

INFORMATIONAL CORRESPONDENCE - FEBRUARY 27, 2017

1. L. Hooper - email dated February 9, 2017 - Marijuana Dispensaries Input Session
2. D. MacAulay - email dated February 9, 2017 - Are Red Light Cameras a Possible Solution to Trucks Running Red Lights
3. K. & C. Taylor - email dated February 9, 2017 - Concerned citizen
4. R. Malischewski - letter received February 14, 2017 - Dilkusha House
5. M. Shaffer, Preserving Dilkusha Group - letter dated February 14, 2017 - Dilkusha, aka Orchard House, 720 22nd Street NE, Salmon Arm
6. B. Duplisse - email dated February 15, 2017 - Dilkusha/Orchard House
7. R. W. Reddecliff, Treasurer, Salmon Arm Elks Recreation Society - letter dated February 8, 2017 - Support for Application under the PAD Program
8. H. Armstrong, Executive Director, NONA Child Development Centre - letter dated February 10, 2017 - Invitation to Bollywood Bang 2017
9. School District #83 - newsletter dated February 6, 2017 - Staying Connected
10. L. Yako, President and CEO, BC Trucking Association - letter dated February 10, 2017 - Trans-Canada Highway Traffic through the City of Salmon Arm
11. Interior Health Association - newsletter dated Winter 2017 - Drinking Water Newsletter
12. Okanagan Mainline Real Estate Board - media release dated February 6, 2017 - January Residential Sales Activity Consistent with Last Year
13. Interior Health Authority - newsletter dated February 2017 - Population Health, Healthy Communities Update
14. University of Victoria - bulletin dated August 2016 - Legalization of Cannabis in Canada: Implementation strategies and public health

-----Original Message-----

From: Lynda Hooper [<mailto:lynda@telus.net>]

Sent: February-09-17 11:24 AM

To: Nancy Cooper

Subject: Thank you

Dear Mayor Cooper and Council,

January 30 information session around cannabis business in Salmon Arm, was a fabulously warm reception, much appreciated by this long term consumer. As a business analyst I have many cannabis related ideas, but as one who has been marginalized and stigmatized, writing a book on my experience, there is much I can share.

There is clearly a disconnect with levels of government and laws, more frightening than ever, for those of us wanting to live an organic lifestyle in peace. As a canvasser for the Sensible BC campaign a few years ago, I listened to many stories of how lives have been destroyed over criminal charges for a bit of weed. I also listened to opinions of citizens who used shame to bully, because their argument is void of truth, gossip has spread the word about this advocate. Since 1970 I have been waiting patiently for truth to be revealed, danger has been astronomically blown out of proportion, 'reefer madness' continues.

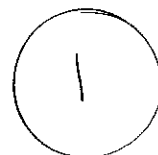
The small number in attendance at the forum might be from fear of being seen by others in the community, who continue to judge for no good reason. Happy am I that I did attend, though I do understand what being bullied is about, I believe we all need to come out of the closet to be free. I would be happy to help out with further information or educational sessions in the future.

Yours truly,

Lynda Hooper

250-832-6194

840-20 St. SE
Salmon Arm, BC



From: Carl Bannister
Sent: February 9, 2017 10:23 AM
To: 'David MacAulay'
Subject: RE: Are Red Light Cameras a Possible Solution to Trucks Running Red Lights

Thank you David. I will ensure that your e-mail is passed on to Council. FYI, the City went through a process (over 2 years or so) where we lobbied ICBC and several Provincial Ministries for a Red Light Camera. We had even budgeted our own funds to do this but were basically told that it was not warranted.

From: David MacAulay [mailto:dbmacaulay@yahoo.com]
Sent: February 9, 2017 9:18 AM
To: Carl Bannister
Subject: Fw: Are Red Light Cameras a Possible Solution to Trucks Running Red Lights

Mayor Cooper's email gave an automated response and mentioned I could contact you regarding this issue. Here is a forward of the original email:

On Thursday, February 9, 2017 8:15 AM, David MacAulay <dbmacaulay@yahoo.com> wrote:

Your Worship and Council,

I had initially been under the impression that red light cameras were not used in BC but I find that there are in fact red light cameras in some parts of BC. The following is a link to two pages on ICBC's website regarding red light cameras:

<http://www.icbc.com/road-safety/community/Pages/Red-light-cameras.aspx>

<https://www.google.com/maps/d/viewer?mid=1EWGGntf7iSRuxCky868bccLPR30&ll=51.259072506166966%2C-122.14825460000003&z=6>

Are there concerns regarding red light cameras in some of our intersections that I am not aware of? What would we need to do to have red light cameras installed?

Thank you,

David MacAulay

From: Karen Taylor [<mailto:kctaylor1@hotmail.ca>]
Sent: February 9, 2017 5:04 PM
To: Carl Bannister
Subject: Concerned citizen

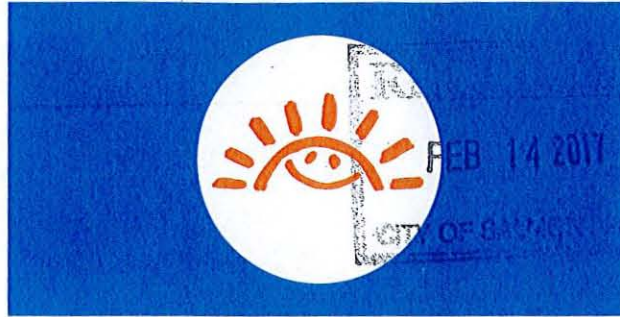
Greetings - as Mayor Cooper is out of the office, I am contacting you.

I am very concerned with the amount of traffic in and around our city that think both speeding and running red lights is somehow acceptable. Incident after incident is occurring, even after baby Lexi was killed several weeks ago in that awful red-light crash. I don't know if you are a member of the Facebook page, Salmon Arm Rant and Rave - if you are not, I suggest you join to see the incredible amount of infractions being reported by our citizens. DAILY people report almost being hit, or having to slam on their brakes to avoid someone blowing a red light. Pedestrians and motorists alike, who are obeying the law themselves.

I recently heard the local RCMP detachment has no mandate for traffic control. Is this correct? May I ask why, in a town of this size - with the TCH running right through our neighborhoods - this is so? I think it is time for the city to fund local traffic control officers, who will enforce our speed limits and traffic laws. I, for one, am willing to pay a bit more on my taxes if greater safety is the outcome.

Things CANNOT remain as they are. I was a personal friend of Lillis Bremnes - who you might recall, was proceeding forward on a green light at the intersection of the TCH and Alexander when she was t-boned and killed by a semi. I know she would want us all to fight for this!!!

Regards
Karen and Chris Taylor
Salmon Arm



A note from:

Ms. Rose Malischewski

I am saying "NO"
to the demolition
of the Dilkusha
House, an historic
building that deserves
to be preserved...

ENJOY —
DON'T
DESTROY!!

R. Malischewski

ROSE MALISCHEWSKI
710 17TH ST SE
SALMON ARM B.C.
V1E 1W2

832-9853



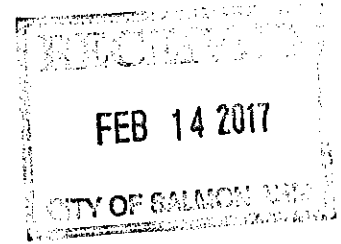
211112

Maureen Shaffer

1651 2nd Ave NE

Salmon Arm, BC, V1E 1P1

February 14, 2017



Mayor Nancy Cooper

City of Salmon Arm

500 2nd Ave NE

Salmon Arm, BC, V1E 4N2

Dear Mayor Cooper,

Re: Dilkusha, aka Orchard House, 720 22nd St.NE, Salmon Arm.

I am a member of Salmon Arm's "Preserving Dilkusha Group" and secretary of same. As you know, members of our group met with representatives of the Community Heritage Commission and Salmon Arm City Council on January 17, 2017.

My understanding from that meeting was that the demolition of Dilkusha (the Orchard House building) would be delayed by two months. During the two month delay, the Preserving Dilkusha Group was to develop a proposal to save the house from demolition, which would be presented to Council.

Could you please confirm the specific date that City Council needs to receive Preserving Dilkusha's plan by. And could you briefly outline specifically what City Council needs to receive from the Preserving Dilkusha Group, in order to make a consideration that would prevent demolition of the building.

If it is possible to receive your reply before our next Preserving Dilkusha meeting which is this Thursday, Feb. 16, that would be most helpful to us.

Thank you in advance for your consideration and support. We look forward to hearing from you at your earliest convenience.

Kindest Regards,

Maureen Shaffer per "Preserving Dilkusha Group"

From: Barb [<mailto:bgdupe@telus.net>]

Sent: February-15-17 3:21 PM

To: Nancy Cooper

Subject: Re: Dilkusha/Orchard House

In regard to this building I feel that if it is such heritage house, then it should be dismantled and taken to Haney Museum and put up there. The house is full of beautiful furniture which some they could keep and auction or sell to help pay for this move.

I am sure it is infested with mice and rats and alot of the structure could be rotten. Why would we have a heritage home in the middle of this recreation area ?

We need a new pool and one could be built there and make sure that it is a competition size. Then the old pool taken down and use that are along with the lot beside the pool for some other recreation. Lets keep all our recreation in one area, in the long run it is probably cheaper for staff and maintenance being in one location and one heating system can help the other. Could even make that a dead end street with a nice walking path to the recreation area.

To leave that house there just not make sense when we have an ideal place for it.

