients as traumatizing but providers indicated that having CASH was better than not having CASH. The CASH program is plagued by a lack of access to a sufficient supply of housing. These findings were published online in a final report for the GVCEH and in a book chapter on Systemic Responses to Homelessness published by the Canadian Observatory on Homelessness (COH). See [http://www.homelesshub.ca/systemsresponses](http://www.homelesshub.ca/systemsresponses). Findings have been presented locally and nationally including a webinar for the COH featuring key systemic responses to homelessness.

**CARBC AFFILIATED PROJECTS**

**Evaluation of traffic safety interventions in British Columbia**

**Investigators:** Brubacher J. (designated PI), Schuurman N., Macdonald S., Purssell R., Brasher P., Desapriya E., Pike I., Asbridge M.

**Funding Body:** CIHR

**Background:** In 2010, British Columbia introduced new traffic laws that targeted drinking and driving and excessive speeding with immediate penalties issued by police at the roadside. Penalties included licence suspension and vehicle impoundment as well as fines. Repeat offenders were subject to more severe sanctions. These penalties were “administrative” sanctions, issued by the province of BC. In addition, the Canadian Criminal Code has laws against “drunk driving” ((i.e. driving with a blood alcohol concentration > 0.08%). The most widely publicized aspect of the new laws were the immediate roadside penalties (IRPs) for drinking drivers.

**Progress:** We have published two evaluations of the new laws and also looked at media coverage. The first evaluation studied police reported crashes. The more recent evaluation studied the broad public health benefits of the new laws by investigating their effect on all cause fatal crashes, ambulance dispatches for road trauma, and hospital admissions for road trauma. We used neighboring jurisdictions (Alberta, Saskatchewan, Washington State) as external controls. We estimated there were an estimated 84 fewer fatal crashes, 308 fewer hospital admissions and 2553 fewer ambulance calls for road trauma each year. The beneficial effects of the new laws were due mostly to a reduction in crashes related to drinking and driving.
We also studied media coverage of the new laws by reviewing BC and Canadian news articles (May 2010 – Dec 2012). Over the course of the study, 1848 articles mentioned distraction, impairment, or speeding and 597 reports mentioned the new laws: 65 against, 227 neutral, and 305 supportive. Reports against the new laws framed them as unfair or as causing economic damage to the entertainment industry. Reports in favor of the new laws framed them in terms of preventing impaired driving and related trauma or of bringing justice to drinking drivers. Growing evidence of the effectiveness of the new laws generated media support. We believe that media coverage of BC’s new traffic laws, especially those pertaining to drinking and driving, played an important role in generating public awareness of the legislative changes and helped mediate the changes in drinking and driving behavior brought about by the new laws.

Do drinking-age laws have an impact on crime? Evidence from Canada, 2009-2013

**Investigators:** Callaghan, R., Gatley, J., Sanches, M., & Benny, C.

**Funding body:** CIHR Operating Grant

**Background:** Surprisingly few studies have examined the potential impacts of MLDA legislation on crime, and the current study addresses this gap. The current study aims to assess the impacts of Canada’s drinking age laws on a broad range of crimes in Canada. We utilized data from the Uniform Crime Reporting (UCR) Incident-Based Survey, 2009-2013 - a Statistics Canada database of substantiated police-reported crimes. In comparison to males slightly younger than the MLDA, those just older than the MLDA had abrupt increases in: violent crimes, 7.4%; property crimes, 4.8%; and disorderly conduct, 29.4%. Among females, national criminal incidents increased sharply following the MLDA in: violent crimes, 14.9%; and disorderly conduct, 35.3%. Among both males and females, there was no evidence of significant changes in cannabis- or narcotics-related crimes (quasi-control outcomes) vis-à-vis the MLDA (P > 0.05).

**Progress to date:** The manuscript has been submitted to Drug and Alcohol Dependence and a revision and resubmission has been requested.

**Medical Cannabis: Standards, Engagement, Evaluation, Dissemination (SEED) Project**

**Investigators:** Walsh, Z. (PI), Capler, R. & Lucas, P.

**Funding body:** Peter Wall Solutions Initiative

**Background:** A community-based research project to assist the Canadian Association of Medical Cannabis Dispensaries (CAMCD) with the creation of standards and an associated certification program for dispensaries in BC.

**Progress to date:** Work involves review of standards and certification process, organizing broad-based stakeholder consultations, and developing an evaluation strategy to monitor the impact on dispensaries, patients and communities. The program is now complete. We worked with CAMCD to develop standards for dispensaries, and were pleased to see parts of these standards incorporated into the City of Vancouver regulations for cannabis dispensaries.
RESEARCH PRIORITY 4

COMMUNITY-BASED PREVENTION PROGRAMS

CARBC PROJECTS

Sex Workers as Educators: Networking HIV Prevention Strategies


Funding body: CIHR

Background: This study was initiated by Prostitutes Empowerment Education and Resource Society (PEERS) Victoria Resources Society as an opportunity to increase the effectiveness of HIV/AIDS prevention and treatment services for sex workers in the Victoria metropolitan area. The team will first summarize the scholarly literature on the topic of HIV/AIDS, other risk factors including substance use and sex work, as well as analyze relevant data on sex workers, clients, intimate partners and managers from a recently completed team grant research project on health and safety in the Canadian sex industry. The research summary will subsequently support the piloting of a peer-based knowledge exchange initiative led by sex workers which targets their personal and workplace networks. The project will additionally launch a training day for service providers. The training event will combine curriculum on emerging trends in research evidence linked to sexual and general health and violence and substance use harm reduction, as well as innovations in peer-based leadership.

Progress to date: The team first summarized the scholarly literature on the topic of sexual health and HIV/AIDS, other risk factors including substance use and sex work, as well as analyzed relevant data on sex workers, clients, intimate partners and managers from a recently completed team grant research project on health and safety in the Canadian sex industry. The research summary subsequently supported the piloting of a peer-based knowledge exchange initiative led by sex workers which targets their personal and workplace networks. The training portion has been completed and the intervention stage is underway. Various knowledge exchange strategies are being organized, including a training day for health and social care providers. The training event will combine curriculum on emerging trends in research evidence linked to sexual and general health and violence and substance use harm reduction, as well as innovations in peer-based leadership.
Working Together: Evaluating an Integrated Model of Care for People Experiencing Homelessness and Substance Use Problems

**Investigators:** Pauly, B. [Co-PI], Lynn, D. [Co-PI], Anderson, M., Barber, K., Goble, C., Hall, S., Hobbs, H., Jensen, K., Thomas, S., Thompson, T. & Wallace, B.

**Funding body:** Island Health Collaborative Grant, from 2015-2016.

**Background:** People who are homeless and using substances often experience poorer health and barriers to accessing health care services. In order to address these challenges, there has been increasing attention to integration of a range of services and thereby increasing access to health services and resources for better health. The primary outcome of this project has been to develop a strong research team with current knowledge of the evidence for integration of services for those who are homeless and using substances. With this critical groundwork in place, we are developing an integrated literature review of the integration of harm reduction and other services, and will submit a strong research proposal to evaluate integrated Intensive Case Management, primary care and harm reduction services for people impacted by homelessness and substance use.

**Progress to date:** The research team has been established; for the integrated literature review, the searches are complete, article screening at the title and abstract level are complete, and documents are being prepared for extraction; Realist Evaluation training is scheduled for June, 2016 and August, 2016.

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CARBC AFFILIATED PROJECTS

A Mixed Method Evaluation of the Impact of the Dr. Peter Centre on Healthcare Access and Outcomes for Persons Living with HIV/AIDS Who Use Illicit Drugs

**Investigators:** Barrios, R., Hogg, R. (PIs), & Pauly, B. (Co-I).

**Funding body:** CIHR Partnership for Health System Improvement Grant

**Background:** The availability of highly active anti-retroviral therapy (HAART) has produced significant health benefits for persons living with HIV/AIDS. Unfortunately, many people living with HIV/AIDS face substantial barriers to accessing and adhering to HIV-related healthcare and support services and typically experience sub-optimal treatment outcomes, even in British Columbia where HIV treatment is free of charge. The focus of this study is to determine the effectiveness of integrated healthcare and harm reduction programming on HIV/AIDS-related outcomes for people living with HIV/AIDS who face multiple and complex barriers to optimal treatment experiences. The study will be conducted at the Dr. Peter Centre (DPC), which offers low barrier access to services, including services that reduce environmental risk factors and drug-related harms for people living with HIV/AIDS.

