



# BC Hepatitis Testers Cohort: Update for Collective Impact Network April 2, 2019

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## Acknowledgements

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  - The BC-HTC Team
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- BC Cancer
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- All data stewards

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  - BCCDC
  - Canadian Institute of Health Research











## Disclaimer

 All inferences, opinions, and conclusions drawn in this presentation are those of the author(s), and do not reflect the opinions or policies of the BC Ministry of Health and Data Steward(s).





## Ministry of Health Citations

- British Columbia Ministry of Health [creator]. (2017): PharmaNet. British Columbia Ministry of Health [publisher]. Data Extract. MOH. (2013). <a href="http://www.health.gov.bc.ca/data/">http://www.health.gov.bc.ca/data/</a>
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- British Columbia Ministry of Health [creator] (2016): Client Roster (Client Registry System/Enterprise Master Patient Index). British Columbia Ministry of Health [publisher]. Data Extract. MOH (2013). <a href="http://www.health.gov.bc.ca/data/">http://www.health.gov.bc.ca/data/</a>



## **Outline**

Community Group Priorities

Conferences 2019

Published manuscripts 2018

• Submitted manuscripts 2018/19





### 1. Youth Co Request:

- Data on youth (<30): diagnoses by geography, granular to clinics, # youth seroconvert
  - → potential interventions/supportive opportunities
- BCHTC action:
  - Comparison of < 30 vs. ≥ 30 years of age</li>
  - Share results at CIN meetings
  - Releasing data at clinic level needs more vetting





### 2. Pacific AIDS Network

- KTE to community: regional/topical profiles via webinars, recordings, blogs. 2-3 mini presentations/yr
- Regional Training & Educators Forum 1-1.5 presentation at LHA levels to support program planning. Opportunity at Regional Training for Island Health in fall.

- Fits well with CPS KT plans
- Researchers can present on current analyses





### 2. Pacific AIDS Network continued

- Geographic service equity:
  - health care service use, mono/co-infection, HR service use by geography and urban/small urban/rural/remote via maps.
  - HIV &/or HCV cascades in maps with social determinants of health.
  - Map from resiliency approach (how is health & wellness defined & supported by health & social services)

- Maps of HCV infection, co-infection, HCV cascades (Dr. Zahid Butt)
- Layering of health service use, testing, HR services, comorbidities, etc. in progress
- Evaluating how to tell a success story within communities





### 2. Pacific AIDS Network continued

• Stigma: map experience with stigma and discrimination (or use proxy like service use/testing rates).

→ Interest to measure changes over time to stigma experience; map to PWLE with HCV &/or drug use

- Currently specific data on stigma (survey data) not part of datasets
- In discussion with BCCDC staff who have worked more closely in stigma field to assess proxies (Dr. Travis Salway, Liza McGuinness, Dr. Teri Buller-Taylor)





#### 3. Pacific Hepatitis C Network

- HCV Cascades: BC/HA, population specific BC/HA who, where, when, risk, age
- Twin epidemic hot spots: geo of highest incidence/which populations, map high HCV in birth cohorts w/ low screening/treatment uptake, etc.
- Characteristics of lost to care who, where, when, risk, age

- Cascades by geography, sex, birth cohort, PWID, co-infection, stage of infection (chronic/sero), ethnicity, urban/rural, year of diagnosis
- Maps of HCV infection, co-infection, HCV cascades (Dr. Zahid Butt)
- Layering of health service use, testing, HR services, co-morbidities, etc. in progress
- LTF: submitted manuscript: Is loss to follow-up a significant barrier in the treatment cascade with HCV DAAs? (Dr. Maryam Darvishian); posters at AASLD 2018, Global Health Summit 2018





- Dissemination Plan
  - Blogs Smart Sex Resource (https://smartsexresource.com/)
  - Lay summaries (https://bchtc.med.ubc.ca/)
  - Infographics (https://bchtc.med.ubc.ca/)
  - Indicator Report pending
    - Public facing component dashboard?
  - Presentations
  - LHA profiles further vetting with MOH and HAs





