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.

GUIDING PRINCIPLES

The work of the Centre for Addictions Research of BC (CARBC) will continue to be guided by the following principles:

Collaborative relationships
Dynamic, collaborative relationships are essential for maintaining relevance to the multi-faceted concerns related to substance use and addictions. Key relationships include those with 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, cannabis 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

KEY RESULTS 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
Message from the Advisory Board Chair

Welcome to the 2016-17 Annual Report of the Centre for Addictions Research of BC. In this latest account of our activities, you will find detailed information on each of the Centre’s key result areas: building capacity, conducting research, disseminating research findings, and improving public policy and practice.

Our network of dedicated and hardworking staff, expert researchers and dazzling students, and invaluable community research and funding partners, have had an outstanding year of achievements. Among the myriad highlights at CARBC, I wish to mention the following:

- 30 graduate students under supervision from faculty in multiple relevant disciplines (with success in applying for external scholarships)
- $3.3 million in new funding
- 100 peer-reviewed publications in high quality journals
- the five-year external review of the Centre was successfully completed, which had many complimentary things to say about our work and its wide impact and also raised concerns about taking steps urgently needed to renew and refresh the CARBC academy as several CARBC-affiliated faculty approach retirement
- 545 stories generated in the traditional media, including numerous interviews for CBC Radio and TV and national papers such as The Globe and Mail
- a growing social media presence through our Twitter and Facebook accounts

On effectively disseminating research via social media, I would highlight the work of two graduate students here. One is Renee O’Leary’s (Social Dimensions of Health) report on e-cigarettes and harm reduction (“Clearing the Air around E-cigarettes”) was retweeted around the world from Afghanistan to Zimbabwe. The other is Audra Roemer’s (Psychology) systematic review published in the Journal of Studies on Alcohol and Drugs was the top downloaded and cited article for that journal last year.

The scope of our work has become increasingly national and international, which has led to consideration of a new name reflecting this new focus.

On behalf of the Advisory Board, I wish to thank and congratulate all those who have made this another outstanding year at CARBC.

Michael J. Prince, PhD
Lansdowne Professor of Social Policy, University of Victoria
Chair, CARBC Advisory Board
Message from the Director

Welcome to this latest chronicle of the amazing productivity of our faculty, staff and students and the impacts of their work on harm reduction, prevention and treatment of problems relating to substance use in Canada. I am happy to report that in 2016 we passed a five-year review conducted by a panel of three independent scientists chaired by Dr Robert Mann, Senior Scientist with the Centre for Addiction and Mental Health. Along with a recommendation (“unanimously and strongly”) that the Centre’s status as a research centre of the University of Victoria be renewed, a number of specific recommendations were made with an eye to our future sustainability. Principally, it was recommended that the Centre’s leadership needs to be engaged in the faculty hiring process at the University in keeping with the Centre’s foundational Memorandum of Understanding which undertook to create seven affiliated faculty appointments as a condition of accepting an endowment of $10.55 million. It suggested some urgency given a number of pending retirements from the existing faculty based at the Centre. It also made recommendations for the University to ensure improved benefits and pensions for staff employed at its research centres and for additional space to be provided to house the growing active membership of the Centre. I am happy to report that a process is underway in collaboration with the offices of the Vice President of Research and also the Provost to explore continuation of UVic faculty affiliated with CARBC. In addition, we have been supported to expand our Victoria office space a little which is most welcome.

A process has been underway to identify a new name for the Centre given concerns about the connotations of the outdated term “addiction” and the provincial designation. We are awaiting approval of a new name (the Canadian Institute for Substance Use Research) by the University Senate. This name was adopted after a lengthy consultation process with the full membership and Advisory Board of CARBC. Many letters of support for the name change were gratefully received both from within UVic and from significant national bodies concerned with substance use policy, health and research.

Following the Review, the CARBC Faculty and Advisory Board engaged in the preparation of a strategic plan for 2017-2021. This document is available on request. With the pending legalisation of cannabis, we made an important strategic decision to add cannabis producers and retailers to the list of commercial vested interest groups from whom we will not accept funding nor have as members those who have done so. We are only too aware of how powerful industry interests can potentially distort the focus and dissemination of research. Other such groups include the alcohol, tobacco, gambling and pharmaceutical industries.

Tim Stockwell, PhD  
Director, CARBC  
Professor, Department of Psychology  
University of Victoria
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 Marjorie MacDonald
Scientist (Nursing)

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)
Our People & Partners

**Staff (Victoria)**

**Katrina Barber**  
Research Assistant

**Meaghan Brown**  
Research Assistant

**Randi Brown**  
Research Assistant

**Emma Carter**  
Administrator

**Geoff Cross**  
Research Assistant

**Charlotte Czerwinski**  
Work study student

**Megan Deyman**  
Research Assistant

**Stephanie Dion**  
Work study student

**Ben Donoghue**  
Research Assistant

**John Dorocicz**  
IT Support

**Rebecca Elliot**  
Work study student

**Jackson Flagg**  
Research Assistant

**Amanda Farrell-Low**  
Communications Officer

**Ari Franklin**  
Research Assistant

**Catherine Hacksel**  
Research Assistant

**Adele Horbulyk**  
Work study student

**Dakota Inglis**  
Research Associate

**Andrew Ivsins**  
Research Assistant

**Caitlin Janzen**  
Research Coordinator

**Chantele Joordens**  
Research Associate

**Chelsie Kadgien**  
Transcriptionist

**Alex Kent**  
Research Assistant

**Bonnie Krysowaty**  
Research Assistant

**Megan Lowe**  
Work study

**Celeste Macevicius**  
Transcriptionist

**Samantha Magnus**  
Research Assistant
Staff (Victoria), cont’d

Renay Maurice
Research Assistant

Megan Mills
Research Assistant

Shane Morrissey
Research Assistant

Chris Pauley
Research Assistant

Jessica Pitman
Research Assistant

Tina Revai
Research Assistant

Jeremy Riishede
Administrative Coordinator/Research Assistant

Sana Shahram
Research Associate

Lindsay Shaw
Research Assistant

Adam Sherk
Research Associate

Justin Sorge
Research Associate

Heather Strosher
Research Coordinator

Leah Shumka
Research Associate

Michaela Smith
Research Assistant

Kate Vallance
Research Associate

Jen Theil
Assistant to the Director

Thea van Roode
Research Coordinator

Joanne Thompson
Research Assistant

Jonathan Woods
Communications Coordinator
Staff (Vancouver)

Cindy Andrew
Program Consultant, Helping Schools

Nicole Bodner
Research Assistant

Dr Tim Dyck
Research Associate

Kristina Jenei
Research Assistant

Gaelle Nicolussi Rossi
Research Assistant

Bette Reimer
Research Associate

Catriona Remocker
Research Associate

Cathy Spence
Assistant to Dan Reist

Post-Doctoral Fellows

Dr Mahboubeh Asgari
(Education)

Dr Sana Shahram
(Nursing)

Dr Trudy Norman
(Nursing)

Site Director

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

Dr Lynne Belle-Isle
Project Consultant, Canadian AIDS Society

Dr Laurence Bosley
Director, Addictions Services, Island Health

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

Chief Del Manak
Chief Constable, Victoria Police Department

Inspector Scott McGregor
Community Services Division, Victoria Police Department

Dr Perry Kendall
Provincial Health Officer, BC Ministry of Health

Andrea Langlois
International Centre for Ethnobotanical Education

Philippe Lucas
Vice President, Patient Services, Tilray

Erika Mundel
Senior Policy Analyst, First Nations Health Authority

Warren O’Brien
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 Oliver Schmitdke
Associate Vice President, Research, University of Victoria
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 Bonnie Leadbeater
Professor, Department of Psychology, University of Victoria

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

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

Dr Gerald Thomas
Director, Alcohol & Gambling Policy, Healthy Living & Health Promotion, BC Ministry of Health

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

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

Philippe Lucas
Vice President, Patient Services, Tilray

Samantha Magnus
Health Information Analyst, Methodologies and Cross Sector Analysis, BC Ministry of Health

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
Research Affiliates cont’d

Dr Diane Rothon
Physician

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

Dr Kara Thompson
Assistant Professor, Department
of Psychology, St Francis Xavier
University

Dr Mikhail Torban
Researcher

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), University of Victoria

Dr Lynne Belle-Isle  
Social Dimensions of Health Program (PhD), University of Victoria

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

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

Kelly Davidson  
School of Health Information Science (MSc), University of Victoria

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

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

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

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

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

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

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

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

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

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

Bethany Jeal  
School of Nursing (MN), University of Victoria
Graduate Students Cont’d

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

Antonio Marante  
School of Health Information Science (MSc), University of Victoria

Renay Maurice  
Department of Sociology (MA), University of Victoria

Heather McArel  
School of Public Health and Social Policy (MPH), 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

Lindsay Shaw  
Department of Anthropology (MA), University of Victoria

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

Krystal Summers  
Social Dimensions of Health Program, University of Victoria

Lee Taylor  
School of Health Information Science (MSc), University of Victoria

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

Andrea Appollos  
School of Nursing (BA, Honours)

Nate Bomans  
School of Nursing (BA, Honours)

Charlotte Czerwinski  
Faculty of Kinesiology (BA, Honours)

Randi Brown  
School of Nursing (BA, Honours)

Sasha Goatley  
Department of Psychology (BA Honours)

Megan Lowe  
School of Health Information Science (BA, Honours)

Volunteers

Kiran Bhangu  
Harpreet Bhela
Andrew Boyce  
Cynthia Chao
Megan Deyman  
Amanda Farrell-Low
James Fraser

Sasha Goatley  
Eric Huang
Dakota Inglis  
Rae Ismail
Jacob Koudys  
Hana Mildenburger
Sam Perreault

Lindsay Shaw  
Hannah van Mook
Nicole Vishnevsky  
Nicole Warren
Janithri Withanage  
Kara Whitlock
Cathy Zwicker

CARBC volunteers undertaking cultural sensitivity and naloxone training
COLLABORATING CENTRES

Canada

Canadian Centre on Substance use and Addiction, 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, 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:**

- AIDS Vancouver Island
- Burnside Gorge Community Association
- CRD Child and Youth Network
- CRD Healthy Schools
- Greater Victoria Coalition to End Homelessness
- Office of the Superintendent of Motor Vehicles, BC
- Our Place Society
- Peers Victoria Resource Society
- Society of Living Intravenous Drug Users (SOLID)
- Together Against Poverty Society
- Victoria Cool Aid Society
- Tri-District (Sooke, Greater Victoria, Saanich School Districts) Interagency Committee