Barb Duplisse

RECEIVED
FEB 08 2017

SALMON ARM ELKS RECREATION SOCIETY OF SALMON ARM

3690 30th St. N.E.
SALMON ARM, B. C.
V1E 3L1

Feb. 8, 2017

City of Salmon Arm
500 – 2nd Avenue NE
Salmon Arm, B. C.
V1E 4N2

Attention Administration Officer

Support for Application under the PAD Program

Salmon Arm Elks Recreation Society wishes to make application to the Heart and Stroke Foundation for a Defibrillator under the PAD Program and would very much appreciate a letter of support from the City.

Our facilities are located about five Kilometers from our hospital and our members believe that this potentially life-saving device would represent an important and vital ability which would help add to the health of members of our community that utilize our park and hall facilities. A number of activities take place at our facilities and we have outlined some of these below together with our estimate of the number of visitors in attendance (2016 estimates):

Elks Community Hall

Salmon Arm Elks maintains and operates the community hall. The overall objective of the Elks Lodge is to raise funds through local activities and funding grants from governmental agencies in order to distribute such funds to provide assistance to youth and charitable groups which provide vitally important services of our community. The fund raising activities include the operation of the community hall which is provided at modest rates to users. (the hall is also made available to charitable groups on a free or substantially reduced basis)

<u>Events</u>	<u>Est total annual number of attendees</u>
- Wedding receptions, family reunions, memorial gatherings, etc.	3,500
- Meetings, church services, etc.	3,000
- Youth Sports Activities	1,200
- Elks Fund Raising Events	<u>350</u>
	Total Hall Attendees <u>8,050</u>

(These estimates indicate the estimated number of attendees at the events – however, as many could be the same individuals, we have determined that 4,250 people are served)

Elks Park

The objective of the Society is to maintain and operate the park in a manner that presents a clean, attractive facility that provides for the gathering of community and family groups. The facility provides a variety of benefits to the community. For example, the Salmon Arm Minor Baseball Association utilizes our three baseball diamonds for league and tournaments with participation by children of all ages. The park includes a few R.V. sites which are used by visitors to our community and funds received from this source are important for the overall park maintenance and necessary ongoing improvements, etc.

Events

Est total annual number of attendees

- Community picnics, family gatherings, etc.	750
- Minor Baseball (participants, supporters, etc.) – park visits	1,500
- R. V. Overnight visitors	4,200
Total Park Attendees	6,450

(These estimates indicate the estimated number of attendees at the events – however, as many could be the same individuals, we have determined that 2,025 people are served)

A caretaker's home is located on site which facilitates the "24/7" supervision of both the hall and park operations and, subject to approval, would recommend that the Defibrillator be located at the home. Our objective is to present a professional operational atmosphere which provides for safe and clean facilities for the enjoyment of the general public.

Our organization will execute the required AED Supply Agreement and we look forward to receiving the equipment and training necessary to install the Defibrillator.

Thank you for providing the City's support for obtaining this equipment for our facilities.

Yours truly;



R. W. Reddecliff
Treasurer



BC PUBLIC ACCESS TO DEFIBRILLATION (PAD) PROGRAM APPLICATION FORM

To help save lives, the Heart and Stroke Foundation, in partnership with the Province of British Columbia and BC Emergency Health Services, is making automated external defibrillators (AEDs) available in public places where there is a risk someone can suffer a sudden cardiac arrest. These locations are open to the public, where large numbers of people gather, and/or where there may be a delay accessing emergency health services. If your facility meets the above criteria, please complete this form and email it to the BC PAD Program Manager at bcpad@hsf.bc.ca.

Facility Name	Salmon Arm Elks Recreation Society		
Facility Address	3690 30th St. NE, Salmon Arm, B. C. V1E 3L1		
Facility Mailing Address (if different)			
Facility Municipality	City of Salmon Arm, B. C.		
Facility Regional District	Columbia Shuswap		
Facility Contact Name	Holly Joynes		
Facility Contact Title	Caretaker		
Facility Contact Phone	250-833-4803		
Facility Contact Email	elks455sa@gmail.com		
Nature of Facility Use	Community Hall, R.V. Park, Minor Baseball Activities, Community Park Facilities		
Facility Operating Hours	All hours of the day and during summer overnight		
Will the AED be mounted outdoors?	Yes	<input checked="" type="checkbox"/>	No
If the facility is operated seasonally, will the AED be relocated to another facility during the off-season?	Yes*	<input checked="" type="checkbox"/>	No
*If "Yes", what is the name of the other facility?			
Approximate number of people served	6,275 est.		
What is the facility's ownership status?	Public/Municipal	Private	<input checked="" type="checkbox"/> Non-profit
Is the facility accountable to a Board of Directors?	<input checked="" type="checkbox"/> Yes	No	
Does the facility already have an AED?	Yes*	<input checked="" type="checkbox"/>	No
*If "Yes", what is the age of the existing unit?			

☒ Yes

No

All BC PAD Program AED recipients must sign the AED Supply Agreement. A sample contract can be found at: <https://www.bcpadprogram.ca/admin/contentx/default.cfm?h=4&PagelD=4> Please confirm that your group is able to execute such a contract.

☒ Yes

No

Please confirm that your group can commit to attending a 3 - 4 hour orientation session.

We would like to know that your request to have an AED installed at your facility is supported by your community. Please attach a letter of support from your municipality, i.e. the Chief Administrative Officer.

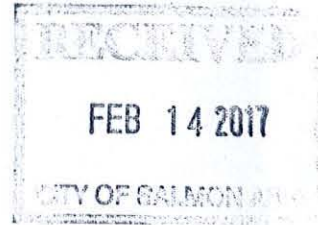


NONA Child Development Centre

2802-34TH STREET, VERNON, B.C. V1T 5X1

PHONE: (250) 549-1281 ~ FAX: (250) 549-3771

email: administration@nona-cdc.com ~ website: www.nona-cdc.com



Friday, February 10, 2017

Dear Mrs. N Cooper and Council,

RE: Invitation to Bollywood Bang 2017

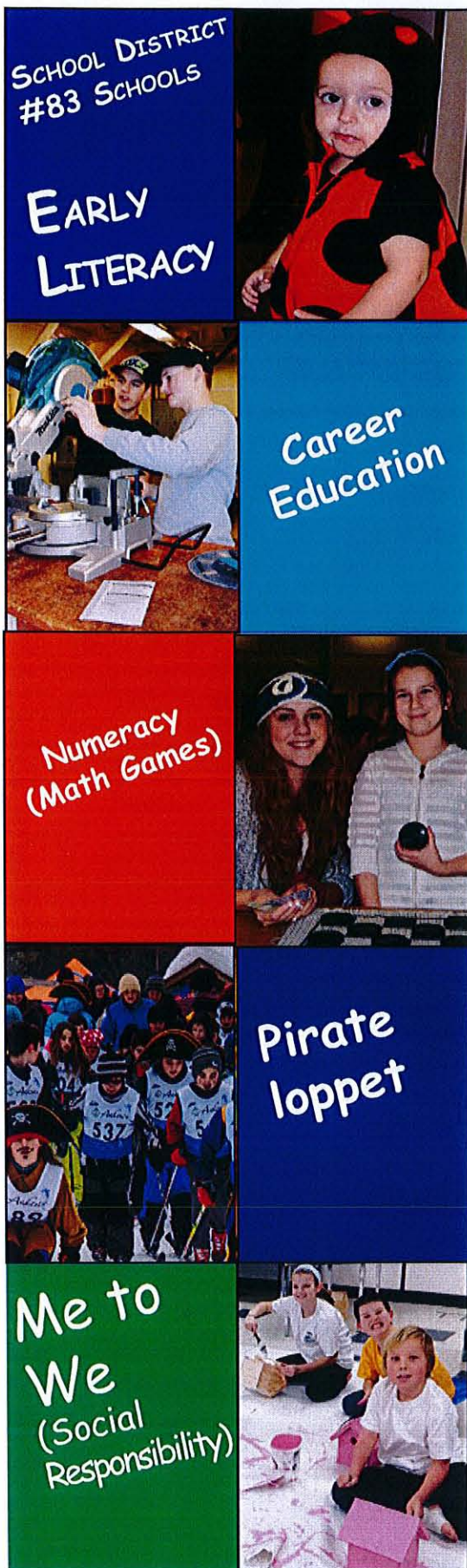
On behalf of Bollywood Bang 2017 and Dalvir Nahal, it is my pleasure to extend a invitation to this event on April 29, 2017. The event is raising funds for NONA Child Development Centre, serving over 700 children with special needs in the North Okanagan.

Bollywood Bang first came to life in 2013. Since its inception the event has surpassed all expectations and has become one of the most anticipated events of the year, selling out in just 6 hours last year. This East meets West concept has the ability to bring people together and celebrate diversity all the while raising money for different local charities. Both men and women have the opportunity to dress up in South Asian outfits and enjoy an experience like no other.

The event will be hosted at Kal Tire Place in Vernon. Tickets go on sale at 8 am on Feb 18, 2017 and can be purchased on line at www.bollywoodbang.org or in person at the 27th street florist in Vernon.

Yours Sincerely,

Helen Armstrong,
Executive Director,
NONA Child Development Centre
www.nona-cdc.com



Feb. 06, 2017

STAYING CONNECTED

~ A message from Official Trustee Mike McKay ~

To North Okanagan-Shuswap School District Community Members:

As we move past the half-way point of the 2016/17 school year, I am pleased to share with you that we continue to make progress on a number of fronts.

