

April 21, 2020

Robert Bruce
Executive Director, Research Branch
Ministry of Social Development and Poverty Reduction
614 Humboldt Street
Victoria, BC V8W 1A4

Dear Robert:

**RE: Data Preparation for Project Number 19-g01 (Bruce)
Basic Income Study**

The available research data approved for this project are ready on the Secure Research Environment (SRE) at Population Data BC:

1. Linked data files from BC Housing:
 - Private Market Rent Supplements for Eligible Seniors and Working Families (SAFER/RAP)
 - Please note the DIP metadata will be coming shortly.

Data may be retained until **March 31, 2022**.

If you have any questions about the data, please do not hesitate to contact me.

Yours sincerely,

Melissa Medearis
Data Management Advisor
604.822.7896

cc: Hayden Lansdell, Executive Lead, Integrated Data Division

June 23, 2021

Cindy Wang
Senior Policy Analyst
Digital Platforms and Data Division, OCIO
563 Superior Street
Victoria BC

Dear Cindy:

RE: Data Preparation for 19-g04
Increasing knowledge of DI Program datasets and developing tools for analyses

The following data has been updated. The most current version of the data files can be found on the Secure Analytic Environment (SAE). Please refer to the directory in the SAE DATA folder with the current date.

Data File	Version	Notes
1. BC Employment and Assistance (BCEA)	V04	

The available linked data approved for this project are ready on the Secure Analytic Environment (SAE) at Population Data BC. Please refer to the directory in the SAE DATA folder with the current date.

Data File	Version	Notes
1. K to 12 Socio Economic Status (SES) Index	V01	
2. Private Market Rent Supplements for Eligible Seniors and Working Families (SAFER/RAP)	V03	
3. Family Maintenance Enforcement Program	V01	
4. BC Perinatal Data Registry	V03	

The following data is not yet available. When the data files are ready, they will be added to the SAE and your team will be notified.

Data File	Notes
1. Home and Community Care	

Please note:

1. Project expiry date: June 30, 2022

If your project requires any extension, please contact the Data Innovation Program as early as possible to discuss the extension request.

2. Amendment

The provisioned data is only allowed to be used for the approved purposes as specified in the Data Access Request. Notify the Data Innovation Program before making any changes to the project, including changes to the study objectives, team members, and data requirements.

3. Metadata

The available metadata can be found in the respective data folder within the SAE. Typically, all metadata for each data release will be found within a “DOCS” folder. The metadata may change when the data is updated. Please make sure you use the correct version of the metadata.

4. Output checking

Before Outputs are transferred out of the SAE, they are subject to both a scan and a manual review by an Output Checker. Please follow the instructions in the “DIP_Output_Guidance_Users v2.docx” in the SAE folder to prepare the files for output checking.

5. Public dissemination

Before public dissemination of project results, the Project Main Contact is required to send the materials in final draft form to the Data Innovation Program, for confirmation that the terms of the Engagement Agreement have been complied with and, in particular, that privacy and confidentiality requirements have been upheld; there has been no misuse of data; and the data has been appropriately referenced and cited. Project results must not be communicated externally until the Data Innovation Program has informed the Project Main Contact that the review has been completed.

6. Required data citation and disclaimer

Data sources must be cited in publication materials. Data that was approved and was used to produce the materials must be cited individually. For the detailed citation format and disclaimer requirements, please refer to the Onboarding Guide provided by the Data Innovation Program. Please refer to the dataset summary tab in the DIP Metadata Workbook, as references in 3. above.

If you have any questions about the data please do not hesitate to contact the Data Innovation Program – Russell.Conly@gov.bc.ca.

Yours sincerely,

Andrew Rigsby
Data Access Coordinator, Population Data BC
On behalf of the Data Innovation Program
dataaccess@popdata.bc.ca

cc: Hayden Lansdell, Assistant Deputy Minister, Digital Platforms and Data

October 13, 2020

Steve Forland
Ministry of Social Development & Poverty Reduction
614 Humboldt Street
Victoria BC

Dear Steve Forland,

**RE: Data Preparation for Forland 19-g07
Preventing & Reducing Homelessness**

The available research data approved for this project are ready on the Secure Research Environment (SRE) at Population Data BC:

1. Data files from BC Housing:
 - a. Private Rent Subsidy (RAP_SAFER_V02)

Data may be retained until **November 30, 2022**.

If you have any questions about the data, please do not hesitate to contact me.

Yours sincerely,

Andrew Rigsby
Data Access Coordinator
arigsby@popdata.bc.ca

cc: Hayden Lansdell, Executive Lead, Integrated Data Division

June 29, 2021

Steve Forland
Ministry of Social Development & Poverty Reduction
614 Humboldt Street
Victoria BC

Dear Steve Forland:

**RE: Data Preparation for Forland 19-g07
Preventing & Reducing Homelessness**

The following data has been updated. The most current version of the data files can be found on the Secure Analytic Environment (SAE). Please refer to the directory in the SAE DATA folder with the current date.