**Vancouver:**

- Dr. Peter Centre
- Drug Users Resource Centre (DURC)
- Eastside Illicit Drinkers for Education
- Health Initiatives for Men (HIM)
- Portland Hotel Society
- Positive Living Society of BC
- Providence Health Care
- Qmunity
- School District #42 (Maple Ridge)
- Vancouver Area Network of Drug Users (VANDU)
- Vancouver Coastal Health
- YouthCo AIDS Society
Our People & Partners

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

**Rest of Canada:**
- CAN, Canadian Association of People who use Drugs
- ON, Canadian Centre for Justice Statistics (CCJS), Statistics Canada
- CAN, Canadian Centre on Substance Abuse, Ottawa
- CAN, Canadian Drug Policy Coalition
- CAN, Canadian Institute for Health Information (CIHI)
- CAN, MADD Canada
- CAN, National Collaborating Centre for Determinants of Health
- CAN, Public Health Agency of Canada, Ottawa
- ON, Art Manuel House, Toronto
- ON, Canadian Mental Health Association, Sudbury Branch
- ON, Centre for Addiction and Mental Health, Toronto
- ON, City of Toronto/Seaton House Annex Harm Reduction Program, Toronto
- ON, Haven Toronto, Toronto
- ON, Good Shepherd Ministries, Toronto
- ON, Haldimand-Norfolk Public Health
- ON, Ministry of Transportation, Government of Ontario
- ON, National Collaborating Centre for Methods and Tools
- ON, Ottawa Inner City Health, Ottawa
- ON, Propel Centre for Population Health Impact, University of Waterloo
- ON, Public Health, Ontario
- ON, Shelter House (Kwae Kii Win Centre), Thunder Bay
- ON, Toronto Public Health
- ON, Wesley Urban Ministries, Hamilton
- NS, Dalhousie University
- NS, National Collaborating Centre for Determinants of Health
- NS, St. Francis Xavier University
- QC, Institut National de Santé Publique du Québec (INSPQ)
- QC, National Collaborating Centre for Healthy Public Policy
- 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 were successful in a wide range of research and knowledge exchange funding applications worth approximate $3.3 million over the years for which they were awarded. There was a good mix of formal peer reviewed research funding as well as several major government contracts. This new work reflects emerging priorities in the Canadian substance use field such as responding to the opioid crisis, supporting Canadian jurisdictions to introduce legal cannabis, evaluating evidence-based alcohol policies and assessing patterns of use, harms and economic costs associated with use of different psychoactive substances.

Successful applications to funding competitions

*Assessing the harms and costs of substance use in Canada.* Canadian Centre for Substance Use and Addictions (CCSA), $130,000 from 2016 to 2017.

*A rapid evidence assessment of literature on best practices in the care of infants with prenatal substance exposure in foster care.* Ministry of Children & Family Development (MCFD)/UVic Shared Research Grant, $10,000, from 2016 to 2017.

*Alcohol and other drug surveillance and policy interventions.* BC Provincial Health Services Authority, $184,000, from 2017 to 2018.


*Navigating the ethics of inpatient syringe exchange in a large acute care hospital.* Canadian Institutes of Health Research (CIHR), Catalyst Grant, $99,921, from 2016 to 2018.
Managed Alcohol Programs: Evaluation Effectiveness and Policy Implications. Canadian Institutes of Health Research (CIHR), Partnerships for Health System Improvement (PHSI) Grant $400,000, Michael Smith Foundation for Health Research (MSFHR) $80,000, the Centre for Addiction and Mental Health (CAMH) $15,000 from 2016 to 2019.


Making It Work: Supporting Community Approaches to Integrated Service Models for People Living with HIV, HCV, Ill Mental Health, and/or Problematic Substance Use. Canadian Institutes of Health Research, Catalyst Grant: HIV/AIDS Community-Based Research, $33,000, from 2016 – 2017.

Victoria Site- Canadian Research Initiative on Substance Misuse. BC Centre for Excellence in HIV/AIDS $5,000, Centre for Addictions Research of BC $5,000, UVic Provost’s Community Engaged Scholar Award $2,500, and YES2SCS $6000, from 2016 to 2017.

Substance Use Patterns Among Homeless Populations (Point in Time Count 2016). UVic Provost’s Community Engaged Scholar Award, $2,000, 2016.

Commissioned contracts won and other grants


BC Partners for Mental Health and Addiction, BC Mental Health Society Branch, BC Mental Health and Substance Use Services, Provincial Health Services Authority, $240,424, from 2016 to 2017.

Competencies and curricular resources related to responsible and problem gambling. BC Gaming Policy Enforcement Branch, $47,000 from 2016 to 2017.

Total Income for 2016/2017

The chart below identifies our major sources of income (including funds carried forward) during the 2016/17 fiscal year. Combined surpluses (or deficits) carried forward and new revenue for the fiscal year was a total of $3,458,987. A large proportion of funding (39%) came from peer-reviewed grants (mostly CIHR), closely followed by funds from knowledge exchange and other contracts.

CARBC 16/17 Revenue and Carry Forward Summary

<table>
<thead>
<tr>
<th>Source</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Grant Competitions</td>
<td>39%</td>
</tr>
<tr>
<td>Other Research Grants and Contracts</td>
<td>15%</td>
</tr>
<tr>
<td>Knowledge Exchange Grants and Contracts</td>
<td>23%</td>
</tr>
<tr>
<td>Endowment</td>
<td>15%</td>
</tr>
<tr>
<td>Overhead</td>
<td>8%</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>OBJECTIVES</th>
<th>PERFORMANCE INDICATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>To maintain or increase national and international funding for substance</td>
<td>Maintain or increase funding for substance use research won by CARBC scientists from (a) Canadian and international peer reviewed sources (b) Canadian and international contracts</td>
</tr>
<tr>
<td>use and health research at CARBC</td>
<td>Benchmarks: (a) $750,000 (b) $150,000 per annum 2016/2017: (a) $2,796,488 (b) $597,424</td>
</tr>
<tr>
<td>To maintain or increase funding for knowledge exchange concerning substance</td>
<td>Maintain or increase funding for substance use knowledge exchange held by CARBC from (a) Canadian and international peer reviewed sources (b) Canadian and international contracts</td>
</tr>
<tr>
<td>use and health promotion at CARBC</td>
<td>Benchmarks: (a) $1,250,000 (b) $1,250,000 per annum 2016/2017: (a) $1,806,004 (b) $597,424</td>
</tr>
<tr>
<td>To maintain or increase the number of national and international funding</td>
<td>Maintain or increase number of funding applications for new research programs identified in one or more identified priority areas (see Key Result Area 2)</td>
</tr>
<tr>
<td>applications for long term research programs addressing research areas of</td>
<td>Benchmark: 15 applications 2016/2017: 27</td>
</tr>
<tr>
<td>high priority in Canada</td>
<td></td>
</tr>
<tr>
<td>To achieve successful national and international collaborations with</td>
<td>Number of projects initiated that involve (a) community partners (b) researchers with relevant expertise who are new to substance use and addictions research</td>
</tr>
<tr>
<td>researchers and community partners on projects that will lead to increased</td>
<td>Benchmarks: (a) 12 (b) 6 2016/2017: (a) 17 (b) 15</td>
</tr>
</tbody>
</table>
“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

We continue to engage a wide network of scholars from UVic and other universities in our research programs as well as a good number of graduate students from a wide array of relevant disciplines. We do, however, anticipate challenges ahead with sustaining our faculty as a number of our Scientists approach retirement. At the end of 2016 we said goodbye to Dr Cheryl Cherpitel who had served as a CARBC Scientist for over seven years. She is continuing her world-class research program on alcohol and injuries with the Alcohol Research Group in Emeryville, California. CARBC Faculty members Bernie Pauly and Cecilia Benoit received provincial and national awards this year.

Honours and Awards

Dr Cecilia Benoit 2017 Provost’s Community Engaged Scholar award, University of Victoria, Victoria, BC.
Dr Cecilia Benoit 2016 Governor General’s Award in Commemoration of the Persons Case, Status of Women Canada, Ottawa, Ontario.
Dr Bernie Pauly 2016 Island Health Research Scholar in Residence, Island Health, Victoria, BC.
Dr Bernie Pauly 2016 Sharon Martin Award for Community Development, Public Health Association of BC, Victoria, BC.
Dr Bernie Pauly 2016 B.C. Community Achievement Award, BC Achievement Foundation, Vancouver, BC.
Dr Tim Stockwell 2016 Social Science Award for Excellence in Research, University of Victoria, Victoria, BC.
<table>
<thead>
<tr>
<th>OBJECTIVES</th>
<th>PERFORMANCE INDICATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>To attract and retain high quality researchers from a broad range of disciplines to the BC substance use and addictions field</td>
<td>Maintain or increase number of (a) PhD qualified researchers and affiliates within CARBC each year (b) postdoctoral fellows with CARBC.</td>
</tr>
<tr>
<td></td>
<td>Benchmarks: 12 / 3</td>
</tr>
<tr>
<td></td>
<td>2016/2017: (a) 33 (b) 3</td>
</tr>
<tr>
<td>To attract and retain high quality students from a broad range of disciplines to the BC substance use and addictions field</td>
<td>Maintain or increase number of CARBC graduate students under supervision per year</td>
</tr>
<tr>
<td></td>
<td>Benchmark: 25</td>
</tr>
<tr>
<td></td>
<td>2016/2017: 29</td>
</tr>
<tr>
<td>To provide training opportunities and programs for the development of additional research skills among CARBC staff, students and affiliates, taking advantage of existing opportunities through CIHR and research partners, nationally and internationally</td>
<td>Maintain or increase number of research staff and/or students attending conferences or training events.</td>
</tr>
<tr>
<td></td>
<td>Benchmark: 15</td>
</tr>
<tr>
<td></td>
<td>2016/2017: 18</td>
</tr>
<tr>
<td></td>
<td>Contributions to graduate research training programs using substance use examples or content by CARBC faculty at UVic and other Canadian universities.</td>
</tr>
<tr>
<td></td>
<td>Benchmarks: a) 5 courses taught b) 5 guest lectures presented per annum.</td>
</tr>
<tr>
<td></td>
<td>2016/2017: (a) 6 (b) 14</td>
</tr>
</tbody>
</table>

CARBC Scientist Cecilia Benoit receiving her 2016 Governor General’s Award in Commemoration of the Persons Case from David Johnston, (now former) Governor General of Canada, in recognition of her “outstanding contribution to the goal of equality for women and girls in Canada.” (photo: MCpl Vincent Carbonneau - Rideau Hall)
“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

CARBC Faculty and collaborators engaged in a wide variety of research, mostly with practical policy and practice applications. Increasingly this research has had a national and international focus. Examples include a close collaboration with the Canadian Centre on Substance Use and Addictions to re-estimate the economic costs of substance use for all Canadian jurisdictions broken down by specific drug type, including alcohol, cannabis, tobacco, opioid drugs and psycho stimulants. We received a commission from the Swedish government to lead an international panel of alcohol research experts on a project designed to estimate the public health and safety benefits of their government alcohol monopoly. Our research on Managed Alcohol Programs has been widely disseminated and picked up not only across Canada but in several other countries.