**Progress to date:** The DPC study has closed enrolment into the baseline survey. We have recruited a total of 121 participants into the baseline survey. The follow-up survey was completed in late 2015 and recruiting for the virtual cohort in early 2016. The qualitative component of the study has finished the data collection phase and has recruited 31 participants. Multiple conference presentations on the quantitative data have been presented at national and international HIV conferences. Three articles from the qualitative analysis have been developed with one under review.
Boys’ and Men’s Health (Advancing Research to Improve Boys’ and Men’s Health) HIV Prevention for Gay and Bisexual Men: A Multi-Site Study and Development of New HIV Prevention Interventions

Investigators: Hart, T. (PI), & Roth, E

Funding body: CIHR Team Grant

Background: This project will focus on sexual and mental health of gay and bisexual men in Vancouver, Toronto and Montreal. It will consist of a prospective cohort study with participants completing computer-assisted interviews every six months for up to three years.

Progress to date: Dr. Roth is working with Drs. David Moore and Trevor Hart to develop the Substance Use Section of the questionnaire for this new team grant.

Population Health Interventions to End Homelessness


Funding body: CIHR

Background: Local coordinators are continuing to identify and code key documents, including municipal Homelessness Action Plans (HAPs), public consultation reports about the HAPs, progress or evaluation reports, National Homelessness Initiative, Homelessness Partnering Strategy (NHI/HPS) reports, other municipal policy documents related to HAPs, reports written by community organizations involved in homelessness, substance use and housing concerns, and provincial and federal policy statements or documents about the intersection of these homelessness and housing issues. Site coordinators have reviewed the history of HPS funding which provides a conceptual framework for policy directions that have informed past and current HAPs or community plans.

Progress to date: The document and transcript coding have been finalized and a systematic review and synthesis of the data collected across the four cities have been prepared into a full report that was circulated to the team and publicly released in a final version.

The Caring Campus Project – A Multilevel Intervention to Address Substance Misuse on Canadian Campuses

Investigators: Stuart, H., Chen, S., Krupa, T., Dobson, K., Stewart, S., Teehan, M. & Thompson, K.

Funding Body: Movember Canada

Background: Student mental health and substance use are key concerns across college and university campuses. The Caring Campus Project is a research study funded by Movember Canada that aims to develop and evaluate multilevel prevention programs for first year university students at three Canadian campuses. The Caring Campus Project draws on evidence-based theory and takes a participatory student-driven approach to help students learn about mental wellness and safer substance use patterns; correct misperceptions about substance use norms; reduce the stigma of these issues through the use of contact-based education; and promote student-driven and -led activities to raise awareness of the importance of early identification and intervention. The goal is to engage students to develop and deliver health promotion initiatives that reduce risks associated with substance misuse, promote mental health, and create a more supportive campus environment, particularly for male students. Furthermore, there is a need to identify the best practices for delivering preventative mental health and substance use programming for emerging adults, and to determine the most effective ways to evaluate these programs.
Progress to date: All three campuses have now developed and implemented their student developed programs. The programs are currently being evaluated using the 4 waves of data that were collected across the last two years. A knowledge translation conference presenting findings from the Caring Campus Project and other similar initiatives across Canada and the US is scheduled for October 2016.

The second-hand effects of undergraduates’ drinking: Prevalence, predictors and consequences of harm from other students’ drinking in Post-Secondary Settings

Investigators: Thompson, K., MacNevin, P-D., Stewart, S. & Teehan, M.

Funding Body: Movember Canada

Background: Alcohol use and its associated harms are higher during young adulthood than at any other time in the lifespan. The majority of studies of alcohol’s harms focus on alcohol’s association with numerous negative outcomes for the drinker. Yet heavy drinking affects not only the drinker, but also the other people in the drinker’s environment. While several studies highlight that harm from others’ drinking is relatively common among post-secondary students, few studies have examined the predictors and consequences of these experiences. Using data from 3100 first-year University students at Dalhousie University, Queens University, and University of Calgary as part of the Movember-funded Caring Campus Project, this work examines the prevalence and types of harms first-year Canadian university students experience from other students’ drinking. We also investigate the individual (i.e. sex, personality, alcohol use) and environmental (i.e., living in residence, perceptions of campus culture) predictors of harm from others’ drinking, as well as the association between harm from others’ drinking and student mental health.

Progress to date: One manuscript has been submitted highlighting the important association between harm from others’ drinking and poor mental health. Another manuscript is currently in preparation focusing on the association between personality and harm from others drinking.

RESEARCH PRIORITY 5

TREATMENT SYSTEMS AND PROGRAMS

CARBC PROJECTS

Compulsory addiction treatment: toward evidence-based policy and practice.

Investigator: Urbanoski, K. (Co-PI), Hering, R. (Co-PI), Macdonald, S., Wild, T.C.

Funding body: Vancouver Island Health Authority

Background: The study consists of a systematic review of the evidence on compulsory addiction treatment programs and strategies, and an environmental scan of local practices and policies.

Progress to date: With the project in its early stages, we are currently developing the methodological protocol for the systematic review. The scope of the review will include both processes and outcomes of addiction treatment that is mandated by the legal authorities, employers, child protection services, and other social services. We are also currently working with the VIHA Research Ethics Board to secure approval to conduct consultations with service providers and policy makers on local strategies related to compulsory treatment across Vancouver Island.
Managed Alcohol Programs: Implementation and Effectiveness

**Investigators:** Pauly, B. (Nominated PI); Stockwell, T. (co-PI); Chow, C., Vallance, K., Wettlaufer, A.

**Funding bodies:** Canadian Institutes for Health Research; Shelter House, Thunder Bay; Michael Smith Foundation of Health Research; Vancouver Coastal Health Authority, Canadian Mental Health Association, Sudbury

**Background:** Managed Alcohol Programs (MAPs) are an almost uniquely Canadian harm reduction approach to the harms of unstable housing and severe alcohol problems that have not been responsive to abstinence-based treatment. This study is rigorously evaluating MAPs in Canada; the results of which will be used to reduce unintended negative consequences of MAPs and inform the development of program and policy recommendations. Five MAPs in Ontario and one in British Columbia form part of the study with additional study collaborators and knowledge users in British Columbia, Ontario, Alberta, Manitoba and Nova Scotia.

**Progress to date:** Data collection has been completed in all sites with 175 MAP participants and 189 controls recruited. Eighty MAP participants and staff across the programs have completed qualitative interviews. Two peer reviewed publications and an economic costing report of one program were completed. Access to police, health and death records has been secured for all sites as part of the follow-up comparison planned between MAP participants and controls with similar profiles. The MAP Community of Practice is well established with webinars and teleconferences alternating each month to share learnings and best practices as well as exchange of research findings and ideas. [http://www.uvic.ca/research/centres/carbc/projects/active/projects/map-study.php](http://www.uvic.ca/research/centres/carbc/projects/active/projects/map-study.php)

Needs-based Planning of Substance Use Treatment Services in BC

**Investigators:** Macdonald, S., Slaunwhite, A. & Joordens, C

**Funding body:** Centre for Addictions Research of BC Quasi – Endowment Fund

**Background:** CARBC is developing a needs-based planning model to assess potential demand for substance use services in British Columbia. This project will aim to better understand current use of services across the province to identify gaps and opportunities to enhance the continuum of care. Demand will be estimated by triangulating several data sources within Local Health Areas, using demographics, the Canadian Alcohol and Drug Monitoring Survey, and alcohol sales data. The project involves collaboration with the Health Authorities who will be able to use this information for planning. We hope to conduct a comprehensive survey of public and private substance use service agencies in BC to better understand variations in the types, continuum of services, and demand for treatment.

**Progress to date:** A report was provided to the Ministry of Health in the Fall of 2015.
Primary Care, Alcohol-Related Harm and Treatment for Alcohol-Attributed Diseases in British Columbia

**Investigator:** Slaunwhite, A. (Supervisor: Dr. Scott Macdonald)

**Funding bodies:** Canadian Institutes for Health Research; Western Regional Training Centre for Health Services and Policy Research (UBC); CARBC

**Background:** This study consists of three separate projects (manuscripts) that work to improve our understanding of longitudinal trends in primary care utilization for alcohol-attributed diseases (AADs), the experience of treating AADs in rural and remote areas of BC from the perspective of family doctors, and the geography of alcohol-related harm in BC. Each project utilizes different data, including physician billing records, original survey data, and qualitative data obtained from study participants.