Data File	Version	Notes
1. BC Employment and Assistance (BCEA)	V04	
2. Private Market Rent Supplements for Eligible Seniors and Working Families (SAFER/RAP)	V03	

Please note:

1. Project expiry date: 2024-12-01

If your project requires any extension, please contact the Data Innovation Program as early as possible to discuss the extension request.

2. Amendment

The provisioned data is only allowed to be used for the approved purposes as specified in the Data Access Request. Notify the Data Innovation Program before making any changes to the project, including changes to the study objectives, team members, and data requirements.

3. Metadata

The available metadata can be found in the respective data folder within the SAE. Typically, all metadata for each data release will be found within a "DOCS" folder. The metadata may change when the data is updated. Please make sure you use the correct version of the metadata.

4. Output checking

Before Outputs are transferred out of the SAE, they are subject to both a scan and a manual review by an Output Checker. Please follow the instructions in the "DIP_Output_Guidance_Users v2.docx" in the SAE folder to prepare the files for output checking.

5. Public dissemination

Before public dissemination of project results, the Project Main Contact is required to send the materials in final draft form to the Data Innovation Program, for confirmation that the terms of the Engagement Agreement have been complied with and, in particular, that privacy and confidentiality requirements have been upheld; there has been no misuse of data; and the data has been appropriately referenced and cited. Project results must not be communicated externally until the Data Innovation Program has informed the Project Main Contact that the review has been completed.

6. Required data citation and disclaimer

Data sources must be cited in publication materials. Data that was approved and was used to produce the materials must be cited individually. For the detailed citation format and disclaimer requirements, please refer to the Onboarding Guide provided by the Data Innovation Program. Please refer to the dataset summary tab in the DIP Metadata Workbook, as references in 3. above.

If you have any questions about the data please do not hesitate to contact the Data Innovation Program – Russell.Conly@gov.bc.ca.

Yours sincerely,

Andrew Rigsby
Data Access Coordinator, Population Data BC
On behalf of the Data Innovation Program
dataaccess@popdata.bc.ca

cc: Hayden Lansdell, Assistant Deputy Minister, Digital Platforms and Data

April 21, 2020

Dr. Craig Hutton
Data Science and Analytics Branch, Office of the Chief Information Officer
614 Humboldt Street
Victoria BC

Dear Dr. Craig Hutton,

RE: Data Preparation for Hutton 20-g01
Historical profile of government service utilization related to poverty and homelessness in Vancouver and the Downtown Eastside neighbourhood.

The available research data approved for this project are ready on the Secure Research Environment (SRE) at Population Data BC:

1. Linked data files from BC Housing:
 - Private Market Rent Supplements for Eligible Seniors and Working Families (SAFER/RAP)
 - Please note the DIP metadata will be coming shortly.

Data still outstanding:
Statistics Canada – Income Data

Data may be retained until **January 31, 2023**.

If you have any questions about the data, please do not hesitate to contact me.

Yours sincerely,

Melissa Medearis
Data Management Advisor
604-822-7896

cc: Hayden Lansdell, Executive Lead, Integrated Data Division

October 13, 2020

Dr. Craig Hutton
Data Science and Analytics Branch, Office of the Chief Information Officer
614 Humboldt Street
Victoria BC

Dear Dr. Craig Hutton,

RE: Data Preparation for Hutton 20-g01
Historical profile of government service utilization related to poverty and homelessness in Vancouver and the Downtown Eastside neighbourhood.

1. Data files from Ministry of Health:
 - a. Registry & Demographics (MOH_REGDMG_V02)
 - b. RPB Lites (MOH_RPBLITES_V02)
 - c. National Ambulatory Care Reporting System (MOH_NACRS_V02)
2. Data files from BC Housing:
 - a. Private Rent Subsidy (RAP_SAFER_V02)

Data may be retained until **January 31, 2023**.

If you have any questions about the data, please do not hesitate to contact me.

Yours sincerely,

Andrew Rigsby
Data Access Coordinator
arigsby@popdata.bc.ca

cc: Hayden Lansdell, Executive Lead, Integrated Data Division

June 29, 2021

Dr. Craig Hutton
Data Science and Analytics Branch, Office of the Chief Information Officer
614 Humboldt Street
Victoria BC

Dear Dr. Craig Hutton,

RE: Data Preparation for Hutton 20-g01
Historical profile of government service utilization related to poverty and homelessness in Vancouver and the Downtown Eastside neighbourhood.

The following data has been updated. The most current version of the data files can be found on the Secure Analytic Environment (SAE). Please refer to the directory in the SAE DATA folder with the current date.

Data File	Version	Notes
1. BC Employment and Assistance (BCEA)	V04	
2. Private Market Rent Supplements for Eligible Seniors and Working Families (SAFER/RAP)	V03	

Please note:

1. Project expiry date: December 31, 2021

If your project requires any extension, please contact the Data Innovation Program as early as possible to discuss the extension request.