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: Canadian Institutes of Health Research (CIHR) operating grant

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 emergency department 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, one journal article has been published and others are under preparation.
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., & Reist, D.

Funding body: Canadian Institutes of Health Research (CIHR)

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 knowledge synthesis project was to conduct a meta-narrative systematic review in which we have endeavored 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 final report was released with considerable media attention in January of 2017 and the executive summary is available on the CARBC website: http://www.uvic.ca/research/centres/carbc/assets/docs/report-clearing-the-air-review-exec-summary.pdf A protocol paper was published in the journal Systematic Reviews in 2016.
Key Result Area 3: Implementation of Quality Research

Canadian Student Tobacco, Alcohol and Drug Survey

**Principal Investigator:** Manske, S. (PI), **MacDonald, M.** (Co-I’s), **Thompson, J.,** Thompson-Haile, A., Zehr, W., MacKenzie, A., McGrath, E., Card, A., Asbridge, M., Mancuso, M., Murnaghan, D., Montreuil, A., Bourhis, R., Muhajarine, N., Wild, C., Schonlau, M., Brown, S., Elton-Marshall, T., MacDonald, J. & Turner, D.

**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:** 2018-19 will be the third year that CSTADS in BC has been affiliated with CARBC. In 2016-17, recruitment of schools took place in the spring and fall with data collection beginning in October and continuing through to May of 2017. A publication based on data from the 2014-15 cycle of CSTADS has just been published in the *Canadian Medical Association Journal* (CMAJ) Open.

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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, $2,000, University of Victoria.

**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 a descriptive analysis generated. These findings have been shared with key community partners and a publication drafted.
BC Alcohol and Other Drug Monitoring Project


Funding bodies in 2016/17: 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://www.uvic.ca/research/centres/carbc/stats/aod-trend-analyzer/index.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.

Evaluation of the effect of cannabis legalization on road safety

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

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

**Background:** Marijuana is the second most widely used recreational drug in the world after alcohol. It impairs the skills required for safe driving, and increases the risk of car crashes. The Canadian federal government will introduce laws to legalize marijuana in April 2017. It will then take approximately 18 months for the laws to be passed and put into force. Legalization of marijuana may result in more car crashes caused by drivers who are impaired by marijuana and this potential problem should be evaluated. Since 2011, the CIHR funded “Cannabis and Motor Vehicle Crashes” (CMVC) study has collected data on how often injured drivers in British Columbia test positive for marijuana, alcohol, and other drugs. This presents a unique opportunity. We propose to continue the same procedures as the CMVC study to investigate changes in the percentage of injured drivers who test positive for recent marijuana use following legalization of cannabis. Our aim is to inform policy targeting marijuana impaired driving. Our primary objective is to compare the percentage of injured drivers who test positive for marijuana after it is legalized versus before it was legalized. Our second objective is to get better estimates of how the risk of having a car crash varies with higher levels of THC (the active ingredient of marijuana). This information might help establish legal limits for driving after using marijuana.

Adolescent injury, substance use, and mental health: An exploration of rates, determinants, and comorbidities in Canadian survey data.

**Investigators:** Asbridge, M., Co-Is: Illie, G., Fitzpatrick, C., Macdonald, S., Mann, R., Fuselli, P.

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

**Background:** This analysis of secondary data sets is designed to achieve three objectives: 1. What is the self-reported prevalence of intentional and unintentional injury among Canadians 11-19 years of age? 2. What social determinants affect the rates and distribution of injury among Canadian adolescents? 3. What is the relationship between injury and poor mental health and substance use?
Cross-National Analysis of Alcohol and Injury

**Investigator:** Cherpitel, 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 emergency rooms in 30 countries.

**RESEARCH PRIORITY 2**

**EDUCATIONAL, LEGISLATIVE AND REGULATORY STRATEGIES**

**CARBC PROJECTS**

Police discretion with high risk substance using youth

**Investigator:** Macdonald, S. (PI), Pauly, B., Hardy, C., Roth, E., Wortley, S., Jansson, M., Baron, S., Stockwell, T., Lee, Z., Reist, D., Benoit, C., Lachowsky, N., & Urbanoski, K.

**Funding bodies:** Social Sciences and Humanities Research Council (SSHRC)

**Background:** The purpose of this research is to learn more about circumstances of interactions between the police and substance using youth and how these experiences affect their lives in regard to two major issues: (1) street checks, the practice of stopping, questioning and documenting (i.e. carding) individuals when no particular offense is being investigated, and (2) police discretion on whether to charge individuals caught for possession of drugs. The study group is youth aged 16 to 30 who used illicit drugs at least once per week in the prior 6 months. Interviews will be conducted with 450 youth from three BC communities: Victoria, Chilliwack and Prince George.

**Progress to date:** Data collection instruments and procedures have been developed and ethical approval to proceed with the study has been received.
The impact of minimum pricing on low, medium and high income areas of British Columbia

**Investigators:** Stockwell, T. (PI) & Zhao, J. (Co-I)

**Funding body:** Scottish Government

**Background:** CARBC was commissioned to reanalyse a unique data set we hold on minimum alcohol prices and alcohol-attributable hospital stays in British Columbia. The Scottish government passed legislation in 2012 to introduce a minimum unit price for alcohol but has been challenged by alcohol industry groups in the British and European courts for the right to implement this policy. We have contributed evidence that increased minimum prices reduce alcohol-attributable hospital stays and deaths. We were asked to see how this effect varied across regions of the province with low, medium and high income. Opponents of the policy measure, including alcohol industry representatives, have suggested that higher prices for alcohol would have negative effects on people with low income.

**Progress to date:** Our analysis found that in low-income regions there were substantially greater reductions in alcohol-attributable hospital admissions when minimum prices were increased. We argued that minimum pricing helps to reduce health disparities across income groups. We completed a report for the Scottish government, a conference presentation and have an article in press with the journal *Addiction.*

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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, Swedish Government.

**Background:** CARBC has been commissioned to 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:** The project has been successfully completed with report summaries posted on the internet in Swedish and English along with a full English report available on request. The results have been presented to the funder and at a Swedish alcohol conference. A paper was presented at an international conference and journal articles are in preparation.
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:** Data collection has been completed and a conference paper prepared.

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The Protection of Communities and Exploited Persons Act: A structural intervention impacting health equity for sex workers

**Investigators:** Benoit, C., (NPA), Atchison, C., Jansson, M., Reist, D. (Co-PIs); Abel, G., Aveline, D., Casey, L., Field, E., Magnus, S., Orchard, T., Phillips, R., Reimer, W., Shaver, F.

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

**Background:** Sex workers, as a group, experience common barriers to health and wellbeing, including pervasive stigma and discrimination in health care and social services. At the same time, they also report many individual differences in health, and in the vulnerabilities and risk factors they experience. The implementation of The Protection of Communities and Exploited Persons Act (PCEPA) in December 2014, amended the Criminal Code to criminalize—for the first time in Canada—the purchase of sexual services, and to further modify certain prohibitions related to advertising and communicating the sale of sexual services. This project examines whether the PCEPA—a natural experiment out of the control of the research team—has alleviated or exacerbated health inequities for sex workers as compared to before the new laws were implemented. We will compare policing and outcomes associated with the practices surrounding the sale of sexual services by sex workers of different genders and working in diverse venues before and after the implementation of PCEPA. The proposed research promises to a) advance our knowledge of health equity for marginalized populations; b) reduce avoidable risks and unmet health needs for sex workers in Canada; and c) develop community-based policies and practices in an effort to reduce the health inequities which exist between sex workers and other Canadians.

**Progress to date:** We have obtained ethics approval from the University of Victoria for this study and have started the data collection, data entry and transcription.
Municipal alcohol policies in BC: exploring best practices

**Investigators:** Stockwell, T. (PI) & Vallance, K. (Co-I).

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

**Background:** Municipal alcohol policies are sometimes developed formally, usually with a focus on how alcohol is allowed to be served on municipally owned premises and, as well, when special occasion licenses can be granted for one off events held in a municipality. There are also opportunities for municipal governments to influence the price, availability and promotion of alcohol in its local communities. The agency BC Healthy Communities has funded a BC-wide project that provides support funding to municipalities to develop their own municipal alcohol policy. CARBC was commissioned with the task of evaluating the extent to which this opportunity was taken up, the policies contained and the perceptions of key stakeholders regarding usefulness and effectiveness.

**Progress to date:** The project has been completed, a conference presentation given and a report provided to the BC Ministry of Health.

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**RESEARCH PRIORITY 3**

**COMMUNITY-BASED PREVENTION PROGRAMS**

**CARBC PROJECTS**

Working together: evaluating an integrated model of care for people experiencing homelessness and substance use problems

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

**Funding body:** Island Health Collaborative Grant, $14,995, 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 and the importance of harm reduction approaches. A primary outcome of this project has been to develop a strong research team that spans health and community sectors and with capacity for realist evaluation. With this critical groundwork in place, we undertook an integrated literature review of the implementation of harm reduction to inform the development of a longer term research proposal.

**Progress to date:** The team has completed realist evaluation training as well as training in the conduct of literature reviews. Our team has completed an integrative literature review of the implementation of evidence based harm reduction interventions that prevent harms of illicit drug use including supervised injection services, safer crack use, overdose prevention programs, opioid substitution therapy and needle exchange. KT summaries on harm reduction philosophy and policy and peer intervention have been developed.
Sex workers as educators: networking HIV prevention strategies


Funding body: Canadian Institutes of Health Research (CIHR)

Background: This study was initiated by Prostitutes Empowerment Education and Resource Society (PEERS) Victoria 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 and the intervention stage is completed. Various knowledge exchange strategies were organized, including a training day for health and social care providers. The training event combined 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. The data collection is also completed and the team has submitted articles to academic journals. Further articles are planned and a further grant application for interventions across Canada based on the knowledge obtained so far in this project. A CARBC bulletin has also been prepared.
**CARBC AFFILIATED PROJECTS**

**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:** Canadian Institutes of Health Research (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.