The recommendations from the Special Advisor Report continue to receive attention from the district's leadership team and from me. I regularly provide updates on that work at each public board meeting as well as at the Partner Group Table and am pleased that we are making progress in addressing the matters that were raised in the report.

January and February are crucial times for the first stages of budget development. We are reviewing current areas of expenditure to ensure that the district's resources (current and anticipated) are focused on addressing our highest priority needs to support student success. To do that requires examining achievement data/evidence and I have appreciated presentations at recent public board meetings that highlight how our students are doing – both the successes and the areas of concern. We are committed to ensuring that the budget for 2017-18 will allocate funds where they are needed most.

Decisions have been made related to previous motions regarding school consolidations and organization

In December, 2016, I considered a number of motions that had been contemplated by the previous board. The outcomes are outlined below.

Armstrong Area

- end the school closure consultation period for Armstrong Elementary, with no recommendation to close a school in Armstrong at this time.
- commit to a full district review to be completed by December 2017 that will address demographics, school configurations and catchment areas, etc.

Salmon Arm Area

- end the school closure consultation period for Silver Creek Elementary, with no recommendation to close the school at this time.

~ Continued ~

CODING IN THE CLASSROOM



Cardboard boat design and races!

Ice Fishing (Unplug & Play)



Trading Up (Exploring the Trades)

Chinese New Year



www.sd83.bc.ca

- commit to a full district review to be completed by December 2017 that will address demographics, school configurations and catchment areas, etc.

- consider the educational impact on students who are in three and four grade splits, with the results to be provided at the February public board meeting.

- establish a Task Force to identify options to reduce the number of student transitions in the Salmon Arm area and develop a process to determine the feasibility of the options identified.

Sicamous Area

- bring recommendations to the February 14 public board meeting in response to the Sicamous K-12 Task Force report on the issue of sustaining viable educational programs from Kindergarten through Graduation.

Update on Sicamous K-12

In June 2016, I reviewed the Task Force report that had been finalized in the Spring and followed up by meeting with the Task Force in person and via technology. Their passion for the community and for educational options for local children is commendable and their efforts are appreciated. As a result of our meetings and in response to changing circumstances and options available to the school district, I shared the following context with the Task Force members and with members of the school district's senior leadership team:

- The K-12 Task Force was commissioned at a time when school closures were a real possibility and the district's resources could not sustain the programs, services and facilities that were in place. The Task Force recommendation to consolidate into a single K-12 school in Sicamous was a viable response to the circumstances of the day. It was a solution that would ensure a continuity of education from K-12 in the community;
- The K-12 proposal would require a school closure process for Parkview Elementary, and would likely subsequently result in disposing of the land and building to generate funds to support a renovation of Eagle River Secondary to accommodate the full range of students, particularly the primary-age students. At the time of the Task Force Report it was anticipated that, in future years, there would be some ongoing operating savings from the closure of Parkview;
- There were ongoing concerns - even with the K-12 concept - about long-term viability of the secondary school program for students Grades 8-12. Small schools struggle to offer a full suite of program options and there are many secondary-age students in Sicamous who travel to other schools in the district in order to access course options. A dwindling Gr. 8-12 population would put the future of the secondary school at risk;
- Many people supported the K-12 concept as it was seen as the only way to sustain a full education program within the community;

- *Several community members were opposed to the K-12 plan for a number of reasons; however, many initial challenges were successfully addressed by the Task Force through its thorough research and in its report. Other matters - like the closer proximity of Parkview to the major residential area and worries about young children needing to cross the round about - continued to be of concern; and,*
- *There were some suggestions that a preferable K-12 single school location would be on the Parkview Elementary School site. The district has identified several challenges to that option including the size of the property and the substantial cost of renovating the school to add lab spaces for science, technology education, home economics and other secondary school course offerings.*

Since the K-12 Task Force report was completed, a number of important variables have changed:

- *Rural Education Enhancement Fund (REEF) was introduced, providing districts with an opportunity to receive grants to keep small/rural schools open;*
- *It has been confirmed that if K-12 at the Eagle River Secondary School site were to proceed, the district would be required to engage in formal school closure consultations for Parkview Elementary. Given the REEF grant, it would no longer be accurate to list financial pressures as a reason to close Parkview. Nor could school closure be recommended because of insufficient population at Parkview;*
- *Other sources of Ministry of Education funding have been accessed by the district since last spring and enrolment has increased this Fall, meaning that the level of financial concern in the district has been mitigated; and,*
- *Discussions with the municipality have identified a number of potential benefits of retaining a two-school model, including introducing more early childhood options and space at Parkview Elementary and implementing a specialized secondary school program that would attract and retain students and would align with the overall community development plan including new business initiatives.*

As a result of the many developments since last spring, I have asked the Task Force and the senior leadership team to provide their thoughts on an alternative option:

- *To configure Parkview Elementary as a K-5 elementary school and include early childhood services in the school building;*
- *To configure Eagle River as a Grade 6-12 school and ensure there is a strong “middle years” focus and programming for students Grades 6-8 and a specific secondary program focus that will help to increase the viability of the secondary program for local students; and,*
- *To allocate capital funds (local and through Ministry grant processes) to update Eagle River Secondary and to ensure that early childhood spaces are appropriate at Parkview Elementary.*

Next Steps:

I recognize that there will be significant disappointment felt by those who saw the Task Force report recommendation as the only viable option to maintain full educational services in Sicamous. In sharing the alternative (K-5/6-12) proposal as an alternative, I hope we can generate dialogue with the community so that the decisions made this spring will serve Sicamous – the community and the learners – for many, many years to come.

Please note that the February 14 public board meeting will be held in Sicamous (see upcoming Board Meeting dates on following page) and there will be an additional opportunity for public input at a meeting that will begin immediately after the conclusion of the public board meeting on Feb. 14

Additionally, school PACs may wish to include this topic on their upcoming agendas.

Task Force members have shared with me the importance of reaching a conclusion in response to the K-12 Task Force recommendation as soon as is practical. I hope that we are able to do that at the March public board meeting.

Upcoming School District Meetings:

Tuesday, Feb. 14 – Public Board Meeting At 6 p.m. at Eagle River Secondary.

Tuesday, Feb. 14 – K-12 Future of Sicamous Schools and Programs public forum. This meeting will commence immediately after the Public Board meeting, slated for 6 p.m. at Eagle River Secondary.

Tuesday, March 14 – Public Board Meeting at 6 p.m. at Pleasant Valley Secondary School

Tuesday, April 4 - Please note this change of date for the April meeting. It will now be held on April 4 at A.L. Fortune Secondary at 6 p.m.

Monday, April 10 – Public Budget Consultation Meeting at 6 p.m. at the District Education Support Centre

Monday, May 15 - Public Board Meeting at 6 p.m. at the District Education Support Centre. Please note this is a Monday, not a Tuesday.

Tuesday, June 13 - Public Board Meeting at 6 p.m. at the District Education Support Centre.

In every community, the perspectives of parents and other community members are an essential part of the education journey. I appreciate your willingness to participate and to engage as we continue to work through several processes to make sure we are providing the best possible learning environments for our children.

Respectfully,

Mike McKay

Mike McKay, Official Trustee

Questions? Feedback? Please send me an email at trusteefeedback@sd83.bc.ca

Your way ahead

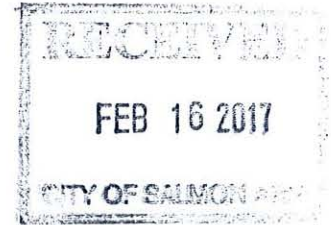


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toll free 1 800 565 2282

bctrucking.com

February 10, 2017

Mayor Nancy Cooper
City of Salmon Arm
P.O. Box 40
Salmon Arm, BC V1E 4N2



Re.: Trans-Canada Highway Traffic through the City of Salmon Arm

Dear Mayor Cooper:

Thank you for your letter dated February 6, 2017, sharing your concerns and those of Salmon Arm's residents about recent traffic incidents involving transport truck drivers in your city's downtown core. I'm very sorry to learn of these incidents.

Safety is BCTA's highest priority. Both our mission statement and our vision as an association reference the need for safety, and our core values, to which all members must agree before joining BCTA, require a promise to conduct business in a way that respects the highest reasonable, fair and effective standards of public safety.

We will publish the attached article in our February 20 *Bulletin* newsletter, including a link to your letter, requesting that our member companies share it with their drivers.

Sincerely,

A handwritten signature in blue ink that reads "Louise Yako".

Louise Yako
President and CEO

Encl.

10

Your way ahead



Attention to Safety Requested for Trans-Canada Hwy in Salmon Arm

Posted on Fri, 2017-02-10 11:34

in [Business & Industry](#)

On February 9, 2017, BCTA received a request from the Mayor of Salmon Arm for a reminder to carriers and truck drivers that operate on the Trans-Canada highway through the city's downtown core that extra caution is necessary in this busy area.

The maximum speed limit through Salmon Arm is 50 kilometres per hour, and all drivers should strictly comply with traffic signals along this commercial corridor. In this and many other communities in BC where a highway also doubles as the main community street, everyone who travels in the area in any type of vehicle or on foot needs to be respectful of others.

With her letter, Mayor Nancy Cooper shared two recent newspaper articles from the *Salmon Arm Observer* reporting crashes involving heavy trucks on December 24, 2016, and January 18, 2017. In both cases the truck drivers were issued Motor Vehicle Act violations.