**Progress to date:** This study was completed and credited towards the dissertation requirements for a PhD in Geography. Three papers have been submitted for publication and two were published in 2015.

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Island Health alcohol and other drug treatment services

**Investigator:** Bosley, L. (Co-PI), Macdonald, S. (Co-PI), Urbanoski, K., Misri, N & Joordens, C.

**Funding bodies:** Island Health Research Support Competition

**Background:** The purpose of this research is to better understand the organization and delivery of health services for substance use issues in the geographic region served by Island Health. Qualitative descriptions of services delivered by 99 programs (housed in 64 agencies) in Island Health have been assembled. We plan to collect additional quantitative information on location/municipality, types of treatment (e.g., day treatment, continuing care, detox services), admission numbers by type of service and client characteristics, treatment models, length of stay, waiting lists, and suggestions for improvement of services. This information could be used for the development of more effective and efficient delivery of substance use services and to identify priorities for further research and evaluation.

**Progress to date:** A questionnaire has been developed with feedback from key players at Island Health and the proposal is being reviewed by the ethics review board. Data collection is planned for next fiscal year.
CARBC AFFILIATED PROJECTS

A Comparative Analysis of Provincial/Territorial Harm Reduction Policies: Implications for Expanding Access to Health Services for People who Use Illicit Drugs.


Funding Body: CIHR

Background: Harm reduction services are health services that aim to reduce morbidity and mortality associated with illicit drug use and increase access to other health and social services. While there is a large evidence base as to the outcomes of harm reduction services, there is uneven and wide variability in the implementation of these services and little knowledge as to the factors that influence effective implementation. The purpose of this grant is to describe and examine provincial and territorial variations in policy frameworks related to harm reduction, and the varied frames that media, policy makers, other stakeholders and the public use to understand, communicate and advocate for or against harm reduction services. We are undertaking a mixed methods, multiple case study design to compare policy frameworks and frames that affect implementation of harm reduction services in Canadian provinces and territories. For each case, we will examine provincial level harm reduction policies, interview key informants and analyze media on harm reduction services for preventing the harms of illicit drug use.

Progress to Date: There are four key streams of work in this project. The first stream is undertaking an analysis of harm reduction policies. This work is nearing completion with more than 100 policy documents from all Canadian provincial and territorial jurisdictions analyzed and coded for key concepts. The initial findings of this analysis are being presented at the International Society of Drugs and Alcohol. Initial steps have been taken to interview key informants and preparatory work is being undertaken to conduct a public opinion survey and media analysis.

A Randomized Double-Blind and Controlled Pilot Study of MDMA-Assisted Psychotherapy in 12 Subjects with Treatment-Resistant PTSD

Investigators: Pacey, I. (PI) Rubensohn, H., Yensen, R (co-PI) and Dryer, D.

Funding body: Multidisciplinary Association for Psychedelic Studies (USA)

Background: PTSD is a debilitating psychiatric disorder arising after a traumatic life event that is associated with high rates of psychiatric and medical comorbidity, disability, suffering and suicide. Despite the sheer number of individuals suffering from PTSD and its devastating effects, questions remain concerning the best possible treatments. At least a third of PTSD patients fail to respond to established PTSD psychotherapies or do not respond in a clinically significant manner. The purpose of this small pilot study is to provide information on whether the combination of psychotherapy with the drug MDMA is safe and helpful for people with PTSD. The researchers will use the results of this study to design more studies of this treatment.

Progress to date: 6 Participants were treated from April 2014 till September 2015. They received 3 full-dose MDMA sessions as well as integration sessions and 2 month follow-up. 10 month follow-up is starting this month. They all received psychological testing before, during and after the treatment sessions, as well as now at 10 month follow-up, to measure changes. There was no evidence of serious adverse events to the administration of MDMA to subjects under study conditions. Results are being examined by MAPS (US) research team and will be pooled with US Phase 2 results. Our impression so far is positive and we await full results.
Canadian HIV Women and Reproductive Health Cohort Study: a Canadian Observational Cohort (CANOC) Affiliated Study

**Investigators:** Loutfy, M., Kaida, A., Hogg R. & Roth, E.

**Funding body:** CIHR Health Research Operating Grant

**Background:** A longitudinal study of Canadian HIV+ women recruited from previous cohorts in Ontario, Quebec and British Columbia, this project is concerned with identifying barriers and pathways to health services.

**Progress to date:** Dr. Roth led the development of the Substance Use Section portion of the survey questionnaire and is now meeting to discuss initial analysis of these data. Here we did a paper on Latent Class Analysis of substance use patterns among the cohort. This will be presented at the Canadian AIDS/HIV Research conference in May, 2016.

Clinical Trial of Medical Cannabis for PTSD

**Investigators:** Walsh, Z. (PI), Mitchell, I., Lucas, P., Eades, J., Bonn-Miller, M.

**Funding body:** Tilray - Health Canada licensed producer of medical cannabis - Investigator Initiated Partnership

**Background:** A clinical trial to examine the effectiveness of three preparations of vaporized cannabis for the reduction of all-cause PTSD symptoms. This novel study is among the first clinical trials of cannabis to treat a psychiatric disorder and is affiliated with the University of British Columbia (UBC).

**Progress to date:** Agreement established between UBC and Tilray. The research team is assembled and we have completed all but the final stages of approval. We anticipate recruiting the first participants by June 2016.
KEY RESULTS AREA

RESEARCH PRIORITY 6

SOCIAL DETERMINANTS AND CONTEXTS OF SUBSTANCE USE

CARBC PROJECTS

Gender, Violence and Health: Contexts of Vulnerabilities, Resiliencies and Care among People in the Sex Industry


Funding body: CIHR Research Team Grant: Violence, Gender and Health

Background: This CIHR team grant examines the perspectives and experiences of each of the following: 1) those who sell sexual services, 2) intimate partners of workers, 3) those who buy sexual services, 4) those who manage the services, and 5) those involved in regulating the industry. Of central interest are issues around safety, conflict, violence, substance use, vulnerability and power for different demographic groups and across work contexts and social spaces, and the damaging impact of how people treat them.

Progress to date: Data collection was completed, a national report was released and presented to an international symposium and workshop. Numerous other knowledge exchange activities occurred over the recent period, including Fact or Science Fiction myth buster published by the CIHR Institute of Gender and Health, and papers published on sex workers’ unmet health care needs and benefits and costs of disclosure in health care encounters, confidence in the police, reasons for initial involvement in sex work, gender power relations within the sex industry and vis-à-vis clients, and the link between stigma, sex work, and less acceptable substance use. Additional academic papers have been submitted for peer review and a series of outreach strategies to key audiences are is planned.

Equity Lens in Public Health (ELPH): Reducing Health Inequities, the Contribution of Core Public Health Services in BC


Principal knowledge user: O’Briain, W.


Funding body: CIHR

Background: In BC, there are significant differences in life expectancy among geographic regions. People with low incomes have significantly poorer health than people with high incomes. Of particular concern is that many Aboriginal peoples have lower life expectancies and poorer health than the general population. Several Canadian reports have recommended strengthening the public health system to increase health equity by closing the gap on
differences in health outcomes. The recent and important development of *Healthy Minds Healthy People: A Ten-Year Plan to Address Mental Health and Substance Use in British Columbia* and the associated public health renewal processes have been identified as a key area for research to strengthen public health action to reduce health inequities. The overall purpose of this project is to explore and foster learning about the use of an equity lens during a period of complex system change in public health in BC, including the implementation of the 10-year plan. Our aim is to produce new knowledge for reducing systemic health inequities, especially in two key areas: mental health promotion and prevention of harms of substance use. This project includes four studies to be carried out over five years, and is linked to the Core Public Health Functions Research Initiative (CPHFR).  