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

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

**Funding body:** Vancouver Island Health Authority

**Background:** This 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:** We are currently conducting a systematic review of evidence on the effectiveness of mandated treatment, considering three main types of mandates: through the legal system, employers, and child protection services. In this phase of the review, the focus is placed on methodologically strong studies that have looked at client outcomes during and following treatment. Upcoming phases of the review will focus on research studies that provide insights into how these different types of mandates work.
Managed Alcohol Programs: implementation and effectiveness

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

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

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 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 for Phase I has been completed in six sites with 175 MAP participants and 189 controls recruited. Eighty MAP participants and staff across the programs have completed qualitative interviews. 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. We are now in Phase II of the research with a specific focus on additional data collection and analysis that will allow for a larger sample, longer term follow-up of participants and controls to determine effectiveness. As well, we are undertaking specific qualitative analysis of implementation issues and the development of Indigenous led research in collaboration with Indigenous partners. To date, we have established an Indigenous Advisory Group and relationships with Indigenous partners interested in MAP programs. http://www.uvic.ca/research/centres/carbc/projects/active/projects/map-study.php

CARBC research on Managed Alcohol Programs was cited in an article in The Guardian, April 2016
**Investigators:** Pauly, B., Stockwell, T. (co-PIs), Wettlaufer, A., Clifton, C., Vallance, K., Brown, M., Larocque, C.

**Funding body:** Canadian Mental Health Association (CMHA), Sudbury Branch

**Background:** Established in late 2015, the Sudbury Managed Alcohol Program (MAP) is one of the newest MAP’s in Canada for people with severe and chronic alcohol use problems. As part of the national research study on MAPs being conducted within an overarching participatory and collaborative approach to research that involves academic and knowledge user partners (including service providers, regional and provincial policy makers), we were invited to conduct a program specific evaluation of the Sudbury MAP. As part of the national study, our goals are to 1) review and revise our established protocol for use in Phase II of a national multisite study; and 2) provide site-specific evaluation of the Sudbury MAP program. The evaluation focuses on outcomes related to housing, health, quality of life, alcohol consumption, alcohol related harms and use of health and other services.

**Progress to date:** The final report was presented in August, 2017.

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From research to practice: addressing the gaps in entry-to-practice HIV nursing competencies in Canada


**Funding body:** Canadian Institutes of Health Research (CIHR), Meeting, Planning and Dissemination Grant

**Background:** PLWH (People living with HIV) continue to encounter stigma from health care providers (including nurses, physicians, dentists, dental hygienists) largely due to insufficient knowledge and training. Education, preparation and mentorship in the delivery of and access to safe, compassionate, competent, and ethical HIV care is identified as important in addressing issues related to access and provision of healthcare. The proposed work will inform entry-level, competency-based nursing education, as well as the development of models to be designed and tested to promote knowledge uptake and translation to practice.

**Progress to date:** To date, a survey of Canadian nursing schools as to current HIV education and training and a systematic review of current research and gaps has been completed. A national meeting of leading nurse educators and researchers was held to examine current evidence and gaps to develop research priorities and inform core competencies for nurses. This work has been presented nationally.
Preventing and reducing harms of substance use in homeless shelter programs

**Investigators:** Wallace, B. (PI), McTavish, D. & Pauly, B. (Co-I)

**Funding body:** Vancouver Foundation, Develop Research Grant

**Background:** Emergency shelters provide low threshold shelter to those who are currently using substances as well as barring substance use by residents to support those who seek to avoid substance use. Under current provincial guidelines, BC shelters are expected to provide harm reduction supplies for those using substances. They also provide abstinence based supports for those who do not use substances. The issues related to substance use in shelters are complex and the shelter population is diverse. Both shelter staff and residents have identified the need to do things differently. Our research question is: What are the issues and challenges related to substance use in a shelter setting and what are strategies for addressing the harms of substance use and promoting health? We are answering this question using an overarching community based approach to research that involved the conduct of qualitative interviews and focus groups with shelter staff and residents to better understand the issues related to substance use and the implementation of harm reduction strategies in this setting.

**Progress to date:** From December, 2015 to January, 2016, we conducted focus groups with a total of 49 participants including shelter residents, shelter staff and harm reduction workers in one urban centre. This timing coincided with a dramatic increase of overdose deaths in the city and just prior to a public health overdose emergency being called in BC. To date, the data has been coded and one paper for publication is under review.

Bruce Wallace and Bernie Pauly were lead authors on CARBC Bulletin #15, which examined drug use and overdoses in social service agency washrooms.

**Every Washroom:**
**De facto consumption sites in the epicenter of an overdose public health emergency**
Supporting successful implementation of public health interventions: a realist synthesis

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

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

**Background:** Despite public health’s growing emphasis 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 healthcare, 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:** 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. Contexts, mechanisms, and outcomes specific to particular system-wide public health programs in these areas are being identified to produce a realist theory of supporting implementation of public health interventions. The protocol paper for this study was published in 2016 and a draft paper of the program theory is being reviewed.

Island Health alcohol and other drug treatment services

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

**Funding body:** 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:** Key providers of substance use services in the Island Health region have been identified and we have received ethical approval to proceed. A questionnaire has been sent out to the agencies and data collection is complete. We are in the process of analysing the data and plan to complete our report this 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:** Canadian Institutes of Health Research (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:** More than 100 policy documents from all Canadian provincial and territorial jurisdictions were analyzed and coded for key concepts. The findings have been presented at the International Society of Drugs and Alcohol and International Harm Reduction Association conferences. Two papers have been published and both received recognition as outstanding papers. Initial steps have been taken to interview key informants and preparatory work is undertaken to conduct a public opinion survey and media analysis.

Expansion of Antiretroviral Therapy and its Impact on Vulnerable Populations in Canada and Global Settings

**Investigators:** Hogg, R. (PI) & Roth, E.

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

**Background:** This CIHR Foundation Grant to Dr. Robert Hogg, SFU, has continued funding for the Momentum Health Study, a cohort study of Vancouver gay and bisexual men’s sexual health and substance use patterns.

**Progress to Date:** This year Momentum analyses were published in the following journals: AIDS and Behavior, Culture, Health and Sexuality, Substance Use and Misuse, Sexually Transmitted Diseases, Journal of Homosexuality, Journal of Urban Health, BMC Medical Research Methodology, Sexual Health, Sexually Transmitted Infections, and the Journal of Medical Internet Research.

Canadian HIV Women’s Sexual and Reproductive Health Cohort Study Phase 2: Addressing priorities in women-centred HIV care across the life course.

**Investigators:** Loutfy, M. (PI) & Roth, E.

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

**Background:** This is a renewal of a previous CIHR grant featuring analysis of over 1,500 HIV-positive women from British Columbia, Quebec and Ontario.

**Progress to Date:** This year a latent class analysis of HIV-positive women’s substance use patterns was submitted to the journal *AIDS and Behavior*, and requested revisions are now completed.
Healthy mothers, healthy families: Evaluating integrated treatment for pregnant and parenting women with addictions.


**Funding:** Canadian Institutes of Health Research

**Background:** Among women with problems related to their substance use, the majority are of child-bearing age, meaning that many face additional challenges related to pregnancy and parenting. Yet there are numerous barriers that prevent women in this target population from seeking help. Recognition of the unique needs and challenges faced by pregnant and parenting women with addictions has led to the development of integrated treatment approaches that link addiction treatment with maternal and child health and social services. Within Ontario’s addiction treatment system, approximately 20 integrated treatment programs have been in operation since 2003. On the basis of positive findings from a preliminary evaluation, programs funded through Ontario’s Early Childhood Development (ECD) Addiction Initiative were provided with sustained funding in 2006, followed by additional investment in 2012. With this new funding and with many programs entering their second decade of operations, there is a high level of interest among provincial stakeholders in continuing to build and improve on what has been developed to date. We are conducting a comprehensive, mixed methods evaluation of the impact of integrated treatment for pregnant and parenting women with addictions. Our objectives are to: 1) investigate the meaning and processes of program integration within the broad network of community-based health and social services; 2) evaluate women’s perceptions of care; 3) assess service capacity and client engagement in addiction treatment; and 4) evaluate maternal and child health outcomes and program cost-effectiveness. The work has a strong focus on health equity, with attention to differences in perceptions and outcomes across subgroups of the population.

**Progress to date:** Findings from the first, qualitative phase of this project have been published in 2 peer-reviewed articles, and were presented at the national annual conference of the Canadian Psychological Association. A comprehensive secondary analysis of administrative health data in Ontario is underway, with findings expected in the next fiscal year.
**RESEARCH PRIORITY 5**

**SOCIAL DETERMINANTS AND CONTEXTS OF SUBSTANCE USE**

**CARBC PROJECTS**

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


**Funding body:** Canadian Institutes of Health Research (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 Indigenous 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 (CPHFRI).

**Progress to date:** For Study 1, we have completed Phase 2 data collection and analysis (just over 100 interviews/focus groups) with the BC Health Authority and Ministry front line staff, managers, directors, and senior executives. Numerous presentations on Study 1 findings have been presented at regional, provincial and national conferences and publications are in development. For Study 2, we are in the process of analyzing social network analysis (SNA) data that focuses on inter-sectoral collaborations within the prevention of harms of substance use program and implications for the use of this methodology. For Study 3, we have updated the 2013 Health Equity Tools Inventory, including the development of a classification system and a template for assessing theoretical and practical criteria. We have developed a Health Equity tools workshop which has been delivered five times regionally provincially and nationally. Study 4 uses grounded theory to examine how public health practitioners navigate ethical issues. We have analyzed 30 interviews and developed our grounded theory. We have presented these findings at numerous conferences and have also drafted papers for publication. We have provided funding for nine student interns in collaboration with Health Authority partners. For more info please visit [www.uvic.ca/elph](http://www.uvic.ca/elph).
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:** Canadian Institutes of Health Research (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. The team is preparing articles for submission to academic journals.
Equity Oriented Primary Healthcare Interventions for Marginalized Populations: Addressing Structural Inequities and Structural Violence


Funding body: Canadian Institutes of Health Research (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.

CARBC AFFILIATED PROJECTS

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

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

Funding body: Canadian Institutes of Health Research (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.

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


Funding body: Canadian Institutes of Health Research (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 Primary Healthcare (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 prior to the intervention, following the staff education components, and at the end of the intervention. In-depth interviews were conducted with 35 staff members at the PHC sites. Analysis of each of these data sets, as well as integrated, mixed-methods analysis, is ongoing. The current focus of this project is the development of publications and KT products including a health equity toolkit. More information is available at www.equiphealthcare.ca.
An Indigenous equity lens for public health

Investigators: Loppie, C (PI), Carriere, J. (Co-PI), Kent, A., MacDonald, M., & Pauly, B. (Co-Is)

Funding body: Canadian Institutes of Health Research (CIHR), Planning and Dissemination Grant

Background: In Canada, decreased life expectations and poorer health exist among Indigenous peoples compared to the general population. As these disparities often result from structural inequities, an examination of the role of public health in the perpetuation or interruption of these inequities is warranted. The proposed project will utilize existing data, gathered through the CIHR-funding ELPH (Equity Lens in Public Health) program, to undertake a pilot-case analysis of one Health Authority's activities to enhance health equity for Indigenous peoples in the province of British Columbia. During a one-day meeting, the findings of this analysis will be presented to a group (~15) of key Indigenous and non-Indigenous community, policy and professional representatives, followed by a discussion that will inform development of future research priorities and work.