Aligned with our vision to continually strive for a safer road transportation industry, we are sharing this letter and our response with you, and ask that you provide this article to your drivers as a reminder. Especially in the challenging weather conditions we have experienced this winter, their extra vigilance and professionalism is greatly appreciated in helping to keep others safe.

[Here](#) is Mayor Cooper's letter, which includes the *Observer* articles. [Here](#) is the response from BCTA's President & CEO Louise Yako.

Thank you for your help in sharing this message.



Winter 2017

Drinking Water Newsletter

In this issue:

Multi-Barrier Approach: Operations and Management**Communications Planning****Tracking the Weather****Waterborne Outbreak****Moving Forward: Glenmore Elilson Improvement District****Emergency Response Plan Courses****A Congratulations to One of Interior Health's Own**

Multi-Barrier Approach: Operations and Management

Water supply systems function best when emergencies are avoided through good operations and proactive maintenance. An operations manual can help ensure your system operates consistently and effectively. There are some common elements and tasks that should be included in each manual to meet the needs of your system:

- Map that includes location of source, treatment and distribution components
- Process descriptions
- Standard operating procedures
- Maintenance schedule
- Log sheets for recording maintenance performed

A standard operating procedure allows you to:

1. Say what you do
2. Do what you say
3. Prove it

Communications Planning

In 2001, the American Water and Wastewater Association listed communication as a key to success for water utility managers. Today, a good website is one of the best ways to communicate with customers.

What information do you post on your water system website?

Submit your nominations for the best water system website in the Interior to judi.ekkert@interiorhealth.ca with a brief description of what you like about the site.

Tracking the Weather

How have the latest weather patterns affected your day-to-day operations? For some water suppliers it meant that they had warm, dry conditions for winterizing irrigation lines, and for others it meant more water main breaks.

What weather information do you record to provide context to your annual operations? Do you have a method for recording it in a way that shows the weather pattern at a quick glance?

Take a look at the format used by the Weather Network.

Could you modify this to work for your system?

Waterborne Outbreak

In Aug. 2016, over one-third of the 14,000 residents of the City of Hasting, New Zealand became ill when their drinking water was contaminated with campylobacter.

The Havelock North campylobacter outbreak has raised concerns about whether chlorination should be required for all groundwater systems. In the past five years, 88 per cent of monitored sites were more than 90 per cent compliant with E. coli indicator tests.

Weather reports show that two days before the first people were sick, the area was hit by a rain storm that poured three months' worth of rain in one weekend.

Drinking water stations set up around Havelock North during the crisis.

Photo: RNZ / Rebekah Parsons-Ring



Moving Forward with Glenmore Ellison Improvement District

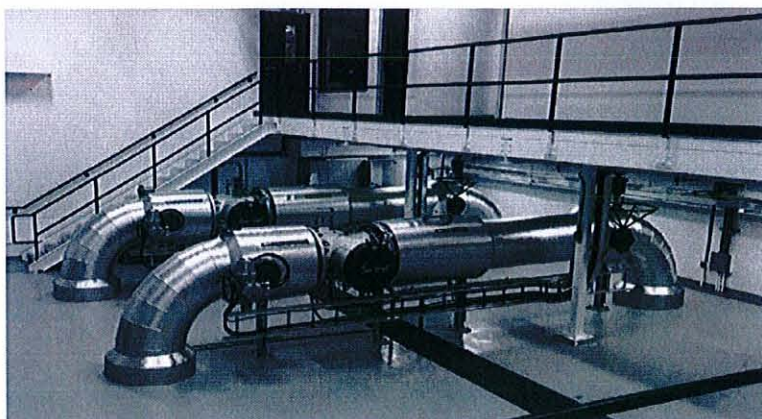
Glenmore Ellison Improvement District (GEID) is one of the five major utilities in Kelowna and provides drinking water to approximately 18,000 customers. The GEID system, originally supplied from Mill Creek, was challenged by chronic turbidity and frequent colour issues. Recognizing the challenges with this source, GEID developed a long-term plan to improve water quality and service delivery.

A deep-water intake and a high-capacity pump station from Okanagan Lake, along with an ultraviolet treatment facility and a treated water storage reservoir (totaling nearly \$20 million in new infrastructure) means improved water quality for the Glenmore distribution area customers. The new UV reactors will allow GEID to reduce the amount of chlorine used in treating the Okanagan Lake water supply and this supply, now has two disinfection barriers in place.

The use of the airport well provides year-round well water for domestic use to the north end of Ellison. Further phased system separation plans will provide treated Okanagan Lake drinking water to Ellison residents, while retaining the existing creek source and water mains for agricultural use.

GEID's long-term capital improvement plan and continual improvement over the years demonstrates their commitment to the multi-barrier approach to providing safe drinking water. A major component to GEID's success was developing a strong financial plan that has enabled them to self-fund these improvement projects.

glenmoreellison.com



GEID new UV reactors

Permission granted per L O'Neil, GEID

Emergency Response Plan Courses

Need help creating an emergency response plan for your water system? Register for one of the courses by contacting the instructor.

Kamloops

Feb. 15, 2017
1 - 4 p.m.

Kamloops Health
Centre
519 Columbia St.

(parking at
courthouse across
from public health
unit)

Instructor:
Katie McNamara

Register by Feb. 8
250-851-7410

Penticton

Feb. 16, 2017
9:30 a.m. - 12:30 p.m.

Penticton Health
Centre
740 Carmi Ave.

Instructor:
Tristin Wilson

250-492-4000 ext.
2793

Williams Lake

March 8, 2017
1 - 4 p.m.

Williams Lake
Health Centre
540 Borland St.

100 Mile House

March 9, 2017
1 - 4 p.m.

South Cariboo
Health Centre
555 S. Cedar Ave.

Instructor:
Kim Porter

250-302-5047

Congratulations to J. Ivor Norlin

The Environmental Health Foundation of Canada recognized Ivor for his outstanding contribution to the promotion of safe drinking water in Canada by awarding him the 2016 Canadian Water and Wastewater Association Safe Water Award.

Ivor Norlin is the health infrastructure manager for Interior Health. Since Ivor took over the lead in 2011, he has been a supporter of the multiple barrier approach for assuring safe drinking water and was successful in raising the importance of water quality improvement in our region. This is no small task considering Interior Health is home to a complex and challenging drinking water environment with over 1900 separate drinking water systems in our 215,000 km² region.

"Ivor champions a partnership approach with water suppliers and his collaborative leadership style has strengthened our relationships with water suppliers," says Roger Parsonage, the Corporate Director of Population Health, and Ivor's direct supervisor.



From left to right, Roger Parsonage, J. Ivor Norlin, and Brian Gregory.

Medical Health Officers					
Dr. Trevor Corneil	Chief MHO	Kelowna Health Services Centre	Note New #	250-469-7070	trevor.corneil@interiorhealth.ca
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Dr. Kamran Golmohammadi					kamran.golmohammadi@interiorhealth.ca
Dr. Silvina Mema					silvina.mema@interiorhealth.ca
Drinking Water Program Management					
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Vacant		Kamloops Health Unit			
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Katie McNamara		Kamloops Health Centre		250-851-7410	Katharine.Mcnamara@interiorhealth.ca
Kim Porter		Cariboo Comm. Health (Williams Lake)		250-302-5000	kimberly.porter@interiorhealth.ca
Tristin Wilson		Penticton Integrated Health		250-770-5540	tristin.wilson@interiorhealth.ca
Zara Zychowicz		Invermere Health Centre		250-342-2368	Zara.Zychowicz@interiorhealth.ca

For Immediate Release

January Residential Sales Activity Consistent with Last Year

KELOWNA, B.C. – February 6th, 2017. Residential sales across the region of Revelstoke to Peachland totaled 353 in January, consistent with a year ago when 334 homes were sold, yet a 22% decrease over the 453 sales in December, reports the Okanagan Mainline Real Estate Board (OMREB).

“While sales volume for January was just 5.6% higher than a year ago, the inventory of properties available for sale is 30% lower than this time last year,” says Anthony Bastiaanssen, OMREB President and active REALTOR® in the central Okanagan.

“The impact of low inventories becomes very evident when you consider average pricing now, compared to a year ago when inventories were higher,” Bastiaanssen comments, noting that the average price in January was \$439,472.99, 4.8% lower than December, yet 21% higher than this time last year. Days on market for January was 96, relatively consistent with December at 91 and November at 96.

“Given the high number of building permits that were taken out over the course of this past year, we’re hopeful that new properties will begin to come onto the market, which should positively impact housing affordability,” Bastiaanssen adds.

Low inventories may also impact prospective buyers, as there may be competition for those properties that are available for sale.

“It’s worthwhile for buyers to engage their own Realtor to work on their behalf as the listing REALTOR®’s fiduciary duty must be to the seller with whom they’ve signed a contract,” says Bastiaanssen, adding that a Realtor can help ensure buyers don’t miss out on new listings and has the knowledge and expertise to draft and negotiate offers that will be attractive to sellers in a competitive marketplace.

Since 2010, OMREB has been collecting information from Okanagan Realtors about buyers: who they are, where they come from, their buying motivations and more to gain insight into the market and to understand market trends.

“Since the OMREB Buyer survey was launched six years ago, move-up buyers have, on average, accounted for 23.3% of purchasers while first time buyers are 20.3%,” comments Bastiaanssen. “The 75-month average also shows that most buyers of Okanagan homes are those who already live in the area at 57.7%, followed by folks from Alberta and the Lower Mainland/Vancouver Island.”