**Progress to date:** The ELPH program of research is comprised of four distinct studies. For Study 1, we have completed Phase 2 data collection (just over 100 interviews/focus groups) with Health Authority and Ministry front line staff, managers, directors, and senior executives. Currently, we are analyzing both the Phase 1 and Phase 2 data and developing papers. For Study 2, we are in the process of collecting social network analysis (SNA) data that focuses on inter-sectoral collaborations within the prevention of harms of substance use program. For Study 3, we have updated the 2013 Health Equity Tools Inventory, including the addition of a classification system. Also we have developed a template to assess the tools for practical and theoretical criteria. Study 4 uses grounded theory to examine how public health practitioners navigate ethical issues. We have analyzed 30 interviews and are drafting papers. We have provided funding for 9 student interns in collaboration with Health Authority partners. We have presented locally and nationally and have upcoming international conference presentations. For more info please visit [www.uvic.ca/elph](http://www.uvic.ca/elph).
Preventing and Reducing Harms of Substance Use in Homeless Shelter Programs

**Investigator:** Wallace, B. Co-I: Pauly, B. Principal Knowledge User: McTavish, D.

**Funding body:** Vancouver Foundation

**Background:** The aim of this research is to explore issues and challenges related to substance use in a shelter setting and strategies for addressing the harms of substance use and promoting health. The community-based qualitative research project engages people who experience homelessness, staff who provide shelter services and harm reduction workers to look at harm reduction strategies to respond to substance use in emergency shelter programs in a new way.

**Progress to date:** This project is now in its final stages and will inform future research on the challenges related to implementation of harm reduction in responses to homelessness. This project is now in its final stages and will inform future research on the challenges related to implementation of harm reduction in responses to homelessness. We are currently developing a CARBC bulletin to highlight key findings.

Socio-Cultural and Environmental Health Risks and Resilience among Street-Based Women and Transgender Sex Workers

**Investigators:** Orchard, T., Benoit, C. (PIs), Burch, M., Mohoney, R. & Oliver, V.

**Funding body:** CIHR

**Background:** This study examines how socio-cultural and environmental factors influence health risks and resilience among street-based women and transgender (i.e., male to female) sex workers in the tri-city area of Kitchener-Waterloo-Cambridge (KWC), Ontario. While research exists on women and transgender sex workers, these groups are often combined in study design and data analysis and very little attention has been paid to how their unique gendered and sexual identities affect their health. There is significant heterogeneity with regard to gendered identities, economic situation and substance use concerns. Assessing how these differences impact health risk and resilience will address pressing research gaps. Study findings will also inform the development of gender-specific service and policy initiatives to address the impact of socio-cultural and environmental influences on the substance use behaviour and other health challenges of street-based women and transgender sex workers in the research area, which has been identified by local health and service providers as a pressing and unmet need for these marginalized members of society.

**Progress to date:** Ethical approval has been attained and interviews have been completed and transcribed. Thematic analysis of the interview data and social mapping is underway.

Applying the Concept of Positive Deviance to Gay Men’s Group Sex Events

**Investigators:** Roth, E. & Moore, D. (Co-PIs)

**Funding body:** CIHR Operating Grant

**Background:** This grant’s objectives are to delineate behavioural strategies Vancouver gay and bisexual men use to protect themselves and their sexual partners from HIV/STD infection when attending group sex events. One focus is on patterns of substance use during these events. Participants are men enrolled in the Momentum Health Study who reported attending group sex events.

**Progress to date:** We have secured Human Ethics approval to begin collecting qualitative data for this project and have done pre-testing in Victoria and Vancouver. We published one paper on quantitative analysis in the journal Culture, Health and Sexuality, and gave a workshop at the Vancouver Gay Men’s Health Summit. Also completed 20 qualitative interviews which will form the basis of Robert Birch’s Ph.D. dissertation.
The Role of Transitional Housing in Health and Recovery from Homelessness, Poor Health and Substance Use


Funding body: Vancouver Foundation

Background: To assist individuals to transition from homeless to houses, we need a good understanding of what works and for whom. In 2008, the Victoria Cool Aid Society initiated an innovative transitional housing program for people recovering from homelessness, poor health and substance use. The program was expanded in 2010. Transitional housing is one approach to supporting men and women in their efforts to leave emergency shelter and enter housing. Although transitional housing has been demonstrated to be effective in fostering transitions, little is known about staff and residents’ perspectives on the role of transitional housing programs or how experiences may vary with gender and substance use background. Within a framework of community-based participatory research (CBPR), this project explores the role of transitional housing both from the perspectives of individuals who are or have been in transitional housing and front-line workers. We are specifically seeking to answer the question: What are the factors in transitional housing that foster or inhibit transitions out of homelessness for men and women and those with or without problematic substance use?

Progress to date: Data collection and analysis is now complete. In our analysis, we identified challenges related to the implementation of harm reduction as a factor in the operation of these programs as well as the difficulty of navigating a maze of systems and services with little capacity to support exits from homelessness. We have presented our findings locally and nationally. We have two papers developed with one under review.
CARBC AFFILIATED PROJECTS

**Equity Oriented Primary Healthcare Interventions for Marginalized Populations: Addressing Structural Inequities and Structural Violence**


**Funding body:** CIHR

**Background:** Equity-Oriented Primary Healthcare Interventions for Marginalized Populations: Addressing Structural Inequities and Structural Violence (EQUIP) seeks to contribute new knowledge about innovative primary healthcare interventions to mitigate the effects of structural inequities and structural violence for marginalized populations and the policy environments needed to support such programming. The focus of the research is the impact of an intervention for staff working at primary healthcare clinics working with marginalized populations. The intervention includes staff training on equity, cultural competence and trauma- and violence-informed care. The researchers will examine the effects of this intervention on changes in the way staff provide healthcare. This research is being conducted at two sites in BC (including Victoria) and two in Ontario.

**Progress to date:** We completed four waves of structured surveys with patients at the four PHC sites, following a cohort of 567 patients over 2.5 years. At Wave 4 we had successfully retained 75% of the original sample. Structured surveys were also completed by staff members at the four sites, at three points in time: prior to the intervention, following the staff education components, and following OIT at the end of the intervention. In addition to these quantitative data, in-depth interviews were conducted with 35 staff members at the PHC sites, including staff in provider, administrative and leadership positions. Analysis of each of these data sets, as well as integrated, mix-methods analysis, is ongoing. More information is available at [www.equiphealthcare.ca](http://www.equiphealthcare.ca).

**HAART Optimism, Drug Use and Risky Sexual Behaviour among MSM in British Columbia**

**Investigators:** Hogg, R., Moore, D. (PIs) & Roth, E.

**Funding bodies:** NIH and CIHR

**Background:** This grant represents the Momentum Health Study, a longitudinal bio-behavioural study of Vancouver gay and bisexual men. Interviewing and biological testing is continuing for participants, who will in total have eight repeated measures every six months with the project.

**Progress to date:** Results from the first cross-sectional sample of 719 men have been published in Culture, Health and Sexuality, with another paper just accepted to AIDS Care, and two more submitted to Archives of Sexual Behavior and Culture, Health and Sexuality. This is still going, and we are still publishing and giving conference papers on it. This year we published in Annals of Sexual Behavior, Journal of International AIDS Society, Culture Health and Society, and HIV Medicine, with papers in press in JAIDS and the Journal of Urban Health. In addition, we presented over 30 conference papers and/or posters.
RESEARCH PRIORITY 7

EVALUATION OF EFFECTIVENESS OF KNOWLEDGE TRANSLATION AND EXCHANGE ACTIVITIES AND STRATEGIES

CARBC PROJECTS

The Effectiveness of Standard Drink Labelling as an Aid for Drinkers to Monitor their Personal Alcohol Use

Investigators: Stockwell, T., Hobin, E., Vallance, K. & Osiowy, M.

Funding bodies: CARBC Endowment Fund, Ontario Public Health

Background: Canada’s first national low-risk drinking guidelines were approved by federal, provincial and territorial governments in November 2011 and have been widely disseminated since that time. These guidelines advise consumers to drink within weekly and daily limits to reduce risks to health and safety. These limits are expressed in terms of “standard drinks” which are 13.45g of pure alcohol or roughly equivalent to a can or bottle of beer, a medium-size glass of wine or a shot of spirits, provided these beverages are average strength. There is increasing diversity in the range and strengths of alcoholic products available. Standard drink labelling is intended to communicate clear information to consumers about the alcohol content of their drinks so they can more easily comply with drinking guidelines. A series of studies have been undertaken, including an experimental study involving 301 Victoria liquor store customers and an internet-based study led by Dr Erin Hobin to establish best formats and most impactful messages to accompany standard drink labelling. Most recently we have conducted focus groups in the Yukon to further establish optimal formats for alcohol container labelling. A new study is planned with a Canadian jurisdiction that is willing to implement the restricting guideline and standard rate labelling information on alcohol containers sold in government liquor stores.

Progress to date: The Victoria study of liquor store customers has been published in Addiction Research and Theory. The focus group and panel studies will be presented at an international conference and submitted for publication to a peer-reviewed journal.