Progress to date: A provincial meeting of Indigenous public health leaders was held in spring, 2016 on the traditional territory of the Musqueam peoples. An overview of the ELPH program of research, the Xpey’ Relational Environments framework developed by Reading and Carriere, and a preliminary pilot case analysis of ELPH data were presented for discussion. Participants at the meeting highlighted the importance of Indigenous-led initiatives in future research endeavors, particularly the importance of undertaking research that foregrounds Indigenous health equity work. Recommendations for future work and research were identified. A publication on the Xpey’ Relational Environments Framework is in press.

RESEARCH PRIORITY 6

EVALUATION OF EFFECTIVENESS OF KNOWLEDGE TRANSLATION AND EXCHANGE ACTIVITIES AND STRATEGIES

CARBC PROJECTS

The implementation of evidence-based alcohol policies in Canada: a national knowledge translation project


Funding body: Health Canada, Substance Use and Addictions Program

Background: In this project, a national team is overseeing a rigorous assessment of the extent to which evidence-based alcohol policies are being implemented in Canadian provinces and territories. Policies being evaluated include pricing, availability, control of promotions, screening and brief interventions, impaired driving regulations and laws, drinking age laws and liquor law enforcement. In addition, the team is investigating the extent of implementation of additional strategies which support the implementation of these policies through the use of health messages, surveillance systems, a government control system for the distribution and retail sale of alcohol and a comprehensive provincial/territorial strategy. A report card will be prepared for each jurisdiction and comparisons made with a previous national exercise completed in 2013.

Progress to date: The scoring and data collection protocol has been completed and data collection is underway.
Table 3: Performance Indicators for Key Result Area 3 (Implementation of Quality Research)

<table>
<thead>
<tr>
<th>OBJECTIVES</th>
<th>PERFORMANCE INDICATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 To conduct research on the patterns, distribution, determinants and consequences of substance use in Canada and internationally</td>
<td>Number of epidemiological projects initiated, ongoing and/or successfully completed each year in this area.</td>
</tr>
<tr>
<td></td>
<td>Benchmark: 15</td>
</tr>
<tr>
<td></td>
<td>2016/2017: 10</td>
</tr>
<tr>
<td>3.2 To conduct research that is valued by stakeholders as being of high quality, responsive to emerging issues and relevant to public policy and practice in Canada and internationally</td>
<td>Number of CARBC special reports and commissioned reports focused on policy and practice.</td>
</tr>
<tr>
<td></td>
<td>Benchmark: 5</td>
</tr>
<tr>
<td></td>
<td>2016/2017: 17</td>
</tr>
<tr>
<td>3.3 To conduct research in the following other key priority areas:</td>
<td></td>
</tr>
<tr>
<td>• The impact of educational, legislative and regulatory strategies to minimize alcohol and other drug-related harms</td>
<td>Number of research projects ongoing and completed Benchmark: 6</td>
</tr>
<tr>
<td></td>
<td>2016/2017: 6</td>
</tr>
<tr>
<td>• Development and evaluation of more effective community prevention programs</td>
<td>Number of research projects ongoing and completed Benchmark: 5</td>
</tr>
<tr>
<td></td>
<td>2016/2017: 2</td>
</tr>
<tr>
<td>• Development and evaluation of more effective treatment systems and programs</td>
<td>Number of research projects ongoing and completed Benchmark: 8</td>
</tr>
<tr>
<td></td>
<td>2016/2017: 7</td>
</tr>
<tr>
<td>• The influence of structural determinants of social contexts of drug use on the implementation of harm reduction strategies</td>
<td>Number of research projects ongoing and completed Benchmark: 10</td>
</tr>
<tr>
<td></td>
<td>2016/2017: 5</td>
</tr>
<tr>
<td>• Research and evaluation of effectiveness of knowledge translation and exchange activities and strategies</td>
<td>Number of research projects ongoing and completed Benchmark: 5</td>
</tr>
<tr>
<td></td>
<td>2016/2017: 10</td>
</tr>
<tr>
<td>3.4 Develop and maintain significant collaborative projects with other researchers and research centres in North America and in other countries</td>
<td>Number of collaborative projects with other North American researchers and research agencies each year</td>
</tr>
<tr>
<td></td>
<td>Benchmark: 10</td>
</tr>
<tr>
<td></td>
<td>2016/2017: 17</td>
</tr>
<tr>
<td>3.5 Develop collaborative projects with international organizations such as WHO and the International Harm Reduction Association</td>
<td>Number of collaborations with WHO and other international organizations each year</td>
</tr>
<tr>
<td></td>
<td>Benchmark: 5</td>
</tr>
<tr>
<td></td>
<td>2016/2017: 6</td>
</tr>
</tbody>
</table>
“To disseminate research findings that increase understanding of substance use and addiction, to increase awareness of related harms, and to identify effective responses.”

Highlights

Peer reviewed academic media

We published 100 peer-reviewed articles in 2016/17 as well as numerous book chapters, monographs, commissioned and informal reports. Graduate students research featured prominently in most cited and downloaded offerings in this year. These include PhD student, Renee O’Leary’s research monograph on the potential for vapour products to achieve tobacco harm reduction “Clearing the Air around E-cigarettes” and PhD student, Audra Roemer’s systematic review in the Journal of Studies on Alcohol and Drugs concerning the mixing of energy drinks with alcohol. CARBC Scientist Dr Jinhui Zhao was also featured as having contributed a top downloaded and cited article in 2016 from the same journal, this time concerning a study critiquing the relationship between alcohol and protection from heart disease.

CARBC PhD student Audra Roemer was lead author on a study about the effects of mixing alcohol and energy drinks (co-authored by CARBC Director Tim Stockwell). The study was one of the top downloaded articles in the Journal on Studies of Alcohol and Drugs in the first half of 2017 and also garnered international media attention, including BBC News, The Independent, Chicago Tribune, Vancouver Sun, International Business Times Australia, New York Post
Social Media

The last year saw us continue to build on and refine our social media presence. Our Twitter following increased from 1,729 to 2,025 (+17%) and our 369 tweets earned a total of 297,120 views (805/tweet (+105%)) and 3,964 engagements (such as “link clicks,” “retweets,” and “likes”; 10.7/tweet (+65%)).

Demographically, 75% of users are from Canada (mostly BC, Vancouver, Ontario, and Ottawa), 10% from the US, 7% from the UK, and 2% from Australia. CARBC Twitter followers include: the chief statistician at Global Drug Survey, the CEO of the Registered Nurses Association of Ontario, the director of The International Centre on Human Rights and Drug Policy, musician and activist Bif Naked, the Director of Global Consumer Policy at Johnson & Johnson, the National Post health reporter, Mums Stop the Harm, Safer Cities Canada, the member of parliament for Port Coquitlam, academics and many others.

There was especially strong uptake of CARBC’s “Clearing the Air around E-cigarettes” report (O’Leary et al.), a systematic review of the harms and benefits of e-cigarette use. The eight tweets that we composed registered an impressive 57,000+ views and 921 engagements (including the UVic Twitter account), highlighting the appetite for this research amid the ongoing public health debate around vaping.

Twitter network analyses performed by The Social Media Research Foundation (California) identified CARBC as having the second greatest influence of all University of Victoria Twitter accounts, behind only the main UVic Twitter account. The CARBC research featured most highly in this analysis was “Clearing the Air around E-cigarettes” (two articles), Cecilia Benoit et al.’s study that framed sex work as an occupational choice, and CARBC’s “Patients Helping Patients Understand Opioid Substitution Treatment” Handbook (Reist et al.).

See the full analysis: https://nodexlgraphgallery.org/Pages/Graph.aspx?graphID=96755

The CARBC Facebook page saw an increase of 298 Likes or +29% in 2016/17, with 1,331 Likes and a page rating of 4.8 out of 5 based on nine ratings at year-end. Our 489 Facebook posts earned 366,956 views (750/post (-2%)) and 20,928 post engagements (43/post (-2%)). As with Twitter, CARBC’s “Clearing the Air around E-cigarettes” report also traveled impressively on Facebook: “Clearing the air around E-cigarettes”-related posts on a Thai vaping Facebook page and the Globe & Mail page each featured prominently. A Facebook video about the “Clearing the Air around E-cigarettes” findings produced by the Vancouver Sun and shared by The Province, The National Post, The London Free Press, and the Montreal Gazette earned over 13,000 plays.
Website

During this, the first full year for which our website analytics were available, 20,121 users made 31,284 visits (86/day) and logged 88,668 page views (243/day) on the CARBC website. The top ten CARBC pages from 2016/17, in order of page views, were:

1. CARBC main page (19,388 page views)
2. Helping Schools (6,478)
3. Publications & Resources (4,081)
4. iMinds (Helping Schools) (3,293)
5. About CARBC (3,273)
6. Managed Alcohol Program project page (2,787)
7. Facts & Stats (2,657)
8. Projects (2,614)
9. Cycles (Helping Schools) (1,924)
10. Screening and Brief Intervention Tools (1,209)

The popularity of our Helping Schools resources is clearly evident from this list, and highlights the strength of CARBC’s knowledge transfer efforts (spearheaded through CARBC’s Vancouver office) in providing pre-secondary curriculum materials covering substance use and related topics to educators in BC and beyond.

Operationally, our website will soon be switching to an updated UVic website template which will improve our ability to track downloads of specific documents (e.g., pdfs).

Geographic breakdown of visits to the CARBC website during fiscal year 2016/17
Media Summary


Table 4: CARBC media coverage during the 2016/17 fiscal year, by news type and outlet.