While buyers from Alberta and the Lower Mainland/Vancouver Island swapped positions in the past couple of years, Bastiaanssen notes that this trend reversed itself in December 2016 with Alberta buyers inching out Lower Mainland/Vancouver Island buyers at 11.1% of total buyers (up from 9.2% in November) and Lower Mainland/Vancouver Island buyers coming in at 10.1% (down from 16.5%). Foreign buyers continue to account for a small proportion of buyers, with the six year average at 2.1%.



MEDIA RELEASE

OMREB serves three diverse markets within the region: the Central Okanagan Zone (Peachland to Lake Country), the North Zone (Predator Ridge to Enderby) and the Shuswap- Revelstoke Zone (Salmon Arm to Revelstoke).

For detailed statistics specific to each of the three regions served by OMREB, visit www.omreb.com.

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For more information, please contact:

Anthony Bastiaanssen, OMREB President (Board-wide statistical information)
anthony@okanaganagents.com (250) 768-3339

Cameron Muir, BCREA Chief Economist, or
Brendon Ogmundson, Economist (Province-wide stats info) cmuir@bcrea.bc.ca (604) 742-2780 /
bogmundson@bcrea.ca (604) 742-2796

Lynette Keyowski, OMREB Executive Director
lynette@omreb.com (250) 491-4560, Ext 226

OMREB is a member-governed not-for-profit association representing more than 1000 REALTORS® and 92 real estate offices within the southern interior region of British Columbia (Peachland to Revelstoke). The Board is dedicated to providing leadership and support to its members in their pursuit of professional excellence.

DISCLAIMER: Monthly Sales statistics are based on the sales reported by real estate offices on or before the last day of the month. Sales not reported by month end and collapsed sales are reflected in the subsequent month's statistics.

All OMREB listings are published in the MLS® Real Estate Review and MLS® Commercial Review magazines available at all real estate offices and various locations in the Central Okanagan, North Okanagan, the Shuswap and Revelstoke areas. For comprehensive Board-wide statistical information, please visit our local public site: www.omreb.com



Population Health

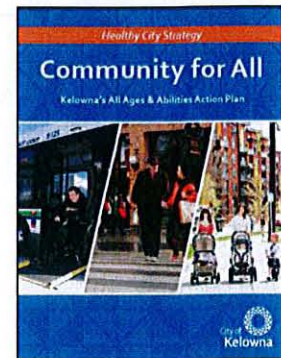
Healthy Communities Update

February 2017

Community Recognition

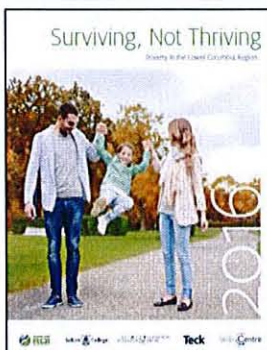
Kelowna Community for All Action Plan

Congratulations to the City of Kelowna for the recent council endorsement of their [Community for All Action Plan](#). The plan includes 31 action items to be implemented over the next 2 years to realize the vision of creating a city that is healthy, safe, active and inclusive for seniors, children and those with diverse abilities. The City of Kelowna will lead 21 of these actions and key community stakeholders including Pathways Abilities Society, People in Motion, School District #23, Seniors Outreach Services Society and Interior Health will lead the remaining 10 actions.



"50,000 Pounds - 50,000 Smiles": Communities gets ready to Grow Local

The [Elk Valley](#), [Kelowna](#), and [Lillooet](#) will be growing more local food in 2017 thanks to provincial funding. More local growers mean more people enjoying fresh vegetables. BC's Grow Local program is funding projects in 10 communities throughout the province.



Surviving, Not Thriving: Poverty in the Lower Columbia Region

This new state-of-poverty report for the Lower Columbia Region (in and around the City of Trail) is filled with fresh economic and demographic statistics. We can't change what we don't measure, and this report is a step in the right direction to make policy and planning changes that could have positive population health outcomes for years to come. Read the report [here](#). See what the media have to say [here](#).

Zero pedestrian and cyclist fatalities in 2016 for Halifax

Halifax didn't even have a 'Vision Zero' plan, but in 2016 they had zero pedestrian/cyclist fatalities. And they are pretty pleased about it! Their built environment interventions seem to be working. Read more [here](#).

Events and Learning Opportunities

National Poverty Reduction Summit - business focus this year

April 4 - 6

What happens when businesses get involved in tackling poverty? That is the theme of the third annual poverty reduction summit — Cities Reducing Poverty: When Business is Engaged — coming to Hamilton this April. Read a media article [here](#). Register for the event [here](#).

Public Policies to Make Bicycling Even Safer

March 16: 10— 11am PST

This is a webinar about Canadian evidence on the percentage of trips by bike, helmet laws, and infrastructure. Presented by Kay Teschke, Professor in the School of Population and Public Health at the University of British Columbia. See [here](#) for information and how to register.

An Asset-Based Community Development (ABCD) approach to 'healthful aging' and care in rural communities

March 14: 12—1pm PST

Working in partnership with Interior Health, this research project will use an ABCD framework to support local community capacity and resiliency for healthful aging in rural communities in New Denver, BC. Register [here](#).

Why food won't solve the problem of hunger

Nick Saul | TEDxToronto

Nick Saul is President and CEO of Community Food Centres Canada, a national organization that builds and supports vibrant, food-focused community centres in low-income neighbourhoods. These centres are based on the idea that good food is a powerful force for greater health, equity and social change. Watch it [here](#).

Healthy Public Policy Resources

BC Family Demographic Infographics

The BC Council for Families has partnered with SPARC BC to produce a series of infographics about family demographics in regional districts across BC using the results of their 2015 Let's Talk Families BC! survey. View all the colourful infographics [here](#).



5 Powerful Community Initiatives - short videos

New from [PlanH](#) and BC Healthy Communities. Watch [these](#) and get inspired about collaborative community action!

Report on Outdoor Smoke-Free Ordinances

With the steady expansion of local legislation, it is beneficial to understand the impact of outdoor smoke-free ordinances on communities and whether such policies have affected municipal capacity, specifically enforcement and legal staff. Additionally, this report offers municipal viewpoints four years after BC municipalities passed Resolution B92 calling for provincial smoke-free outdoor places legislation and it offers perspectives on how the Province of BC might move forward on this issue in future. See full report [here](#). A [factsheet](#) was also created. This Link explains the rationale for [outdoor smoke and vape-free policies](#) from the Canadian Cancer Society.

Health Status of Canadians 2016: Report of the Chief Public Health Officer



Health is fundamental to our quality of life and to Canada's prosperity in the world. Using a collection of health indicators to monitor the health status of a population helps us understand areas where we are doing well and those areas where we can improve. This snapshot is a useful tool to help bring us closer to narrowing health gaps in Canada and preventing illness in the most vulnerable.

See [here](#) for background info. See [here](#) for the full report.

Funding News

Connect to Innovate

The federal government's Connect to Innovate program will invest up to \$500 million by 2021 to bring high-speed Internet to rural and remote communities in Canada. The deadline for submissions has been extended until **April 20, 2017**. Access to health care is a determinant of health, and Internet technology can help. Learn more [here](#).

Active Communities Grant

Local governments, regional districts and First Nations, can apply for the Active Communities Grants to increase opportunities for physical activity through improving access, inclusion and/or healthy community design. Each health authority will receive \$353,800 to award individual community grants of up to \$30,000, with the opportunity for larger combined grants for joint proposals. Interior Health will have an open call for proposals supported by BC Healthy Communities Society beginning at the end of March, with an application deadline of **May 15, 2017**. For more information, contact Gagan Leekha at: gagan@bchealthycommunities.ca Read the news release [here](#).



BC Healthy Communities
People. Place. Potential.

Community Spaces Funding

Co-op will contribute up to \$2 million to help support projects that improve the places Canadians meet, play, learn and share. Funding categories are recreation, environmental conservation, and urban agriculture. Only registered non-profits, registered charitable organizations, or community service co-operatives may apply. Application period is **February 1 to March 1, 2017**. Learn more [here](#).

Community Fund for Canada's 150th

Canadian municipalities and registered charities may apply for grants up to \$15,000 from their local community foundation. Funds are for projects that build vibrant and healthy communities with the broadest possible engagement of all Canadians, including indigenous peoples; groups that reflect our cultural diversity; youth; and official language minorities. Each foundation has its own application timelines so please see [here](#) for more information.

Sincerely,

Your Community Health Facilitators:

Thompson/Cariboo



Nicole Fornelli
250.851.7387
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North Okanagan/Shuswap



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Legalization of Cannabis in Canada: Implementation strategies and public health



University
of Victoria
Centre for
Addictions
Research of BC

Scott Macdonald, Tim Stockwell, Dan Reist, Lynne Belle-Isle, Cecilia Benoit,
Russell Callaghan, Cheryl Cherpitel, Tim Dyck, Mikael Jansson, Bernie Pauly,
Eric Roth, Kate Vallance and Jinhui Zhao

Summary of Recommendations

- 1 The Federal government should provide guidelines for the production and sale of cannabis that includes the specific objective of minimizing harms to users.
- 2 Cannabis should be sold in government-controlled stores and individuals should be allowed to grow specified quantities for personal use.
- 3 Standardized labelling on all cannabis products should include at least percent of THC, product weight, number of "standard doses" and percent of cannabidiol (CBD).
- 4 Regulations encourage the development and use of less harmful products. Cannabis products that may be attractive to children should be sold in tamper resistant containers.
- 5 Minimum prices are set per standard dose (based on THC content) and Canadian jurisdictions strive for a consistent approach to pricing of cannabis products.
- 6 Products derived from cannabis for medicinal purposes should be prescribed by doctors and dispensed by pharmacists.
- 7 Cannabis sales are subject to the same age restrictions as alcohol in each province.
- 8 A well-developed set of advertising regulations is needed with a public complaints mechanism.
- 9 Civil sanctions are created for cannabis impaired driving similar to the current BC alcohol impaired laws. Drivers should have a choice as to whether to provide a urine, saliva or blood sample while being advised that blood is the most accurate.
- 10 Investment is made in effective strategies to increase Canadians' health literacy related to drug use to equip them to make informed healthy choices about cannabis use.
- 11 A high percentage (10% or more) of revenue gains from the sale of cannabis products is directly diverted to health promotion, education, research and treatment.
- 12 Enforcement against violations of regulations related to cannabis should be treated similarly to current regulations related to tobacco and alcohol.