CARBC AFFILIATED PROJECTS

Opioid-Dependent Users on Methadone: A Knowledge Synthesis of Formal Interventions aimed at Methadone Retention and Improved Health

Investigators: Jackson, L., Davison, C. (Pls), Buxton, J., Bailey, D., Dingwell, J., Dykeman, M., Cahagan, J., Gallant, K., Gossop, M., Hodder, S., Karabanow, J., Keough, F., Kirkland, S., Leaonard, L., MacIsaac, C., Martin, F., Neves, K., Porter, C., Sketris, I. & Warren, D.

Funding body: CIHR Knowledge Synthesis Grant

Background: Realist review of the methadone treatment literature

Progress to date: Completed and manuscript published.
### Performance Indicators for Key Results Area 3 (Implementing Quality Research)

#### OBJECTIVE

To conduct research on the patterns, distribution, determinants and consequences of substance use

#### PERFORMANCE INDICATORS

Number of epidemiological projects initiated, ongoing and/or successfully completed each year in this area.

*Benchmark: 15*

*2015/2016: 15*

To conduct research that is valued by stakeholders as being of high quality, responsive to emerging issues and relevant to public policy and practice

Number of CARBC special reports and commissioned reports focused on policy and practice.

*Benchmark: 5*

*2015/2016: 16*

To identify key strategic research opportunities that will inform policy, practice, strategy development and implementation

Number of new research projects initiated in response to emerging issues and opportunities that are consistent with this plan.

*Benchmark: 5*

*2015/2016: 13*

To conduct research in the following key priority areas:

1. Province-wide monitoring of alcohol, tobacco, gambling and other drug use patterns and related harms
2. Studies of the neuroscience and learning bases for drug-seeking behaviour
3. The impact of educational, legislative and regulatory strategies to minimize alcohol and other drug-related harms
4. Development and evaluation of more effective community prevention programs
5. Development and evaluation of more effective treatment systems and programs
6. 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
7. Research and evaluation of effectiveness of knowledge translation and exchange activities and strategies

Number of research projects ongoing and completed

*Benchmark: 10 | 2015/2016: 19*

Number of research projects ongoing and completed

*Benchmark: 2 | 2015/2016: 1*

Number of research projects ongoing and completed

*Benchmark: 6 | 2015/2016: 11*

Number of research projects ongoing and completed

*Benchmark: 5 | 2015/2016: 7*

Number of research projects ongoing and completed

*Benchmark: 8 | 2015/2016: 12*

Number of research projects ongoing and completed

*Benchmark: 10 | 2015/2016: 9*

Number of research projects ongoing and completed

*Benchmark: 5 | 2015/2016: 7*
| 3.5 | Develop and maintain significant collaborative projects with other researchers and research centres in BC working on harm reduction, substance use and related areas | Number of collaborative projects with other BC-based researchers and research agencies each year  
*Benchmark:* 20  
2015/2016: **36** |
| 3.6 | Develop and maintain research projects that engage researchers from several relevant disciplines and which integrate different disciplinary perspectives | Number of collaborative projects involving multi-disciplinary participation with individuals and other centres both at UVic and other BC campuses and research settings  
*Benchmark:* 25  
2015/2016: **36** |
| 3.7 | Develop and maintain significant collaborative projects with other researchers and research centres in North America | Number of collaborative projects with other North American researchers and research agencies each year  
*Benchmark:* 10  
2015/2016: **20** |
| 3.8 | Develop collaborative projects with international organizations such as WHO and the International Harm Reduction Association | Number of collaborations with WHO and other international organizations each year  
*Benchmark:* 5  
2014/2015: **7** |
HIGHLIGHTS

Peer reviewed academic media

CARBC faculty and close affiliates reported having 76 new academic and research papers accepted for publication in 2015/16 in a range of both specialist (e.g. Addiction, International Journal of Drug Policy, Journal of Studies on Alcohol and Drugs) and generalist journals (e.g. Canadian Journal of Public Health, Canadian Public Policy, Advances in Nursing Science, Nature Reviews, Archives of Sexual Behavior, Urban Health, Culture, Health and Sexuality). In 2015 CARBC Scientists had a total of 1470 citations of their published works in peer reviewed journals. Two papers now in press with Harm Reduction evaluating Managed Alcohol Programs have trebled the international literature on this emerging topic.

Social Media

It was another great year for CARBC’s social media presence. We have 1,034 Facebook likes and 1,729 followers on Twitter, a growth of over 20% on both platforms. Our best post on Facebook, which was about the news that Naloxone had become non-prescription in Canada, was shared dozens of times and reached over 20,000 people. This reach shows the importance and potential reach of being on top of current events on social media. Our Facebook posts reach an average of 1,127 people per post, which is...
impressive, given that we have just over 1,000 fans. Our engagement on Twitter was also very strong; one three-month period saw a total of over 175,000 impressions, and we averaged about five retweets of our posts every day.

Our Harm Reduction in BC infographic, which we initially created for International Harm Reduction Day on May 7, 2014, continued to be popular; updates with 2015 info were some of our most shared Twitter posts in 2015/16. We also created several new infographics, including ones on happy hours in Victoria, per capita alcohol consumption, and moderate drinking and life expectancy.

We also saw infographics being used by journalists to help them understand some of our more complex stories. Our “Do moderate drinkers live longer?” infographic, which we created in conjunction with a major paper, was reprinted by several news agencies, including the Huffington Post. This shows the value in creating a simple infographic to accompany more complex publications.

It was a bit of a transition year for our Matters of Substance blog. We moved to our new home on the UVic Online Academic Community website, which meant having to rebuild our subscriber base and losing the ability to track blog views. Despite this, we had 15 new posts in both one-off categories and series on topics ranging from harm reduction in recreational settings, women and alcohol, and forced drug treatment.

Website

Our website officially migrated to UVic’s web environment on April 1, 2015. Some improvements we saw as a result of the move were a robust and easily searchable publications database, the ability to link faculty and staff profiles and publications with projects, and more facts and stats information.

Media Summary

CARBC once again generated a lot of media this year, with over 170 unique articles and interviews in the 2015/16 year. Media outlets in the UK, the US, India, Chile, Amsterdam and beyond covered our research, and we received coverage in major outlets such as CBS, CNN, Bloomberg, Salon.com, CBC’s The National, The New York Post, BBC and Forbes. By far our most popular news story of the year was Stockwell et al’s paper on moderate alcohol consumption and mortality, a meta-analysis which found there were no health
benefits to be gained from moderate drinking. Over 50 unique stories featuring interviews with or quotes from Tim were generated from this paper. However, this number did not include duplicate wire stories, or general mentions of the research; if we were to include those, the number would be closer to 400 news stories. Other popular news stories this year were a funding announcement around the Changing the Culture of Substance Use on Campus program, comments on BC’s new minimum pricing regulations, BC’s increase in per capita alcohol consumption, and the cannabis substitution effect.

**CARBC Speaker Series**

CARBC hosted several public talks in 2015/16 topics ranging from forced addiction treatment to the history of Canadian drug policy to an overview of BC’s Take Home Naloxone Program. Our most popular lecture was Karen Urbanoski’s talk on forced drug treatment, which had well over 100 people in attendance. We have continued to post recordings of our talks on YouTube, and they have been viewed close to 6,000 times.
PUBLICATIONS

Journal Articles


**Books**


**Book Chapters**


Commissioned and Special Reports


CARBC Bulletins


CARBC Blogs

See: https://onlineacademiccommunity.uvic.ca/carbc


Thompson, K. (2015). University students’ perceptions of the link between substance use and mental health.

McInnis, O. (2015). Detecting and addressing mental health and substance use disorders — the earlier the better.


Padgett, C. (2015). Why are women more prone to alcohol-related blackouts than men?

Padgett, C. (2015). How to have a great night (and remember it the next day).


Urbanoski, K. (2016). Does forced drug treatment actually work?

Infographics

See www.carbc.ca to view:

Alcohol and drug use among youth in street-based settings in Victoria, BC, 2010-2015

Alcohol and drug use among adults using substances in social settings in Victoria, BC, 2010-2015

Annual per capita alcohol consumption in BC and Canada (2015)

Happy hours in Victoria: Did alcohol become cheaper? (2015)


Harm reduction in British Columbia (Updated 2016)

Do moderate drinkers live longer? (2016)

Opinion Editorials and Letters to News Outlets


CARBC Student Dissertations

Romano, B. (2015). An informational resource to enhance nursing care for patients with problematic alcohol use. MA, School of Nursing

Jeal, B. (2015). Impact and effectiveness of the Dr. Peter centre model on quality of life for those living with HIV/AIDS and who use drugs. MA, School of Nursing


Belle-Isle, L. (2016) At the Table with People who use drugs: Transforming Power Inequities. PhD, Social Dimensions of Health Research Program


Invited Presentations


Brubacher J. (2015, November). Drug Impaired Driving. Shiga University of Medical Science, Shiga, Japan.