<table>
<thead>
<tr>
<th>News Type</th>
<th>Outlet</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>TV</td>
<td>CHEK</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>CTV national</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>CTV Vancouver</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>CTV Vancouver Island</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Global News</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>CBC national</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>CBC “The National”</td>
<td>1</td>
</tr>
<tr>
<td>Web video</td>
<td>Ecancer.org</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sub-Total</td>
<td>15</td>
</tr>
<tr>
<td>Radio</td>
<td>CFX</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>CBC BC Almanac</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>CBC All Points West</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>CBC Early Edition</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>CBC On the Island</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>CBC – other (Daybreak South (Kelowna), Daybreak North (northern BC), Boulevard du Pacifique, Thunder Bay, Yellowknife, Winnipeg, Windsor, Halifax, Saskatchewan, Calgary, Edmonton, etc.)</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>other (Radio NL Kamloops, National Post radio, CKNW, NewsTalk (Calgary, St Catharines, Saskatoon/Regina, Calgary), Roundhouse Radio, etc.)</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Sub-Total</td>
<td>78</td>
</tr>
<tr>
<td>Articles</td>
<td>Op-Eds (Globe &amp; Mail (national), Globe &amp; Mail (BC), Victoria News)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Other articles</td>
<td>292+</td>
</tr>
<tr>
<td></td>
<td>Sub-Total</td>
<td>452+</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>545+</td>
</tr>
</tbody>
</table>
During 2016/17, CARBC work was the subject of five UVic Media Releases and two UVic Media “Tips”. CARBC also disseminated one media release independently. For the three of those releases centered on research published in academic journal articles, we partnered with the journals to increase our promotional reach. Given the journal publishers’ geographical locations, London, UK, and New Jersey, in these cases and the strength of their existing networks and promotional efforts (e.g., paid placement of the releases in “EurekAlert! Science News”), these partnerships appeared especially fruitful in fostering our international reach.

2016/17 CARBC-featured media releases concerning alcohol consumption, specifically with regards to both its relationship with prostate cancer and the increased harm of mixing alcohol with energy drinks, received particularly substantial coverage among traditional news outlets and secondary, health and lifestyle-related websites internationally from Afghanistan to Zimbabwe. As mentioned in the social media section of this summary, the CARBC Clearing the Air around E-cigarettes report proved particularly provocative on social media and blogs, especially among vaping supporters on Twitter who leveraged the report findings in the contentious debate over the still-nascent regulatory environment around vaping. Importantly, Andre Picard, national health columnist for the Globe & Mail, brought the findings to a more mainstream audience, using the report as the basis for an opinion piece advancing the potential public health utility of vapour devices as a harm reduction alternative to tobacco smoking. Rounding out CARBC’s top-covered media topics for the year were issues around sex work (e.g., factors related to entering the field), the legalization of cannabis, and managed alcohol programs.

A special note of commendation to CARBC Scientist Bernie Pauly and Collaborating Scientist Bruce Wallace who have tirelessly engaged the media throughout the ongoing overdose public health emergency and other related issues.
Table 5: CARBC media coverage during the 2016/17 fiscal year, by topic

<table>
<thead>
<tr>
<th>Topic</th>
<th>Primary Media Count</th>
<th>Additional Media Count**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol (moderate drinking, minimum pricing, privatization, health and cancer)</td>
<td>48</td>
<td>244+</td>
</tr>
<tr>
<td>Managed Alcohol Programs</td>
<td>16</td>
<td>-</td>
</tr>
<tr>
<td>Opioid crisis (including supervised consumption sites, overdose statistics, naloxone, opioid substitution handbook, etc.)</td>
<td>69</td>
<td>-</td>
</tr>
<tr>
<td>Homelessness</td>
<td>32</td>
<td>-</td>
</tr>
<tr>
<td>Cannabis (mostly legalization, impairment testing)</td>
<td>17</td>
<td>-</td>
</tr>
<tr>
<td>Sex work</td>
<td>18</td>
<td>-</td>
</tr>
<tr>
<td>E-cigs and smoking</td>
<td>23</td>
<td>?+</td>
</tr>
<tr>
<td>Energy drinks + alcohol</td>
<td>18</td>
<td>46+</td>
</tr>
<tr>
<td>Talking to kids about drugs</td>
<td>5</td>
<td>-</td>
</tr>
</tbody>
</table>

* notable media outlets
** “secondary” media hits (e.g., articles on health sites as part of a newswire)
Other Dissemination Channels and Materials

Blog
During 2016/17, we published five posts on the CARBC Matters of Substance Blog. These covered a wide range of substance use related topics from both in-house and guest authors. One highlight was an exclusive interview with the Director of Policy Analysis and Public Affairs at the United Nations Office on Drugs and Crime (UNODC) in the lead up to the 2016 UN General Assembly Special Session on Drugs. The UVic blog hosting platform does not provide analytics, so it is difficult to evaluate the reach of our blog posts.

Public talks
CARBC hosted five free public talks during the year on a variety of topics presented by CARBC students, Scientists, and visiting scholars and recordings of these are made available on the CARBC YouTube Channel. Among the high-quality presentations, we were treated to a guest talk from renowned Australian tobacco control scholar Dr. Ron Borland on “the case for a harm reduction approach to tobacco control.” In October, as part of Homelessness Action Week, CARBC also co-hosted a screening of a local documentary film that followed several people navigating substance use and housing issues in Victoria (“Us and Them” at Cinecenta), which opened with a performance by the local Unity Drummers group and was followed by a panel discussion. In January, CARBC members led a very well-attended “community dialogue” on the opioid crises in UVic’s Student Union Building that was organized by the UVic Students’ Society and UVic Health Services.

Print/Web Collateral
CARBC published three “CARBC (Statistical) Bulletins” and three infographics last year. One bulletin, CARBC’s public health-oriented recommendations regarding the legalization of cannabis in Canada served as CARBC’s submission to the Federal Task Force on legalization. Another CARBC Bulletin about people turning to social service agency washrooms as “de-facto” drug consumption sites served as the basis of a UVic media release and accompanying op-ed in the Globe & Mail, which was timed to coincide with International Overdose Awareness day for maximum impact. That media release registered ten quality media hits and 12,000 views via UVic Twitter accounts. The infographic that we created to accompany the “Clearing the Air around E-cigarettes” report traveled well across social media, especially among the vaping community.
PUBLICATIONS

Journal Articles


Stockwell, T. (2017). Alcohol’s contribution to cancer is underestimated for exactly the same reason that its contribution to cardio-protection is overestimated. Addiction, 112(2), 230-231.


Books


Book Chapters


Commissioned and Special Reports


CARBC Bulletins


**CARBC Blogs**

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


Holmes, J. (2016). Minimum unit pricing for alcohol: Why reports of its illegality were premature.

**Michelow, W.** (2016). Avoiding Harm from Misrepresented Drugs.

**Belle-Isle, L.** (2016). Actions speak louder than words: How to include people who use drugs in decisions that affect them.


**Infographics**

See https://www.uvic.ca/research/centres/carbc/publications/infographics/index.php to view:

Clearing the Air around e-Cigarettes: Their harm reduction potential (2017)

Is Alcohol a Risk Factor for Prostate Cancer? (2016)

Inside a Managed Alcohol Program (2016)

**Opinion Editorials and Letters to News Outlets**


**CARBC Student Dissertations**


**Invited Presentations**


**Benoit, C.** (2017, April). Prostitution stigma as a major determinant of sex workers’ health. Closing Address. Social Dimensions of Health Student Conference: Connecting Health Across All Topics, April 6, University of Victoria, Victoria, British Columbia.


Benoit, C. (2016, November). Health & health equity for pregnant & early parenting families facing substance use & other challenges. Invited talk in the Midwifery Program, College of Nursing, Faculty of Health Sciences, University of Manitoba, Winnipeg, Manitoba.


**Buxton, J.** (2016, October). Alberta Health Service/Chief Medical Health Officer and Medical Examiner, Edmonton, Alberta.


**Pauly, B.** (2016, November). Nurses and health equity researchers: Allies, advocates or activists? Invited presentation to the University of Saskatchewan Faculty of Nursing and webcast to Prince Albert and Regina, Saskatoon, Saskatchewan.

**Pauly, B.** (2016, November). Do Managed Alcohol Programs prevent the harms of alcohol dependence and homelessness? Plenary presentation at the Saskatoon Regional Housing Conference, Saskatoon, Saskatchewan.


Pauly, B. (2016, September). Taking it to the streets: Enhancing healthcare for people experiencing homelessness. Invited presentation at the University of Victoria and Island Health’s Health Talk series, Victoria, British Columbia.


Pauly, B. (2016, September). Building a program of research: Health equity, homelessness, and substance use. Presentation to PhD Seminar, University of Victoria, British Columbia.


Stockwell, T. (2016, September). Considerations when selecting a meta-analysis for CHD. Invited presentation to the US Centers for Disease Control Epidemiology Section, Atlanta, Georgia.


Other Conference and Seminar Presentations


**Crabtree, A., Latham, N., & Buxton, J.** (2016, June). Working with people who drink non-beverage alcohol to describe perceived harms and proposed harm reduction initiatives Poster presentation Canadian Public Health Association (CPHA) annual conference; Public Health 2016, Toronto, Ontario.


Selfridge, M. (2016, April 7). Paper dissolves or dies, but Facebook is always there: Street-involved youth and digital technology. CARBC-sponsored public lecture, Greater Victoria Public Library. Victoria, British Columbia.


Stockwell, T. (2016, June). Do managed alcohol programs (MAPs) reduce consumption and harm? Presented at the 42nd Annual Alcohol Epidemiology Symposium of the Kettil Bruun Society, University of Stockholm, Sweden.


**CARBC Sponsored Conferences and Seminars**

**Public Seminars**


Belle-Isle, L. (2016, June). From one ally to another. Practice guidelines to better include people who use drugs at your decision-making tables. Royal Jubilee Hospital, Victoria, British Columbia.