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Background

The Federal government is committed to legalizing the sale and use of cannabis in Canada in spring 2017 (Smith, 2016). Cannabis is a popular drug and its criminalization has been costly and ineffective in deterring use (Nolin et al., 2002). Legalization entails new challenges of balancing the potential harms associated with cannabis use with potential societal benefits, including the likely substantial government revenues accruing from its sale. Going forward with legalization, many lessons can be learned from alcohol and cannabis legalization in other jurisdictions. In response primarily to major social problems associated with excessive use, alcohol was banned in several Canadian provinces and the U.S. in the 19th and early 20th centuries with benefits of lower per capita consumption and alcohol-related harms (Blocker, 2006). However, in jurisdictions with prohibition the illicit distribution of alcohol by organized crime was common, courts were clogged with drink related prosecutions, unscientific alcohol curricula were taught to students, and prohibition was largely viewed negatively (Blocker, 2006). Despite some public health benefits including reduced deaths from liver cirrhosis (Blocker, 2006), it was apparent to many that the costs of prohibition outweighed the costs of legalization. Close to a century after prohibition, alcohol has been gradually liberalized, propelled by public preferences and pressures from vested commercial interests. Concurrently, the acute harms such as alcohol-related traffic crashes and violence, and chronic health conditions, such as liver cirrhosis, have escalated. Today, alcohol has been rated as more harmful to oneself and others than any other drug (Nutt et al., 2010).

Population surveys show that a large proportion of the Canadian population has used cannabis, which suggests normalization. About 11% (3.1 million) of Canadians reported use in the past year (Health Canada, 2013) and over 40% have used cannabis in their lifetime. In 2002, 1.5 million Canadian citizens were reported to have criminal records for possession of cannabis (John Howard Society, 2002). In 2014, over 66% of drug related crimes were reported for cannabis in Canada, with approximately 68,000 total cannabis offences and about 57,000 of those were for possession (Boyce, 2015). The negative impacts of criminalization against cannabis users have been documented (Erickson, 1980). As pointed out by the Senate Special Committee on Illegal Drugs, laws are, ideally, a source for normative rules that should be used sparingly while respecting the freedoms of individuals to seek their own well-being, and current supply-reduction policies have been ineffective (Nolin et al., 2002). Given that the annual costs of police enforcement and sentencing for crimes related to all types of illicit substances were estimated at 1.4 billion dollars a decade ago (Rehm et al., 2006), annual enforcement costs for cannabis alone likely exceed 1 billion dollars per year today. Under most models, legalization allows profits from sales to be diverted to governments. These factors have all likely contributed to the Federal government's commitment to legalize cannabis.

Prohibition of alcohol and cannabis was intended to minimize use of these substances and the associated harms to individuals and society, but enforcement became too onerous in relation to the popularity of these substances. The acute effects of cannabis can compromise short-term memory, increase anxiety, paranoia, and psychotic symptoms, and reduce perceptual abilities that can increase the likelihood of injury, especially while driving a car (Hall, 2014). Negative effects from chronic use include possible dependency, respiratory illnesses and possible cancers when smoked (Gordon et al., 2013; Hall, 2014). There is a possible link between chronic use and schizophrenia (Minozzi et al., 2010; Murray et al., 2007) and rare cases of hyperemesis syndrome, characterized by nausea and vomiting (Wallace et al., 2011). In terms of positive effects, many users report pleasant euphoric effects, social benefits and some medicinal effects noted later in this report.

As members of the Centre for Addictions Research of BC (CARBC), University of Victoria with expertise regarding the societal impacts of substance use, we have prepared this Bulletin to recommend some overarching strategies to help reduce potentially negative consequences of legalized cannabis. We are all currently actively involved in conducting research into substance use issues in society and have related graduate training in diverse disciplines, including Anthropology, Criminology, Epidemiology, Nursing, Philosophy, Psychology, and Sociology (see more details of our backgrounds and research at www.carbc.ca). Our intent is not to debate legalization, which has been addressed in several policy documents (see Nolin et al., 2002, Centre for Addiction and Mental Health, 2014); we all agree that criminalization of cannabis has yielded few benefits. In this Bulletin, we recognize that legalization provides opportunities to prevent and reduce harms that could not be adequately addressed in a criminalized environment. We take a public health approach and recommend some key policies and practices that aim to strike a delicate balance between ensuring fiscal benefits for government and the social responsibility of regulating substances that are potentially harmful to the health of Canadians. This Bulletin is divided into two main sections: (1) regulations for sales of cannabis, and (2) other strategies to minimize harms from use.

Regulations for sales of cannabis in Canada

Governance of cannabis sales

Historically, the prohibition of alcohol in Canada was instituted in the existing provinces as well as in the Northwest Territories between 1856 and 1919, but later repealed in various years, with Prince Edward Island being the final province to legalize alcohol in 1948 (Hallowell, 1988). As well, municipalities could prohibit the sale of alcohol and today, several Canadian communities, primarily indigenous reserves, are currently “dry” with no sales outlets and alcohol use forbidden. Many of these communities are facing extreme challenges from being alcohol free while surrounded by outside jurisdictions where alcohol is readily accessible. Bootlegging and smuggled black market alcohol is common. The lesson to be learned is that such disparities between jurisdictions can create additional social problems for those areas that attempt to prohibit sales, even though there is strong evidence that dry communities have significantly lower rates of alcohol-related deaths compared with other similar but not “dry” communities.

Although the Federal government plans to introduce legislation in 2017 to eliminate cannabis possession and sales from the criminal code, the commercial sale of cannabis may still be restricted by provincial/territorial and municipal rules and regulations. This means that although the use and sale will be legal, not necessarily every province/territory and municipality will permit the sale or use of cannabis in all areas or indeed anywhere. Similarly, the sale and distribution of alcohol in Canada is governed by the provinces/territories, which has resulted in diverse systems of liquor distribution, from privately controlled to government controlled stores, with regulatory practices for beer, wine and spirits varying by area. Lessons can be learned from the Federal regulation of alcohol production and sales (in the Excise Act).

R¹ We recommend that the Federal government provide guidelines regarding the production and sales of cannabis, including recommendations for regulations aimed to minimize harms to users.

Type of distribution system

Research on alcohol distribution indicates that government controlled stores are more effective than privately controlled stores in addressing issues around mitigating negative public health consequences related to alcohol use (Her et al., 1999; Stockwell et al., 2012). Government controlled distribution systems can better control pricing, labelling, overall outlet density, enforcement of minimum age restrictions and also restrictions on sales to impaired customers. Government systems are best suited to minimizing harms. Since cannabis is relatively simple to grow, it will be impractical to prohibit cultivation of small quantities.

R² We recommend cannabis be sold through government controlled stores and that individuals should not be prohibited from growing specified quantities for personal use.

Labelling of products

A major benefit of legalization is that products can be regulated and standardized so that consumers are better informed regarding their constituents. Increased awareness by consumers can be helpful to mitigate potential negative consequences from use.

Legalization should require chemical analysis of products so that purchasers are aware of the amount of THC (the main psychoactive constituent) and CBD (an important constituent for medicinal use) in the product before use. Federally mandated labelling requirements should assist in helping consumers understand differences among cannabis products.

Studies of alternative health-related labelling for alcohol indicate that labelling the number of “standard drinks” in a container assists consumers to estimate whether they will have exceeded national low risk drinking guidelines (Osiowy et al., 2015). Labelling of percent alcohol content alone was shown to be insufficient. The development of standardized doses, similar to the idea of a “standard drink,” could allow users to be better informed of the amount of THC in a given product. Labelling products in terms of standard doses of THC (e.g. “joints”) would enable consumers to better follow future low risk cannabis use guidelines (Fischer et al., 2011). Research has been conducted on how to best define “standard joints” (Zeisser et al., 2012), which could be helpful in defining standard doses, including different product forms, such as concentrates (e.g. hashish, oils) and edibles.

R³ We recommend standardized labelling on all cannabis products. Standardized labelling should include, as a minimum, the percent of THC, the weight of each product, and the number of standard doses (based on THC content), and the percent of cannabidiol (CBD). The amount of THC in an “average joint” may be a useful basis for defining a standard dose.

Types of cannabis products

Various cannabis products have different associated risks. Legalization provides an opportunity to put in place regulations to minimize the potential harm from cannabis use. Research suggests that marijuana smoking is harmful to the lungs even though the impact may be different than for tobacco (Tetrault et al., 2007). Vaporizers can be used to extract THC at low temperatures below the point of combustion of plant matter and thus reduce the harms associated with smoke. Cannabis and its constituents can also be taken as edibles, tinctures, pills or in other forms. Although these forms of use eliminate potential lung problems, they can pose other risks. For example, when used orally, the effects are considerably delayed making it harder for the person to sense immediately the impact, potentially leading to consumption of a higher dose than desired (Hartman et al., 2015a); in the hands of children, tasty edibles or other oral products could be problematic.