Marcellus, L. (2015, September). Caring for people with Fetal Alcohol Spectrum Disorder in our Health Care System: Challenges and opportunities for care providers. Island Health, Royal Jubilee Hospital Patient Care Centre Health Talk, Victoria, BC.


Pauly, B. (2015, May). Taking aim at the social determinants of health in HIV Care: What’s your


Reist, D. (2015, August). Education is Self-Education. Keynote address at the Summer Institute 2015: Promoting Mental Wellness in BC School Communities, UBC.


Stockwell, T. (2015, November) Responding to substance use and related problems in BC: prevalence, priorities and prevention of harms. Presentation to Supreme Court of British Columbia Education Seminar, Vancouver, BC.


Stockwell, T. (2015, August) Is alcohol a cause or a sign of good health? Invited Presentation to What’s New in Addiction Medicine? Lecture Series, St Paul’s Hospital, Providence Health Care, Vancouver, BC.


Walsh, Z. (2015, October). Cannabis for therapeutic purposes: Implications for public health and Mental Health, Merritt Public Library, Merritt, BC.


Other Conference and Seminar Presentations


Taylor, D., van Borek, N., Li, N., Patterson, M., Masse, L.C., Ho, A., Ogilvie, G., & Buxton, J. (2015, July). A novel instrument to assess capacity to consent for healthcare among individuals with problematic substance use and who are homeless or unstably housed. Poster, 8th IAS Conference on HIV Pathogenesis, Treatment and Prevention, Vancouver, BC.


Urbanoski, K. (2015, May). Addiction system outcome indicators and monitoring framework for performance measurement in Ontario’s addiction treatment system. 3rd Annual Conference of Addictions and Mental Health Ontario (AMHO), Toronto, ON.


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**CARBC Sponsored Conferences and Seminars**

**Public Seminars**


**In–House Lecture Series**

**Magnus, S.** (2015, April) Fitting fathers into the morality discourse on substance use during pregnancy and early parenthood.


**Sharam, S.** (2015, May) Understanding the social determinants of substance use among pregnant-involved young Aboriginal women: A mixed methods research project.

**Casey, L.** (2015, August) Blurred Lines: Triangular power relations between managers, sex workers and clients in Canadian escort and massage businesses.

**Magnus, S.** (2015, August) Applying an Equity Lens to a Health Promotion Initiative in Northern BC


**Honours and Awards**

Dr Bernie Pauly was honoured by being selected to be Vancouver Island Health Authority’s Scholar-in-Residence for 2016-2018.

Dr Marjorie MacDonald was given an award for Excellence in Advancing Nursing Knowledge and Research. Association of Registered Nurses of BC.
### Table 4: Performance Indicators for Key Result Area 4 (Dissemination)

<table>
<thead>
<tr>
<th>Objective</th>
<th>Performance Indicators</th>
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| 4.1 To publish research findings in articles in peer reviewed journals | Number of articles published each year by CARBC researchers and students in peer reviewed journals  
*Benchmark:* 70  
*2015/16:* 76 |
| 4.2 To publish research findings in book chapters, books and research monographs | Number of book chapters, books or research monographs published by CARBC researchers and students each year  
*Benchmark:* 25  
*2015/16:* 17 |
| 4.3 To disseminate research findings through reports, systematic reviews and other resources | Number of reports, systematic reviews or other resources published each year  
*Benchmark:* 36  
*2015/16:* 37 |
| 4.4 To achieve a high academic impact for BC addictions-related research so that it is well known, frequently requested and often cited | Number of citations in peer reviewed journals of research by CARBC scientists and graduate students per year  
*Benchmark:* 1,045  
*2015/16:* 1,470 |
| 4.5 To conduct seminars, lectures and occasional conferences on the state of knowledge and its application to policy, practice and the research agenda | Number of public research seminars, symposia or conferences convened or co-convened by CARBC  
Number of invitations to CARBC researchers to present at conferences or symposia each year  
Number of papers accepted for presentation by CARBC researchers and students at conferences or symposia each year  
* Benchmarks:* 5 / 25 / 35  
*2015/16:* 14 / 44 / 58 |
| 4.6 To contribute to teaching programs on substance use and addictions for undergraduate and graduate courses/programs | Number of courses in addictions issues taught by CARBC members at UVic  
Number of courses in addictions issues taught by CARBC members at other campuses  
* Benchmarks:* 6 / 3  
*2015/16:* 16 / 6 |
“To contribute to constructive communication and cooperation between producers, intermediaries and users of various types of knowledge for the implementation of evidence-based policy and practice.”

HIGHLIGHTS

The knowledge mobilization team was heavily involved in work with schools and campuses this year. The Helping Schools project worked with educators to develop 24 curricular support resources and developed or revised several other resources to support effective policy and practice in drug education. The Changing the Culture of Substance Use project continued to work with groups on eleven campuses across BC and this year helped launch a new web-based platform for knowledge sharing and collaborative action. Researchers and staff reviewed and revised ten of the substance use information sheets for the Here to Help website to ensure the messaging was both consistent with a health promotion perspective and engaging to our core audiences.

Our website officially migrated to UVic’s web environment on April 1, 2015. Some improvements we saw as a result of the move were a robust and easily searchable publications database, the ability to link faculty and staff profiles and publications with projects, and more facts and stats information. There were a total of 28,492 visits to the CARBC website with 51,196 page views. AOD Monitoring pages were viewed 6,945 times and Helping Schools pages 6,882 times.
SUCCESSFUL APPLICATIONS FOR NEW KNOWLEDGE MOBILIZATION FUNDING

**Patient to Patient (OST Patient Handbook)**, BC Ministry of Health, $24,000, 2015-16.

**Competencies and curricular resources related to responsible and problem gambling**, Gaming Policy Enforcement Branch, $23,500, 2015-16.


CURRENT PROJECTS

**Alcohol and Other Drug Screening and Education**

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

**Funding bodies:** BC Mental Health Society Branch and BC Ministry of Health

**Background:** Alcohol and other drug screening and education is an ongoing project aimed at increasing the reach of assessment tools and harm reduction information to help more people in BC take more control over their health. Promoting health through screening and education is in keeping with the recommendations in *Healthy Minds, Healthy People: A ten-year plan to address mental health and substance use in British Columbia*.

Among other recommendations, the publication encourages BC agencies to take action to improve the reach of self-management and supported self-management tools, prevent substance-related problems and reduce costs to government by screening for hazardous drinking, and encourage uptake of evidence-based substance use information through heretohelp and other reputable web portals.

**Activities this year:** In 2015-16, we introduced paper based drug screening as part of our support to the *Beyond the Blues Education and Screening Day* project. Our screening and education page was viewed 2,046 times, and 297 individuals completed alcohol or drug use screens at 70 community sites in BC and the Yukon during a Beyond the Blues Education and Screening Day.
Changing the Culture of Substance Use on Campus

**Investigators:** Remocker, C., Dyck, T., Reist, D., Joosse, S., Streatch, S. and Morris, J.

**Funding body:** BC Ministry of Health

**Background:** Nested within the *Healthy Minds | Healthy Campuses* provincial community of practice project, Changing the Culture of Substance Use is a project that works with post-secondary institutions to assess and address the factors that promote healthier relationships with substances on campus. The project involves developing campus networks that are curious about the role substances play on campus and how we can shape a positive campus culture with staff and students alike. The project works with key campus stakeholders to develop an array of vibrant resources and tools housed in an online social learning repository for promoting campus-wide wellness using a socio-ecological approach.