Table 6: Performance Indicators for Key Result Area 4 (Dissemination)

<table>
<thead>
<tr>
<th>OBJECTIVES</th>
<th>PERFORMANCE INDICATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>**4.1 To publish research findings in international peer reviewed journal</td>
<td></td>
</tr>
<tr>
<td>articles**</td>
<td>Number of articles published each year by CARBC researchers and students in peer</td>
</tr>
<tr>
<td></td>
<td>reviewed journals</td>
</tr>
<tr>
<td></td>
<td>Benchmark: 70</td>
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<tr>
<td></td>
<td>2016/2017: 100</td>
</tr>
<tr>
<td>**4.2 To publish research findings in book chapters, books and research</td>
<td></td>
</tr>
<tr>
<td>monographs**</td>
<td>Number of book chapters, books or research monographs published by CARBC researchers</td>
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<tr>
<td></td>
<td>and students each year</td>
</tr>
<tr>
<td></td>
<td>Benchmark: 25</td>
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<tr>
<td></td>
<td>2016/2017: 27</td>
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<tr>
<td>**4.3 To disseminate research findings through reports, systematic</td>
<td></td>
</tr>
<tr>
<td>reviews and other resources, nationally and internationally**</td>
<td>Number of reports, systematic reviews or other resources published each year</td>
</tr>
<tr>
<td></td>
<td>Benchmark: 35</td>
</tr>
<tr>
<td></td>
<td>2016/2017: 38</td>
</tr>
<tr>
<td><strong>4.4 To achieve a high academic impact for CARBC</strong></td>
<td>Number of citations in peer reviewed journals of research by CARBC scientists and</td>
</tr>
<tr>
<td>addictions-related research so that it is well known, frequently</td>
<td>graduate students per year</td>
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<tr>
<td>requested and often cited internationally**</td>
<td>Benchmark: 1,000</td>
</tr>
<tr>
<td></td>
<td>2016/2017: 2,363</td>
</tr>
<tr>
<td>**4.5 To conduct seminars, workshops, lectures and occasional</td>
<td>• Number of public research seminars, symposia, workshops or conferences convened or</td>
</tr>
<tr>
<td>conferences on related policy, practice and research**</td>
<td>co-convened by CARBC</td>
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<tr>
<td></td>
<td>• Number of invitations to CARBC researchers to present at conferences or symposia</td>
</tr>
<tr>
<td></td>
<td>each year</td>
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<tr>
<td></td>
<td>• Number of papers accepted for presentation by CARBC researchers and students at</td>
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<tr>
<td></td>
<td>conferences or symposia each year</td>
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<tr>
<td></td>
<td>Benchmark: 5 / 25 / 35</td>
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<tr>
<td></td>
<td>2016/2017: 45 / 55 / 79</td>
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</table>
“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**

Our work continues to focus on three settings for knowledge mobilization: schools, campuses and communities. A key accomplishment was the completion of the Patients Helping Patients handbook. The CARBC knowledge mobilization team supported a group of opioid substitution therapy patients to write this guide for other patients. Ten thousand copies have been distributed and the demand for print copies is still high even though the resource is also available online.

In the school setting, work on iMinds continued with the development of 36 new classroom learning resources including a new line of gambling-related resources. Highlights from the campus setting included the development of a stakeholder engagement video displaying the work of 5 involved campuses and exploring the question of substance use culture change and publishing the first in a series of substance use policy discussion papers.

CARBC Assistant Director Dan Reist and Al Fowler deliver copies of their handbook, “Patients Helping Patients Understand Opioid Substitution Treatment,” to the Connections clinic in Vancouver’s Downtown Eastside. (Photo: Jeff Vinnick)
CURRENT PROJECTS

Alcohol and Other Drug Screening and Education

**Investigators:** Dyck, T. & 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 2016-17 our activities included:

- writing a blog posting on *Matters of Substance* encouraging critical thinking about screening and health promotion
- providing perspective to three campuses in particular around a health promotion approach to doing screening and supporting harm reduction
- continuing to commend a motivational interviewing orientation to clinicians serving at the annual *Beyond the Blues* community outreach through which 180 individuals received alcohol or drug use screens at 70 community sites in BC and the Yukon
- maintaining our screening and brief intervention tools pages (805 visits; 2,263 downloads) and our *Alcohol Reality Check* online screening app (240 individuals completed the screen from January to March 2017; data for previous nine months is not available)

Building capacity for effective drug education

**Investigators:** Reist, D., Andrew, C., Reimer, B., Asgari, M., Bodner, N., Nicolussi, G., & Jackson, N.

**Funding bodies:** BC Ministry of Education

**Background:** The objective of this multi-year project was to develop a system by which a common understanding consistent with current provincial health and education policy and the skills necessary for effective implementation of drug education can be nurtured and sustained through structures and mechanisms within school districts, health authorities and communities.

The project recognized the existence of drug content expertise within the health system and education process expertise within the education system. Recognizing that education is largely relational and needs to promote inquiry and dialogue rather than didactic instruction, the project sought to maximize educational effectiveness by leveraging the capacity with health to support effective pedagogical efforts within education.
During the period of the project, a significant re-design of the BC curriculum was being undertaken by the BC Ministry of Education. This re-design, in many ways, was aligned with the efforts this project was pursuing relative to drug education (emphasis on inquiry and competency development).

**Activities this year:** During the first three months of fiscal year 2016-17, as the project was winding down, activities included:

- Completing the development of classroom resources informed by the project
- Conducting key informant interviews with the implementation partners in nine BC school districts
- Participating in a multi-project Knowledge Transfer and Exchange (KTE) event involving other Health Canada funded projects in BC

Outputs from this project have been rolled into the [Helping Schools](#) and [iMinds](#) collections of professional learning and classroom resources. Key lessons learned from the project include:

- When working with communities we must work within their timeframe and context. This often takes more time than we anticipate for plans to be developed and implemented. Other priorities and complications often require attention. Patience and flexibility are critical to success.

- Relationships matter. Where good working relationships were already in place (e.g., between health and education; between administration and teachers) things progressed much more quickly than when they were not. Building understanding and positive relationships is an essential part of the work.

- Changing community systems is a lot like motivating personal change. Open questions, active listening, developing discrepancy, rolling with resistance and empowering others are transferable skills that work in both environments.
iMinds drug education

Investigators: Reist, D., Asgari, M., Andrew, C., Bodner, N., Nicolussi, G., & Reimer, B.

Funding body: BC Ministry of Health

Background: This project develops classroom learning resources to promote effective drug education. This focuses on maximizing young people's drug literacy—the knowledge and skills they need to survive and thrive in a world where caffeine, tobacco, alcohol, and other drug use are common. The goal is to encourage students to both express and think critically about their current drug-related beliefs, attitudes and behaviours.

Drugs touch virtually every aspect of human life. The opportunities for education are equally diverse. iMinds consists of a wide range of learning ideas that can be easily adapted and used in various curricular areas such as Social Studies, English Language Arts, Science and other subjects and settings. Resources are available in both English and French.

Activities this year: In 2016-17 our activities included:

- Consultation with School District #42 (Maple Ridge) and Alouette Addiction Services to develop lesson ideas and learning resources to support their joint initiative designed to build teacher capacity in delivering effective drug education in elementary schools
- Development of 21 new (total 45) drug-related classroom learning resources
- Further development of the online Drug History Timeline

iMinds gambling education

Investigators: Reist, D., Andrew, C., Asgari, M., Bodner, N., Nicolussi, G., & Reimer, B.

Funding body: BC Ministry of Justice

Background: This project develops classroom learning resources to promote effective gambling education. It sets out to improve students' gambling literacy—the knowledge and skills they need to survive and thrive in a world where gaming and gambling are common recreational activities. The goal is to encourage students to both express and think critically about their current gambling-related beliefs, attitudes and behaviours.

Gaming and gambling touch virtually every aspect of human life. The opportunities for education are equally diverse. iMinds consists of a wide range of learning ideas that can be easily adapted and used in various curricular areas such as Social Studies, English Language Arts, Mathematics and other subjects and settings.

Activities this year: In 2016-17 our activities included:

- Development of 15 new (total 20) gambling-related classroom learning resources
- Development of a professional learning package for gambling prevention support workers

A health literacy resource for K-12 schools

iMinds is a health education resource that seeks to maximize young people's drug literacy—the knowledge and skills they need to survive and thrive in a world where caffeine, tobacco, alcohol and other drug use is common. Building health literacy (including drug literacy) is one part of a comprehensive school health approach to addressing substance use (along with other behavioural health matters relevant to youth).
Opioid overdose crisis response

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

Funding body: BC Ministry of Health

Background: The Opioid Overdose Crisis Response projects were a collection of initiatives aligned with the priorities of the Joint Task Force on Overdose Response. At the direction of the BC Ministry of Health, funding from the “Preventing Harms from Substance Use” contract was re-directed toward these projects.

Activities this year: In 2016-17 our activities included:

- Preparing a set of parenting articles for HealthLinkBC
- Working with a group of opioid substitution therapy (OST) patients to complete the Patients Helping Patients handbook
- Providing consultation to the CAI OPEN (Community Action Initiative Overdose Prevention and Education Network) project
- Preparing a draft community dialogue guide
- Responding to the media and providing balanced information on prevention and health promotion in light of the opioid overdose crisis
- Assisting in the preparation of a community overdose prevention guide
- Providing consultation and support to community-based systems (including schools) on responding to the opioid overdose crisis

A Public Health Guide to Developing a COMMUNITY OVERDOSE RESPONSE PLAN

Bernie Pauly, RN, Ph.D, Paul Hasselback, MD, MSc, FRCPC, Dan Reist, MTh
Opioid dialogues

Investigators: Reist, D., Bodner, N., Dyck, T., & Jenei, K.

Funding bodies: BC Ministry of Public Safety and Solicitor General

Background: CARBC has been provided with funds from the Ministry of Public Safety and Solicitor General as part of the province’s commitment under the Joint Task Force on Overdose Response to develop and administer a grant program to support community dialogues.

Dialogue is a method of communication that involves two-way conversation where people not only speak to each other but also really listen. This kind of listening involves empathy. Each partner in a dialogue is curious about the experiences of the other partners – about their assumptions, beliefs and values. The goal is to leave the conversation with a better understanding.

Dialogue to address the opioid crisis is far more than talking about drugs. Since addiction is not simply about drugs but results from a breakdown in the fabric or connectedness of human community, the dialogue needs to help us understand each other and build social relationships that support individual needs, preferences and autonomy. The breakdown of this integration of the community and all its members is at the root of addiction. Dialogue is an important tool in re-building this integration.

Activities this year: Our efforts in 2016/17 focused on

- Preparing a call for community coalitions from every region of the province to submit a letter of interest in engaging their community in dialogue about opioid and other drug use
- Developing a guide to community dialogue and preparing a webinar on the topic

Want to Host a Community Dialogue on Opioid Use?

grants from $2,000 to $15,000 are available to community coalitions in BC | visit www.carbc.ca
**Changing the Culture of Substance Use on Campus (CCSU)**

**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 2016-17 our activities included:

- co-fostering capacity building with leaders in 15 post-secondary institutions across BC to collaborate in developing substance use strategies that support the health and well-being of all campus members
- co-creating a CCSU project stakeholder engagement video, displaying the work of 5 involved campuses and exploring the question of substance use culture change
- co-developing, co-creating and publishing 3 evidence-informed tools and the first in a series of substance use policy discussion papers - for a total of 5 promising practice guides, 6 supportive tools for campuses and 9 national webinars shared on the Healthy Minds|Healthy Campuses (HM|HC) website
- Attendance and presentation on campus-based project work at 2 national conferences
- supporting campus-based health promotion, community dialogue and immediate responses to the fentanyl crisis
Gambling online resource

Investigators: Reist, D., Asgari, M., Reimer, B., & Nicolussi, G.