R⁴ We recommend that cannabis policies and regulations recognize the diverse harm potential of different cannabis products and that policies and regulations seek to encourage the development and use of less harmful products and mitigate the harms wherever possible. Cannabis products that may be attractive to children should be sold in tamper resistant containers to prevent accidental harm.

Pricing of products

A balance must be struck in relation to prices for cannabis. If prices are too high in comparison to production costs or prices in neighboring jurisdictions, illegal markets can emerge (Kleiman, 2015). However, higher absolute prices and minimum prices of alcohol have been shown to be related to lower rates of alcohol-related morbidity and mortality (Stockwell et al., 2013; Wagenaar et al., 2010).

R⁵ We recommend that minimum prices be established per standard dose (based on THC content) of cannabis and that Canadian jurisdictions strive for a consistent approach to pricing. The pricing regulations should seek to minimize the negative health impact of cannabis while also minimizing the potential for a black market.

Medical cannabis

CBD is a non-psychoactive constituent in cannabis that has been studied for its medicinal effects, such as to reduce anxiety (Brenneisen, 2007). Strains of cannabis vary considerably in terms of their THC or CBD contents. These cannabis compounds can produce analgesic effects (Watson et al., 2000), and have been found to be beneficial for some neurological conditions (Koppel et al., 2014). In Canada since July, 2001, cannabis could be prescribed by physicians to patients for a variety of medical conditions but barriers to access have existed (Belle-Isle et al., 2014). More research is needed to better understand the different benefits of different chemical compounds in cannabis. Currently, few insurance plans cover the costs of cannabis for medicinal purposes, although this will likely change in a legalized environment. Cannabis as a medicine is distinct from cannabis as a recreational drug and should be treated as such in a regulated market.

R⁶ We recommend that products derived from cannabis for medicinal purposes and prescribed by doctors be dispensed by pharmacists as safety standards for medical products are at a higher standard and ingredients and products should be specific to address a particular medical condition.

Age restrictions

Use of cannabis by youth is a major issue with respect to legalization. Past year use of cannabis is highest among 18- to 24-year-olds (Statistics Canada, 2015). While cannabis use among Canadian young people seems to have decreased since 2002 (Public Health Agency of Canada, 2008), according to UNICEF, Canada has the highest percentage among rich countries of the world of children aged 11, 13 and 15 who report having used cannabis in the last 12 months (UNICEF Canada, 2013). Given that youth have been most likely to use cannabis under the criminalized regime, it is unlikely that age restrictions for sales will be successful in preventing all youth from using cannabis. However, age restrictions may help delay the onset of use for some.

R⁷ We recommend sales be subject to the same age restrictions as currently used for alcohol in each province. Any penalties for sales violations should be aimed at sales personnel and adults rather than those who are underage.

Advertising

Research on alcohol advertising indicates that promotion encourages use (Anderson et al., 2009). A particular concern is advertising aimed at youth (Saffer, 2002). A related concern is that much alcohol advertising is seen by underage youth and that, despite attempts by the alcohol industry to self-regulate content, promotions that glamourize drinking can still be found, especially in social media and on the internet generally. Some alcohol products, such as alcopops, are particularly attractive to youth (Saffer, 2002).

In Colorado, where cannabis was legalized in 2012, numerous cannabis-infused products including chocolates and candy can be purchased. As noted above, these products may be less harmful than smoking, but they also can be appealing to children and youth. The State of Colorado has taken the position that cannabis advertising should be regulated in a way similar to alcohol and has developed a comprehensive set of regulations (Colorado Department of Revenue, 2013).

R⁸ We recommend that cannabis advertising be subject to a well-developed set of regulations similar to those developed to regulate alcohol advertising and that these regulations give particular attention to prohibiting any advertising aimed at children and youth. A public complaints mechanism should be set up to allow reporting infringements and compliance enforcement should be a priority.

Other Strategies to minimize harms from cannabis use

As noted in the introduction of this Bulletin, use of cannabis can cause some short and long term negative consequences, which should be addressed under a new system.

Driving while under the influence of cannabis

Driving under the influence of cannabis can be dangerous, which legitimates appropriate legal measures to protect the well-being of motorists and others (including, e.g., graduated licensing programs with zero tolerance of impairment in novice drivers). Enforcement of laws against impaired drugged driving is challenging to implement because the validity of drug tests for cannabis to assess impairment ranges from poor to moderate. Although cannabis use can be detected with oral fluids, urine, hair and sweat, studies have not found that these types of tests are accurately related to crash risk. Only blood tests for THC provide a moderately valid diagnosis for impairment. A meta-analysis of THC levels in blood and crash risk shows a significant relationship between the two (Asbridge et al., 2012); however, not enough research is available for empirically-established precise thresholds for impairment. The literature does provide some helpful points of reference. Empirical evidence suggests that a threshold of 6-8 ng/ml THC in blood is roughly equivalent to a blood alcohol content (BAC) of 0.05% alcohol (Grotenhermen et al., 2007). A recent laboratory study by Hartman et al. (2015b) found that 13.1 ng/ml THC in blood corresponds to a BAC of 0.08%. Thresholds and penalizing approaches to driving under the influence vary considerably across countries (Wong et al., 2014). In Canada, criminal convictions for drug impaired driving have relied on signs of impairment visible to police, usually followed by a positive drug test of urine, blood or oral fluids - a sequential procedure that reduces the likelihood of false positives for detecting impairment. A recent intervention study of impaired driving by alcohol in BC found that civil sanctions are both expedient and effective in reducing alcohol-related crashes (Macdonald et al., 2013).

R⁹ We recommend a system similar to that in BC for alcohol related driving which also includes civil sanctions and allows for criminal code violations. Those suspected of driving under the influence of cannabis under a criminal code should be given a choice of the type of biological sample to produce and be informed that blood tests are the most accurate form of drug testing for impairment. Conviction could result for those who refuse to provide any sample but have visual indicators consistent with impairment. A THC threshold of 6 ng/ml for a blood sample should be needed for penalization to apply.

Education and Prevention

The change in the legal status of cannabis presents an opportunity to engage Canadians in meaningful drug education initiatives. A health promotion approach to cannabis education would place healthy individuals, families and communities at the forefront. Health promotion efforts should enable people to increase control over their health and, ultimately, reduce the potential health and social harms associated with cannabis use. This means ensuring easy access to evidence informed information that reflects the complexity of the issues, opportunities for critical thinking and interpersonal dialogue and the means to develop personal and social skills. One promising drug education approach is represented by the iMinds program in BC. As we repeal prohibition on cannabis, we need to invest in such health promotion approaches.

R¹⁰ We recommend investing in effective strategies to increase Canadians' health literacy related to drug use to equip them to make informed healthy choices about cannabis use. This should involve delivering theoretically sound drug education programs in all schools as well as a range of evidence-informed public education strategies.

Treatment

Increased frequency and quantity of cannabis use can lead to cannabis use disorders. Although research shows that a lower percent of users transitions to dependence (the most severe level of disorder) from cannabis use than from nicotine, cocaine or alcohol use (Lopez-Quintero et al., 2011), substance use treatment agencies report considerable admissions for cannabis disorders.

R¹¹ We recommend that a high percentage (10% or more) of revenue gains from the sale of cannabis products be directly diverted to health promotion, education, research and treatment.

Enforcement

Law enforcement should be directed toward prevention of a black market, activities that may harm others, such as cannabis impaired driving, and aimed at ensuring standards of public health. Regulations similar to tobacco to protect those from second hand smoke should apply.

R¹² We recommend that enforcement against violations of regulations related to cannabis should be treated similarly to current regulations related to tobacco and alcohol.

Conclusions and summary of recommendations

Going forward with cannabis legalization, many lessons can be learned from the Canadian experience with legalization of alcohol. Over time, Canadian populations have acclimatized to legal alcohol and have endorsed easier access. However, cannabis like alcohol is no ordinary commodity and a delicate balance is needed between the pressures for liberalization and public and individual health harms (Babor et al., 2010).

The onset of legalization will likely be associated with a substantial new economic sector largely geared towards maximising profitability, and a host of new cannabis products that will emerge to encourage use. If effective regulatory pressures can be applied, these products will include smokeless alternatives that will reduce long-term health consequences but may increase negative acute and social consequences. Legalization also presents more open opportunities for objective research on benefits and harms.

The recommendations in this report are primarily aimed at regulations that should be mandated at the Federal level and provide guidance to jurisdictions that choose to legally sell cannabis.

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Views in this Bulletin are shared by the authors and do not necessarily reflect the views of other members of CARBC or the University of Victoria.