**Activities this year:** In 2015-16 our activities included:

- co-fostering capacity building with leaders in 11 post-secondary institutions across BC to collaborate in developing substance use strategies that support the health and well-being of all campus members
- administering $20,000 in mini-grants to 8 post-secondary institutions to develop project-specific initiatives and evidence-informed tools and resources
- Initiating the development of provincial working groups in various areas related to alcohol, including on the intersection of alcohol, gender and sex
- researching and evaluating evidence-based strategies for promoting a comprehensive approach to addressing substance use in the campus community
- developing co-created resources, including a webinar series, video tool series, and promising practice guides based on the experiences of campus members across BC
• Assisting with community rebranding efforts
• Meeting and working with individual campuses in BC to develop strategies and tools for addressing substance use concerns (particularly alcohol) and encourage uptake of a socio-ecological approach to responding to challenges around inappropriate substance use and related behaviours
• Identifying and articulating evidence-based promising practices around core facets of campus health promotion (health capacity, inclusion and connectedness, risk management, and regulation and support)
• Providing consultation and developing tools and resources to support implementation of these promising practices, as well as links to relevant literature and articles in CARBC’s Matters of Substance blog series

Healthy Relationships with Food and Substances on Campus

**Investigators:** Reimer, B., Remocker, C., Dyck, T., Reist, D., Streatch, S. Hudson, M., Hine, S., and Kohl, L.

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

**Background:** This project aims to develop a strategy for addressing the intersection of eating difficulties and substance use problems in the post-secondary setting. The project involves bringing campus stakeholders together to discuss the complex intersections of food and substance use on campus, and to identify prevention and intervention strategies to reduce harm and promote health. While students often experience a continuum of healthy to unhealthy relationships with food and substances, the co-occurrence of “binge eating” and “binge drinking” is associated with increased risk and harm. In fact, many of the behaviours traditionally associated with unhealthy patterns of alcohol consumption (especially problems at work or school and regretted sexual activity) are increased when “binge eating” and “binge drinking” occur together.

**Activities this year:** This project is a collaboration with Canadian Mental Health Association, BC Division, and the Jessie’s Legacy Program of Family Services North Shore. Our work this year involved continuing to engage with BC post-secondary institutions to explore the issues related to psychoactive substance use and eating. This included hosting a webinar that looked at the complexity of influences on eating and substance use behaviours and ways to address these influences and shape the campus culture. The goal is to use the experiences and observations shared by campus members to help institutions move forward in this area and define how CARBC, JL and CMHA might help.

Selkirk College students prepare a meal as part of the Selkirk dinner basket conversations, an initiative of the Changing the Culture of Substance Use on Campus project.
Helping Communities and Supporting Systems

**Investigators:** Reist, D., Reimer, B., Dyck, T., Andrew, C., Bodner, N. and Souza, E.

**Funding body:** BC Ministry of Health

**Background:** Helping Communities and Supporting Systems is an ongoing project aimed at promoting a health promotion approach and helping organizations and other stakeholders develop tools and mechanisms for addressing the impact of alcohol and other drug use on individuals, families and neighbourhoods in BC. This ongoing project involves working with communities and systems throughout the province to promote health and well-being relative to substance use. The project revolves around the notion that drug-related problems in our society are more than a matter of personal responsibility. An individual’s choices about alcohol and other drugs—including when, where and how to use them—are strongly influenced by social and environmental factors in their community. The project focuses on four core areas of health:

- **Health capacity:** shaping the community environment to make it conducive to health as well as developing the knowledge and skills that allow individuals to take control of their own health
- **Inclusion and connectedness:** offering a variety of means and contexts to help citizens feel connected to each other and to the community
- **Managing risk:** promoting safer contexts and less risky behaviour among individuals
- **Interventions:** regulating the community environment and supporting individual behaviour change

**Activities this year:** In 2015-16 the Helping Communities and Supporting Systems project involved

- providing consultation and support to community members and agencies in Haida Gwaii
- working with a group of OST patients to develop a “patient to patient” handbook on the OST program in BC
- ongoing engagement with
  - BC Health Literacy Network (member)
  - BC Partners for Mental Health and Addictions Information (member)
  - BC School-Centred Mental Health Coalition (member)
  - Child and Youth Mental Health and Substance Use Collaborative (co-chair of Substance Use Clinical Faculty)
  - Public Health Association of BC (board member, co-chair of Capacity Building Committee)
Helping Schools

Investigators: Reist, D., Reimer, B., Andrew, C. Nicolussi, G. and Bodner, N.

Funding bodies: BC Mental Health Society Branch, BC Ministry of Health, BC Ministry of Finance and Health Canada

Background: Helping Schools is an ongoing project aimed at assessing evidence, identifying promising practices, developing resources to support effective responses to substance use (and other potentially addictive behaviours), and providing consultation and support to educators and their partners—parents, health professionals and others in the school community. These activities support comprehensive school health, an ecological approach that does not focus simply on “fixing” students but aims to change the school environment and actively engage students in the learning process. Rather than relying solely on a drug education program to teach children how to make healthy choices, the whole-school approach encourages the school itself—its structures, policies, procedures, staff and partners—to operate in a healthy way and thereby both model and promote “health.” Although comprehensive school health programs have components that address individual competence and resilience, they also focus on changing the culture of the school to encourage greater school attachment and involvement. Together, these factors have been shown to reduce alienation from the school and from the values of the larger society, improve academic performance and increase health and wellness.

Activities this year: In 2015-16 the Helping Schools webpages were viewed 6,882 times and the project involved

- developing sets of literacy competency statements related to drug use and related to gambling to guide education practice and resource development
- developing 24 classroom instructional ideas related to drug education and 5 related to gambling that can be delivered in mainstream curricular subjects (e.g., Social Studies, English Language Arts, Physical and Health Education and Mathematics)
- work on an online interactive drug history timeline
- engaging directly with three school districts in resource development and consulting with numerous others on the utility of the resources being developed
- providing professional learning opportunities and consultation to schools and education partners, including presentations on effective drug education at provincial conferences and professional development workshops with educators and their partners (e.g., public health, parents)
- promoting health promotion within the school setting through print, online and social media channels
Here to Help Information Products

**Investigators:** Reimer, B., Reist, D. & Remocker, C.

**Funding bodies:** BC Mental Health Society Branch and BC Ministry of Health

**Background:** Here to Help is an ongoing project aimed at helping all people in the province learn how to better prevent and manage mental health and substance use issues—at home, in the workplace and in the community. Our part in the project involves developing and updating substance use information products for distribution on the [heretohelp](https://heretohelp.org) website. These activities support health literacy, the knowledge and skills people need to maximize their health within their environments. Drug literacy, a type of health literacy, means imparting the knowledge and skills needed to effectively navigate a world in which psychoactive substances are present and commonly used. This project therefore plays a key role in helping people in the province make better decisions about substance use in the context of their own unique situations.

**Activities this year:** In 2015/16 the Here to Help project included:

- reviewing the needs related to linguistically and culturally appropriate mental health and substance use resources for BC residents whose primary language isn't English (this involved collaborating with the Canadian Mental Health Association, BC Division and consulting with BC multicultural organizations)
- drafting a toolkit for family and community members to help young people learn how to be thoughtful and intentional in their use of substances

Understanding Addiction (online training)

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

**Funding body:** Canadian Mental Health Association/Community Action Initiative

**Background:** This project involves developing and testing an online training program for community-based health and social service workers in non-clinical settings who assist and support vulnerable people in BC in various ways. Understanding Addiction (formerly Helping People with Addictive Behaviours) seeks to teach people the “spirit of motivational interviewing” and basic skills to apply the core principles in everyday situations. Understanding substance use and effective ways to respond to problems requires an open mind and an appreciation of basic health promotion and harm reduction principles. Research and common sense suggest that truly helping people who are struggling with mental health and substance use issues—or other complex human problems—requires compassion, patience and other skills that build trust. Trust is key to helping vulnerable people feel safe and confident enough to identify the factors that contribute to their problems and, more importantly, articulate a path forward that matches their needs and desires.

**Activities this year:** CARBC is one of several partners in this project. This year, minor adjustments were made to the content following the second pilot and the material was moved to a new, more flexible platform. Following these changes the training program was offered on cost-recovery basis and evaluation was conducted. Of the 12 learners completed the course in order to receive a certificate

- 100% indicated that they have a clearer understanding of the complexity of addictive behaviours as a result of taking the course.
- 83% indicated that they had increased their skills and confidence as a result of taking the course.
- 83% indicated that they increased their awareness of attitudes that contribute to stigma and discrimination towards people who struggle with addiction.
**Visions: BC’s Mental Health and Addictions Journal**

**Investigators:** Reimer, B. and Reist, D.

**Funding body:** BC Mental Health Society Branch and BC Ministry of Health

**Background:** This is an ongoing project aimed at increasing the representation of substance-related information in the award-winning quarterly magazine. It is written by and for a range of BC audiences: people who have experienced mental health or substance use problems, their family and friends, service providers, community advocates, leaders and decision-makers. **Visions** is a central knowledge exchange vehicle of the BC Partners for Mental Health and Addictions Information. The magazine creates a place where many perspectives on mental health and substance use issues can be heard. As one of seven BC partners, CARBC contributes articles that focus on substance use and socio-ecological approaches to understanding, addressing and managing substance use issues. This project therefore plays a key role in helping to build a shared understanding of substance use from a health promotion perspective.