## 2019 Conferences

	Conference	Location	Date	Number of presentations
1	BC Quality Forum	Vancouver, BC	26-28Feb2019	1 poster
2	CROI	Seattle, WA	4-7Mar2019	1 poster
3	EASL	Vienna, Austria	10-14Apr2019	4 posters
4	CAHR	Saskatoon, SK	9-12May2019	3 oral; 2 posters
5	Canadian Liver Meeting	Montréal, QC	24-26May2019	5 posters
6	ISSTDR	Vancouver, BC	14-17Jul2019	1 oral; 4 posters
7	INSHU	Montréal, QC	11-13Sep2019	pending
8	AASLD	Boston, MA	9-12Nov2019	pending
9	CCSA	Ottawa, ON	25-27Nov2019	1 abstract





## Conferences – Feb/Mar 2019

- BC Quality Forum, 26-28Feb2019
  - Integrating health and administrative datasets to improve quality of care: The BC-HTC
    - Dr. Sofia Bartlett
- Conference on Retroviruses and Opportunistic Infections (CROI), 4-7Mar2019
  - Hepatitis C cascade of care among people who inject drugs in British Columbia in 2017
    - Dr. Sofia Bartlett





## European Association for the Study of the Liver (EASL) 10-14Apr2019

- Factors associated with hepatitis C treatment uptake among people who inject drugs in a population-based data linkage study
  - Dr. Sofia Bartlett
- The impact of HCV SVR from direct acting antiviral and interferonbased treatments on HCC in a large population based cohort study
  - Dr. Naveed Janjua
- Cancer Risk Among People with HIV, HBV and/or HCV Infections
  - Dr. Maryam Darvishian
- Elevated HCV reinfection rates after cure or spontaneous clearance among HIV-infected and uninfected men who have sex with men
  - Dr. Carmine Rossi





## Canadian Conference on HIV/AIDS Research (CAHR) 9-12May2019

#### Oral

- HCV, HBV and HIV syndemics are associated with higher mortality risk in a large population based cohort study
  - Dr. Zahid Butt
- Effectiveness of sofosbuvir / velpatasvir in treating hepatitis C virus infection in real-world setting
  - Dr. Naveed Janjua
- Elevated HCV reinfection rates after cure or spontaneous clearance among HIV-infected and uninfected men who have sex with men
  - Dr. Carmine Rossi

#### Poster

- The impact of HCV SVR from direct acting antiviral and interferon-based treatments on mortality in a large population based cohort study
  - Dr. Naveed Janjua
- Drug-related deaths among hepatitis C positive and negative people in British Columbia, Canada
  - Dr. Hasina Samji





## Canadian Liver Meeting 24-26May, 2019

- Elevated HCV reinfection rates after cure or spontaneous clearance among HIVinfected and uninfected men who have sex with men
  - Dr. Carmine Rossi
- Spatio-temporal detection of HCV reinfection clusters: an approach to inform interventions for prevention of reinfection
  - Dr. Zahid Butt
- Characterization and identification of gaps within the HCV cascade of care among ethnic minority groups: a population-based cohort study
  - Dr. Margo Pearce
- Hepatitis C cascade of care and factors associated with treatment uptake among people who inject drugs in British Columbia in 2017
  - Dr. Sofia Bartlett
- Hepatitis C incidence rate among people who inject drug (PWID) in British Columbia from 2000 to 2015
  - Kelly Li MSc Student





## International Society for Sexually Transmitted Diseases Research (ISSTDR), 14-17Jul2019

#### Oral

- Hepatitis C incidence rate among people who inject drug (PWID) in British Columbia from 2000 to 2015
  - Kelly Li, MSc Student
- Poster
  - Evolution of Hepatitis C cascades of care among HIV and hepatitis B coinfected patients in British Columbia, Canada
    - Dr. Geoff McKee
  - MSM predictive modeling within a large, linked database of laboratory, surveillance, and administrative healthcare records
    - Dr. Travis Salway
  - Elevated HCV reinfection rates after cure or spontaneous clearance among HIV-infected and uninfected men who have sex with men
    - Dr. Carmine Rossi
  - Cancer Risk Among People with HIV, HBV and/or HCV Infections
    - Dr. Maryam Darvishian