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References

- Anderson, P., de Bruijn, A., Angus, K., Gordon, R. and Hastings, G. (2009). Impact of Alcohol Advertising and Media Exposure on Adolescent Alcohol Use: A Systematic Review of Longitudinal Studies. *Alcohol & Alcoholism*, 44(3), 229-243.
- Asbridge, M., Hayden, J. A., & Cartwright, J. L. (2012). Acute cannabis consumption and motor vehicle collision risk: systematic review of observational studies and meta-analysis. *BMJ: British Medical Journal*, 344, e536–e536.
- Babor, T.F., Caetano, R., Casswell, S., Edwards, G., Giesbrecht, N., Graham, K. (2010). *Alcohol: No ordinary commodity, Research and public policy*. Oxford University Press.
- Belle-Isle, L., Walsh, Z., Callaway, R., Lucas, P., Capler, R., Kay, R., & Holtzman, S. (2014). Barriers to access for Canadians who use cannabis for therapeutic purposes. *International Journal of Drug Policy*, 25(4), 691–699.
- Boyce, J. (2015). Police-reported crime statistics in Canada, 2014. *Juristat*. Statistics Canada Catalogue no. 85-002X.
- Brenneisen, R. (2007). Chemistry and Analysis of Phytocannabinoids and Other Cannabis Constituents. In M. A. ElSohly (Ed.), *Marijuana and the Cannabinoids* (pp.17–49). Humana Press.
- Blocker, J. (2006). Did Prohibition Really Work? Alcohol Prohibition as a Public Health Innovation. *American Journal of Public Health*, 96(6), 962–965.
- Canadian Centre on Substance Abuse (2016) Marijuana and Youth. <http://www.ccsa.ca/Eng/topics/Marijuana/Marijuana-and-Youth/Pages/default.aspx>
- Centre for Addiction and Mental Health, Cannabis policy framework, Oct 2014.
- Colorado Department of Revenue. (2013). Permanent Rules Related to the Colorado Retail Marijuana Code. Denver, CO: State of Colorado. Retrieved from [https://www.colorado.gov/pacific/sites/default/files/Retail Marijuana Rules, Adopted 090913, Effective 101513%5B1%5D_0.pdf](https://www.colorado.gov/pacific/sites/default/files/Retail%20Marijuana%20Rules,%20Adopted%20090913,%20Effective%20101513%5B1%5D_0.pdf)
- Erickson, P. (1980). Cannabis Criminals: The social effects of punishment on drug users. Toronto: Addiction Research Foundation.
- Fischer, B., Jeffries, V., Hall, W., Room, R., Goldner, E., Canadian, S., ... Rehm, J. (2011). Lower Risk Cannabis Use Guidelines for Canada (LRCUG): A Narrative Review of Evidence and Recommendations. *Canadian Journal of Public Health*, 102(5), 324–327.
- Gordon, A. J., Conley, J. W., & Gordon, J. M. (2013). Medical consequences of marijuana use: A review of current literature. *Current Psychiatry Reports*, 15(12), 419.
- Grotenhermen, F., Leson, G., Berghaus, G., Drummer, O. H., Krüger, H.-P., Longo, M., ... Tunbridge, R. (2007). Developing limits for driving under cannabis. *Addiction*, 102(12), 1910–7.
- Hall, W. (2014). What has research over the last two decades revealed about the adverse health effects of recreational cannabis use. *Addiction*, 110(1), 19–35.
- Hallowell, Gerald (1988). "Prohibition in Canada" The Canadian Encyclopedia. Hurtig Publishers.
- Hartman, R. L., Anizan, S., Jang, M., Brown, T. L., Yun, K., Gorelick, D. A., ... Huestis, M. A. (2015a). Cannabinoid disposition in oral fluid after controlled vaporizer administration with and without alcohol. *Forensic Toxicology*, 33(2), 260-278.
- Hartman, R. L., Brown, T. L., Milavetz, G., Spurgin, A., Pierce, R. S., Gorelick, D. A., ... Huestis, M. A. (2015b). Cannabis Effects on Driving Lateral Control With and Without Alcohol. *Drug and Alcohol Dependence*, 154, 25–37.
- Health Canada (2013). Summary of results for 2013, Canadian Tobacco, Alcohol and Drugs Survey, Government of Canada <http://healthycanadians.gc.ca/science-research-sciences-recherches/data-donnees/ctads-ectad/summary-sommaire-2013-eng.php>
- Her, M., Giesbrecht, N., Room, R., & Rehm, J. (1999). Privatizing alcohol sales and alcohol consumption: evidence and implications. *Addiction*, 94(8), 1125–1139.
- John Howard Society (2002). <http://www.johnhoward.ca/document/drugs/fact/1.htm>
- Kleiman, M. A. R. (2015). Legal Commercial Cannabis Sales in Colorado and Washington: What Can We Learn? Center for 21st Century Security and Intelligence Latin America Initiative. <https://www.brookings.edu/wp-content/uploads/2016/07/Kleiman-Wash-and-Co-final.pdf>
- Koppel, B. S., Brust, J. C. M., Fife, T., Bronstein, J., Youssouf, S., Gronseth, G., & Gloss, D. (2014). Systematic review: Efficacy and safety of medical marijuana in selected neurologic disorders: Report of the Guideline Development Subcommittee of the American Academy of Neurology. *Neurology*, 82(17), 1556–1563.
- Lopez-Quintero, C., Cobos, J. P. de los, Hasin, D. S., Okuda, M., Wang, S., Grant, B. F., & Blanco, C. (2011). Probability and predictors of transition from first use to dependence on nicotine, alcohol, cannabis, and cocaine: Results of the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC). *Drug and Alcohol Dependence*, 115(1–2), 120–130.
- Macdonald, S., Zhao, J., Martin, G., Brubacher, J., Stockwell, T., Arason, N., ... Chan, H. (2013). The impact on alcohol-related collisions of the partial decriminalization of impaired driving in British Columbia, Canada. *Accident, Analysis & Prevention*, 59, 200–5.
- Minozzi, S., Davoli, M., Bargagli, A. M., Amato, L., Vecchi, S., & Perucci, C. A. (2010). An overview of systematic reviews on cannabis and psychosis: Discussing apparently conflicting results. *Drug and Alcohol Review*, 29(3), 304–317.
- Murray, R. M., Morrison, P. D., Henquet, C., & Di Forti, M. (2007). Cannabis, the mind and society: the hash realities. *Nature Reviews. Neuroscience*, 8(11), 885–895.
- Nolin, P. C. et al. (2002). Cannabis: Our position for a Canadian public policy, Summary Report. Senate Canada.
- Nutt, D. J., King, L. A., & Phillips, L. D. (2010). Drug harms in the UK: a multicriteria decision analysis. *Lancet*, 376(9752), 1558–65.
- Osiowy, M., Stockwell, T., Zhao, J., Thompson, K., & Moore, S. (2015). How much did you actually drink last night? An evaluation of standard drink labels as an aid to monitoring personal consumption. *Addiction Research & Theory*, 23(2), 163–169.
- Public Health Agency of Canada. (2008). Healthy settings for young people in Canada: Substance Use among Canadian Students. Retrieved July 3, 2016, from http://www.phac-aspc.gc.ca/hp-ps/dca-dea/publications/yjc/ch4_78_83-eng.php
- Rehm, J., Baliunas, D., Brochu, S., Fischer, B., Gnam, W., Patra, J., Popova, S., Sarnocinska-Hart, A., and Taylor, B. in collaboration with Adlaf, E., Recel, M., and Single, E. (2006). The cost of substance abuse in Canada, 2002: highlights. Ottawa: Canadian Centre on Substance Abuse.
- Saffer, H. (2002). Alcohol Advertising and Youth. *Journal of Studies on Alcohol*, Supplement 14, 173-181.
- Smith, J. (2016). Marijuana legislation coming to Canada next spring, The Toronto Star <https://www.thestar.com/news/canada/2016/04/20/marijuana-legislation-coming-to-canada-next-spring.html>
- Statistics Canada. (2015). Prevalence and correlates of marijuana use in Canada, 2012. Retrieved July 3, 2016, from <http://www.statcan.gc.ca/pub/82-003-x/2015004/article/14158-eng.htm>
- Stockwell, T., Zhao, J., Giesbrecht, N., Macdonald, S., Thomas, G., & Wettlaufer, A. (2012). The raising of minimum alcohol prices in Saskatchewan, Canada: impacts on consumption and implications for public health. *American Journal of Public Health*, 102(12), e103–10.
- Tetrault, J. M., Crothers, K., Moore, B. A., Mehra, R., Concato, J., & Fiellin, D. A. (2007). Effects of Marijuana Smoking on Pulmonary Function and Respiratory Complications: A Systematic Review. *Archives of Internal Medicine*, 167(3), 221–228.
- UNICEF Canada. (2013). Child well-being in rich countries: A comparative overview-Canadian companion. Report Card 11. Retrieved from <http://ideas.repec.org/p/ucf/inreca/inreca683.html>
- Wagenaar, A. C., Tobler, A. L., & Komro, K. A. (2010). Effects of alcohol tax and price policies on morbidity and mortality: A systematic review. *American Journal of Public Health*, 100(11), 2270–2278.
- Wallace, E., Andrews, S., Garmany, C., & Jelley, M. (2011). Cannabinoid Hyperemesis Syndrome: Literature review and proposed diagnosis and treatment algorithm. *Southern Medical Journal*, 104(9), 659–664.
- Watson, S. J., Benson, J., & Joy, J. E. (2000). Marijuana and Medicine: Assessing the Science Base. A Summary of the 1999 Institute of Medicine Report, *Archives of General Psychiatry*, 57(June), 547–552.
- Wong, K., Brady, J. E., & Li, G. (2014). Establishing legal limits for driving under the influence of marijuana. *Injury Epidemiology*, 1(1), 26.
- Zeisser, C., Thompson, K., Stockwell, T., Duff, C., Chow, C., Vallance, K., Ivins, A., Michelow, W., Marsh, D., & Lucas, P. (2012). A "standard joint"? The role of quantity in predicting cannabis-related harm. *Addiction Research & Theory*, 20(1), 82–92.