**Activities this year:** Our efforts focused on increasing the representation of information about substance use in the journal. CARBC contributed to the Editorial Committee for the four issues produced this year and provided one article for one of the issues.

**NEW OR REVISED HEALTH PROMOTION RESOURCES**

**Understanding Substance Use: a health promotion perspective**

**COMMITTEE MEMBERSHIPS**

- Andrew, C. BC School-Connected Mental Health Coalition (BCSCMHC)
- Andrew, C. BCSCMHC Summer Institute on Promoting the Mental Health of Young People
- Andrew, C. BC School Connectedness Project
- Belle-Isle, L. Chair, National Steering Committee for the Canadian Drug Policy Coalition
- Belle-Isle, L. CIHR Review Committee Member, HIV/AIDS Community-Based Research Program
- Benoit, C. Canadian Society for the Sociology of Health
- Benoit, C. Sociologists for Women in Society
- Benoit, C. International Sociological Association, Occupational Groups Section, Social Welfare Section, Sociology of Health Section
- Benoit, C. International Institute of Sociology
- Benoit, C. American Sociological Association
- Benoit, C. Canadian Sociology Association
- Benoit, C. Canadian Public Health Association
- Benoit, C. HerWay Home Community Advisory Committee, Victoria, BC
- Benoit, C. HerWay Home Communications Committee, Victoria, BC
- Benoit, C. Genomics, Society and Ethics Advisory Committee, Genome BC
- Benoit, C. Advisory Board Member, Canadian Society for the Sociology of Health
- 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. Program Advisory Committee, IMPART: Intersections of Mental Health Perspectives in Addictions Research Training
- Benoit, C. International Scientific Advisory Board, NIHR King’s Patient Safety and Service Quality Research Centre, King’s College, London, UK
- Brubacher, J. Chair, British Columbia Road Safety Strategy, Research and Data Committee
- Brubacher, J. Doctors of British Columbia, Emergency Medical Services Committee
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<tr>
<th>Name</th>
<th>Positions</th>
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<tbody>
<tr>
<td>Callaghan, R.</td>
<td>UNBC Associate Research Ethics Board member, UNBC Animal Care and Use Committee (ACUC)</td>
</tr>
<tr>
<td>Callaghan, R.</td>
<td>UNBC Branch Regional Data Centre Steering Committee Member</td>
</tr>
<tr>
<td>Cherpitel, C.</td>
<td>American Public Health Association Section Council: Alcohol, Tobacco and Other Drugs Section</td>
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<tr>
<td>Cherpitel, C.</td>
<td>Ketttil Bruun Society for Social and Epidemiologic Research on Alcohol</td>
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<td>Cherpitel, C.</td>
<td>College on Problems of Drug Dependence</td>
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<td>Cherpitel, C.</td>
<td>International Network on Brief Interventions for Alcohol Problems</td>
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<td>Cherpitel, C.</td>
<td>International Network on Brief for Alcohol Problems Committee on Conflict or Interest</td>
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<tr>
<td>Dyck, T.</td>
<td>Healthy Minds</td>
</tr>
<tr>
<td>Jansson, M.</td>
<td>Steering Committee, BC Inter-University Research Data Centre, UVic Branch</td>
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<tr>
<td>Jansson, M.</td>
<td>Capital Region Action Team on Sexually Exploited Youth (CRAT)</td>
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<td>Society for Research in Child Development.</td>
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<td>Society for Research on Adolescence. Chair, Social Policy Awards Committee</td>
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<td>Lucas, P.</td>
<td>Board of Directors, Multidisciplinary Association of Psychedelic Studies Canada</td>
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<td>MacDonald, M.</td>
<td>Alberta Health Services, Population Public and Aboriginal Health Division, Social Determinants of Health Advisory Panel</td>
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<td>Executive Committee, Public Health Association of BC</td>
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<td>MacDonald, M.</td>
<td>Steering Committee Member, Canadian Public Health Association Conference 2015</td>
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<td>Peer Review Committee, Canadian Public Health Association Conference 2016</td>
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<td>MacDonald, M.</td>
<td>Public Health Knowledge Translation Network, NCCMT</td>
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<td>Advisory Committee, Public Health Agency of Canada, Core Public Health Competencies Project</td>
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<td>Simon Fraser University, Masters of Public Health Advisory Committee</td>
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<td>Population and Public Health Research Advisory Committee</td>
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<td>Steering Committee Member, Canadian Observatory on Homelessness</td>
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<td>Greater Victoria Coalition to End Homelessness Governance Review</td>
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<td>BC Partners for Mental Health and Addictions Information</td>
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<td>Reist, D.</td>
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<td>Child and Youth Mental Health and Substance Use Collaborative</td>
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<td>Mandatory Display Provincial Advisory Committee, Ministry of Finance</td>
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<td>Roth, E.</td>
<td>Graduate Committee, Department of Anthropology</td>
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<td>Speakers’ Committee, Department of Anthropology</td>
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<td>Dean of Social Sciences’ Faculty Advisory Committee</td>
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</table>
Roth, E.  
Vice-Chair, Human Ethics Committee, Office of Research Services

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Academic Advisory Board, Child and Youth Advocate of New Brunswick

Stockwell, T.  
National Alcohol Strategy Advisory Committee

Stockwell, T.  
Scientific Advisory Board, Alcohol Research Group, Emeryville, CA

Stockwell, T.  
Canadian Academy of Health Sciences

Stockwell, T.  
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Stockwell, T.  
World Health Organization Technical Advisory Group on Alcohol and Drug Epidemiology

Vallance, K.  
Drug Overdose and Alert Partnership

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American Psychological Association

Woodin, E.M.  
Association for the Advancement of Behavioral and Cognitive Therapies

Woodin, E.M.  
Canadian Psychological Association

Woodin, E.M.  
Society for Prevention Research

Woodin, E.M.  
Society for a Science of Clinical Psychology

Woodin, E.M.  
Board Member, LifeRing Canada Peer Support for Secular Recovery

Zhao, J.  
Kettil Bruun Society for Social and Epidemiological Research on Alcohol
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<th>OBJECTIVE</th>
<th>PERFORMANCE INDICATORS</th>
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| **5.1** To ensure access to relevant knowledge while working in partnership with policymakers and practitioners in planning and implementing projects to address substance use | Number of projects in which CARBC members collaborate with policymakers or practitioners  
_Benchmark: 15_  
2015/16: 39 |
| **5.2** To provide proposals, briefings and submissions to government and parliamentary inquiries, policy advisors and relevant provincial and national committees on emerging issues related to substance use | Number of policy proposals contributed to by CARBC members each year  
Number of invitations received each year to make submissions to policy forums, select committees or other such bodies  
Number of provincial or national committees, advisory boards or other such bodies on which CARBC members are active  
_Benchmarks: 5 / 5 / 20_  
2015/16: 9 / 10 / 45 |
| **5.3** To develop and promote resources with the potential to make direct contributions to policies, programs or service delivery systems | Number of resources completed in any one year  
_Benchmark: 10_  
2015/16: 68 |
| **5.4** To facilitate mechanisms that increase the sharing of knowledge among policymakers, practitioners, researchers and community members related to challenges, trends and effective interventions for promoting health and preventing harm related to substance use | Number of networks or communities of practice in which CARBC members are active  
Number of multi-sectoral symposia or knowledge exchange events each year  
_Benchmarks: 20 / 1_  
2015/16: 16 / 15 |
| **5.5** To provide access to balanced factual information on substance use and related harms and health promotion approaches through a variety of knowledge exchange strategies | Number of visits to CARBC websites each year  
Number of articles in the print media and interviews used by the electronic media annually as a result of CARBC activities  
Number of e-bulletins/blog articles published each year  
Publication of articles from CARBC members in magazines, newsletters, websites and non-refereed journals each year  
Number of consultations provided each year  
_Benchmarks: 30,000 / 150 / 10 / 5 / 10_  
2015/16: 28,492 / 170 / 18 / 15 / 79 |