## Published Manuscripts 2018

https://bchtc.med.ubc.ca/research/publications/

- Contextualizing Canada's Hepatitis C Virus Epidemic. Krajden M, et al. Canadian Liver Journal. https://doi.org/10.3138/canlivj.2018-0011
- Syndemic characterization of HCV, HBV, and HIV co-infections in a large population based cohort study. McKee G, et al. EClinM. <a href="https://doi.org/10.1016/j.eclinm.2018.10.006">https://doi.org/10.1016/j.eclinm.2018.10.006</a>
- Effectiveness of Ledipasvir/Sofosbuvir and Sofosbuvir/Velpatasvir in People Who
  Inject Drugs and/or Those in Opioid Agonist Therapy. Janjua NZ, et al. Hepatology
  Communications. <a href="http://dx.doi.org/10.1002/hep4.1307">http://dx.doi.org/10.1002/hep4.1307</a>
- Applying core theory and spatial analysis to identify HCV infection 'core areas' in British Columbia, Canada. Butt ZA, et al. Journal of Viral Hepatitis. <a href="https://onlinelibrary.wiley.com/doi/pdf/10.1111/jvh.13043">https://onlinelibrary.wiley.com/doi/pdf/10.1111/jvh.13043</a>
- Effect of Opioid Substitution Therapy (OST) and Psychotherapy on HIV Risk among HCV infected individuals. Butt Z, et al. Clinical Epidemiology. <a href="https://www.dovepress.com/articles.php?article\_id=40228">https://www.dovepress.com/articles.php?article\_id=40228</a>





## Published Manuscripts 2018

https://bchtc.med.ubc.ca/research/publications/

- Hepatitis C Virus Reinfection after Successful Treatment with Direct-Acting Antiviral Therapy in a Large Population-Based Cohort. Rossi C, et al. Journal of Hepatology. <a href="https://doi.org/10.1016/j.jhep.2018.07.025">https://doi.org/10.1016/j.jhep.2018.07.025</a>
- Estimating the impact of early hepatitis C virus clearance on hepatocellular carcinoma risk. Darvishian M, et al. Journal of Viral Hepatitis. <a href="https://onlinelibrary.wiley.com/doi/pdf/10.1111/jvh.12977">https://onlinelibrary.wiley.com/doi/pdf/10.1111/jvh.12977</a>
- Differing profiles of people diagnosed with acute and chronic hepatitis B virus infection in British Columbia, Canada. Binka M, et al. World J Gastroenterol. <a href="https://www.wjgnet.com/1007-9327/full/v24/i11/1216.htm">https://www.wjgnet.com/1007-9327/full/v24/i11/1216.htm</a>
- Identifying injection drug use and estimating population size of people who inject drugs using healthcare administrative datasets. Janjua NZ, et al. International Journal of Drug Policy 2018. https://www.sciencedirect.com/science/article/pii/S0955395918300306
- Trends in hepatocellular carcinoma incidence and survival among people with hepatitis C: an international comparison. Alavi M, et al. Journal of Viral Hepatitis. <a href="https://doi.org/10.1111/jvh.12837">https://doi.org/10.1111/jvh.12837</a>





## **Submitted Manuscripts**

- Is loss to follow-up a significant barrier in the treatment cascade with direct-acting hepatitis C virus (HCV) therapies?
- What is Killing People with Hepatitis C Virus Infection? Analysis of a population-based cohort in Canada
- The population level care cascade for hepatitis C in British Columbia, Canada as of 2017: Impact of Direct Acting Antivirals
- Reduced Incidence of Extrahepatic Manifestations associated with Sustained Virologic Response for Hepatitis C Treatment
- The Impact of Public Coverage of Newer Hepatitis C Medications on Utilization, Adherence, and Costs





Thank you!



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