Funding bodies: BC Ministry of Justice

Background: This project, funded by the BC Ministry of Justice, involves developing and producing an online gambling health promotion resources in consultation with the BC Responsible and Problem Gambling Program. The resource is intended to meet the needs of British Columbians interested in accessing educational and supportive materials to help them manage their lives relative to gambling and to access resources in their communities and through the treatment system as needed.

Activities this year: This project began at the very end of the fiscal year. Activities in 2016-17 included:

- Consultation with the BC Responsible and Problem Gambling Program
- Developing a partnership with Walden Media Group to assist in developing the resources

Healthy Minds | Healthy Campuses

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

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

Background: Healthy Minds | Healthy Campuses is a province-wide network promoting campus mental health and reducing risky substance use. The project is based on the notion that success in a post-secondary institution, as in any workplace, requires attending to the collective well-being of the campus itself as well as the well-being of individuals.

Activities this year: The project is co-led with the Canadian Mental Health Association, BC Division. Our contribution to this project in 2016-17 has involved:

- Ongoing refinement and development of the new community website, communication platform and resource repository
- Co-leading and developing several nationally-attended community webinars and additional synchronous learning events centred on substance use, particularly alcohol and cannabis, and community engagement
- Assisting in planning and supporting the development of substance use-related content for the annual community Summit, held in April 2017
- 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 (e.g., 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 articles
Healthy Relationships with Food and Substances on Campus

**Investigators:** Reimer, B., Remocker, C., Dyck, T., Reist, D., Streach, 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:** Our efforts in 2016/17 focused on

- connecting with campus stakeholders, including residence, health promotion and food services personnel, to explore their interest in participating in a collective discussion toward influencing policy around food and substance use in the post-secondary context,
- bringing campus stakeholders together to discuss: 1) food and substance use policy work they would be interested in pursuing in their own campus context, 2) how the project team might support them, and 3) ways colleagues from fellow campuses might support each other, and
- planning, jointly with campus colleagues, a food and substance use dialogue session at the 2017 Healthy Minds | Healthy Campuses Summit.
Helping Communities

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: Activities in 2016-17 involved providing consultation and support to a wide range of community members and agencies and participation on:

- BC Mental Health and Substance Use 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 Faculty)
- Mandatory Display Provincial Advisory Committee, Ministry of Finance
- 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 2016-17 our activities included:

- A focus on professional learning with the development of two self-guided inquiry group guides for teachers and other educators. One guide on engaged philosophical inquiry and the other on building resilience, both will be published soon
- Development of a peer mentoring guide, also coming soon
- Providing consultation and support to teachers and other school professionals and to school districts and their partners throughout BC

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 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: Our efforts in 2016/17 focused on

- engaging with individuals from multicultural organizations to understand needs related to linguistically and culturally appropriate mental health and substance use resources for BC residents whose primary language is not English and, begin to identify priorities, strategies and formats for resources,
- developing content for the “Ask Us” section of the website: 1) How do I know if I’m drinking too much? 2) If cannabis is dangerous, why are we legalizing it? and 3) How can I convince my kids not to use drugs?
- contributing two resources to the website: Patients Helping Patients Understand Opiate Substitution Treatment and a French translation of Understanding Substance Use: A health promotion perspective, and
- creating a consultation draft of Let’s Talk About Drugs: A guide to community dialogue.

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 in 2016/17 focused on

- increasing the representation of information about substance use in the journal,
- contributing to the Editorial Board for the four issues produced this year,
- providing articles for three of the issues, and
- promoting the journal through our networks.

New or Revised Health Promotion Resources

Understanding Substance Use: a health promotion perspective
## Memberships

<table>
<thead>
<tr>
<th>Name</th>
<th>Membership Details</th>
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<tbody>
<tr>
<td>Andrew, C.</td>
<td>BC School-Connected Mental Health Coalition (BCSCMHC)</td>
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<tr>
<td>Andrew, C.</td>
<td>BCSCMHC Summer Institute on Promoting the Mental Health of Young People</td>
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<tr>
<td>Andrew, C.</td>
<td>BC School Connectedness Project</td>
</tr>
<tr>
<td>Belle-Isle, L.</td>
<td>Chair, National Steering Committee for the Canadian Drug Policy Coalition</td>
</tr>
<tr>
<td>Belle-Isle, L.</td>
<td>Canadian Institutes of Health Research (CIHR) Review Committee Member, HIV/AIDS Community-Based Research Program</td>
</tr>
<tr>
<td>Benoit, C.</td>
<td>Canadian Society for the Sociology of Health</td>
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<tr>
<td>Benoit, C.</td>
<td>Sociologists for Women in Society</td>
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<tr>
<td>Benoit, C.</td>
<td>International Sociological Association, Occupational Groups Section, Social Welfare Section, Sociology of Health Section</td>
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<tr>
<td>Benoit, C.</td>
<td>International Institute of Sociology</td>
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<td>Benoit, C.</td>
<td>American Sociological Association</td>
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<td>Benoit, C.</td>
<td>Canadian Sociology Association</td>
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<td>Benoit, C.</td>
<td>Canadian Public Health Association</td>
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<td>Benoit, C.</td>
<td>HerWay Home Community Advisory Committee, Victoria, BC</td>
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<td>Benoit, C.</td>
<td>HerWay Home Communications Committee, Victoria, BC</td>
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<tr>
<td>Benoit, C.</td>
<td>Genomics, Society and Ethics Advisory Committee, Genome BC</td>
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<tr>
<td>Benoit, C.</td>
<td>Advisory Board Member, Canadian Society for the Sociology of Health</td>
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<tr>
<td>Benoit, C.</td>
<td>Panelist, Grand Challenge in Global Mental Health Initiative, Office for Research on Disparities and Global Mental Health, National Institute of Mental Health</td>
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<tr>
<td>Benoit, C.</td>
<td>Program Advisory Committee, IMPART: Intersections of Mental Health Perspectives in Addictions Research Training</td>
</tr>
<tr>
<td>Benoit, C.</td>
<td>International Scientific Advisory Board, NIHR King’s Patient Safety and Service Quality Research Centre, King’s College, London, UK</td>
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<tr>
<td>Benoit, C.</td>
<td>Member, Canadian Academy of Health Sciences Victoria Chapter, University of Victoria, Victoria, BC</td>
</tr>
<tr>
<td>Benoit, C.</td>
<td>Member of Expert Review Panel, Strategic Clusters program, Québec Research Fund - Society and Culture (FRQSC), Montreal, Quebec</td>
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<tr>
<td>Brubacher, J.</td>
<td>Chair, British Columbia Road Safety Strategy, Research and Data Committee</td>
</tr>
<tr>
<td>Brubacher, J.</td>
<td>Doctors of British Columbia, Emergency Medical Services Committee</td>
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<tr>
<td>Callaghan, R.</td>
<td>University of Northern BC Associate Research Ethics Board member</td>
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<tr>
<td>Callaghan, R.</td>
<td>University of Northern BC Animal Care and Use Committee (ACUC)</td>
</tr>
<tr>
<td>Callaghan, R.</td>
<td>University of Northern BC 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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<td>Cherpitel, C.</td>
<td>Kettl 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>
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<td>Dyck, T.</td>
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<td>Jansson, M.</td>
<td>Capital Region Action Team on Sexually Exploited Youth (CRAT)</td>
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<td>Leadbeater, B.</td>
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<td>Leadbeater, B.</td>
<td>Society for Research in Child Development.</td>
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<td>Leadbeater, B.</td>
<td>Society for Research on Adolescence. Chair, Social Policy Awards Committee</td>
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<td>Macdonald, S.</td>
<td>Kettl Bruun Society for Social and Epidemiologic Research on Alcohol</td>
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<tr>
<td>Pauly, B.</td>
<td>Steering Committee Member, Canadian Observatory on Homelessness</td>
</tr>
<tr>
<td>Pauly, B.</td>
<td>Greater Victoria Coalition to End Homelessness Governance Review</td>
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<tr>
<td>Pauly, B.</td>
<td>Steering Committee, Pacific Housing Research Network</td>
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<tr>
<td>Pauly, B.</td>
<td>Island Health Mental Health and Substance Use Committee</td>
</tr>
</tbody>
</table>
Pauly, B. Member, Housing First Regional Design and Integration Team, Greater Victoria Coalition to End Homelessness.

Pauly, B. Board Member, Society for Living Illicit Drug Users

Pauly, B. Member, Abstract Review Committee, Symposium on Housing Research in BC, Pacific Housing Research Network

Pauly, B. Member, Registered Nurses of Ontario Supervised Injection Services Best Practices Guidelines Panel

Reimer, B. BC Mental Health and Substance Use Provincial Health Literacy Network

Reimer, B. BC Partners for Mental Health and Addictions Information

Reimer, B. Substance Abuse Librarians and Information Specialists

Reist, D. BC Health Literacy Network

Reist, D. Child and Youth Mental Health and Substance Use Collaborative

Reist, D. Mandatory Display Provincial Advisory Committee, Ministry of Finance

Roth, E. Vice-Chair, Human Ethics Committee, Office of Research Services

Slaunwhite, A. 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. World Health Organization Technical Advisory Group on Alcohol and Drug Epidemiology

Stockwell, T. Canadian Institute for Health Information, Alcohol Indicator Advisory Group

Vallance, K. Alberta Municipal Alcohol Policy Project Advisory Board

Vallance, K. Drug Overdose and Alert Partnership

Woodin, E.M. 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
### Table 7: Performance Indicators for Key Result Area 5 (Knowledge Mobilization)

<table>
<thead>
<tr>
<th>OBJECTIVES</th>
<th>PERFORMANCE INDICATORS</th>
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</thead>
</table>
| To ensure access to relevant knowledge while working in partnership with policymakers and practitioners in planning and implementing projects to address substance use in Canada and internationally | • Number of projects in which CARBC members collaborate with policy makers or practitioners  
• Number of policy proposals contributed to by CARBC members each year  
• Number of provincial or national committees, advisory boards, communities of practice or other such bodies on which CARBC members are active  
  
  *Benchmark:* 20 / 5 / 25  
  
  *2016/2017:* 23 / 21 / 51 |
| To develop and promote resources with the potential to make direct contributions to policies, programs or service delivery systems in Canada and internationally | • Number of resources completed in any one year  
  
  *Benchmark:* 30  
  
  *2016/2017:* 65 |
| To provide broad 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 presentations/workshops/displays each year  
• Number of media interviews or citations resulting from CARBC activities each year  
• Number of articles (blogs, magazine, newsletter, OpEd, policy briefs, etc.) published each year  
• Number of consultations provided each year  
  
  * Benchmarks: 30,000 / 15 / 150 / 15 / 15  
  
  *2016/2017:* 31,284 / 50+ / 545 / 29 / 80 |