2. Amendment

The provisioned data is only allowed to be used for the approved purposes as specified in the Data Access Request. Notify the Data Innovation Program before making any changes to the project, including changes to the study objectives, team members, and data requirements.

3. Metadata

The available metadata can be found in the respective data folder within the SAE. Typically, all metadata for each data release will be found within a "DOCS" folder. The metadata may change when the data is updated. Please make sure you use the correct version of the metadata.

4. Output checking

Before Outputs are transferred out of the SAE, they are subject to both a scan and a manual review by an Output Checker. Please follow the instructions in the "DIP_Output_Guidance_Users v2.docx" in the SAE folder to prepare the files for output checking.

5. Public dissemination

Before public dissemination of project results, the Project Main Contact is required to send the materials in final draft form to the Data Innovation Program, for confirmation that the terms of the Engagement Agreement have been complied with and, in particular, that privacy and confidentiality requirements have been upheld; there has been no misuse of data; and the data has been appropriately referenced and cited. Project results must not be communicated externally until the Data Innovation Program has informed the Project Main Contact that the review has been completed.

6. Required data citation and disclaimer

Data sources must be cited in publication materials. Data that was approved and was used to produce the materials must be cited individually. For the detailed citation format and disclaimer requirements, please refer to the Onboarding Guide provided by the Data Innovation Program. Please refer to the dataset summary tab in the DIP Metadata Workbook, as references in 3. above.

If you have any questions about the data please do not hesitate to contact the Data Innovation Program – Russell.Conly@gov.bc.ca.

Yours sincerely,

Andrew Rigsby
Data Access Coordinator, Population Data BC
On behalf of the Data Innovation Program
dataaccess@popdata.bc.ca

cc: Hayden Lansdell, Assistant Deputy Minister, Digital Platforms and Data

February 3, 2021

Dr. Stephanie Hazlitt
Ministry of Citizens' Services
563 Superior St.
Victoria BC

Dear Dr. Hazlitt,

RE: Data Preparation for Hazlitt 21-g01
Impacts of Significant Climate-Related Events on Use of Government Services – A Feasibility Project

The available research data approved for this project are ready on the Secure Analytics Environment (SAE aka SRE) at Population Data BC:

1. Linked data files from Ministry of Health:
 - Medical Services Plan
 - National Ambulatory Care Reporting System
 - Discharge Abstract Database
 - Vital Events
 - Registry & Demographics
 - RPB Lites
 - Mental Health Services
 - Census Geodata
2. Linked data files from the Ministry of Children and Family Development
3. Linked data files from Ministry of Advanced Education, Skills and Training
4. Linked data files from the Ministry of Social Development and Poverty Reduction
5. Linked data files from Statistics Canada
6. Linked data files from BC Housing:
 - Private Rent Subsidy

No data outstanding.

A brief note on the new participant ID format in the AEST LMID refresh:

There are more than one data system within LMID. One of the three main LMID programs started using a new data system in March 2020. The new system assigns participant IDs in a new format. There are 6% of the records in this refresh received an ID in the new format. Participants who newly joined this program after the system switching, but also joined other programs can have two participant IDs, one in the new format and one in the old format. Their records can still be linked to the same individual in our population dictionary. As a result, it is possible that a small portion of records with two different participant IDs are associated with the same STUDYID. LMID is working to resolve this issue in the next data refresh.

Data may be retained until **July 31, 2021**.

If you have any questions about the data, please do not hesitate to contact me.

Yours sincerely,

Andrew Rigsby
Data Access Coordinator
dataaccess@popdata.bc.ca

cc: Hayden Lansdell, Executive Lead, Integrated Data Division

This guide is intended for all projects working with the Data Innovation Program.

Data Innovation Program

Pre-publication Review Form

Prior to release, communications and publications generated by Data Innovation (DI) Program Projects require review of their disclosures for confirmation that:

- The terms of the Engagement Agreement have been complied with;
- There has been no misuse of data;
- And the data has been appropriately cited.

For full details, see the DI Program's Communication and Pre-publication Guidelines section of the Onboarding Guide to the Project Main Contact.

Please complete the form below for each item of project material which is being submitted for review.

PLEASE ENSURE THE FOLLOWING REQUIRED ACKNOWLEDGEMENTS ARE INCLUDED BEFORE SUBMITTING YOUR PROJECT MATERIALS

1. **Disclaimer:** The following disclaimer must be prominently displayed in all project materials:
"The results in [this report/these tables] have been created from information made available through the Data Innovation Program and are not official statistics. The opinions, findings, recommendations, and conclusions expressed in [this report/these tables] are solely those of the author(s)."
2. **Data source citations:** Data sources must be cited in all project materials (e.g., articles, journals, theses and dissertations). Please contact the DI Program or see the Communication and Pre-Publication Guidelines for more details.

For additional information on project material requirements, refer to the Engagement Agreement.

Part 1: General Information

Name	Steve Forland
Position	Manager
Work Email	Steve.Forland@gov.bc.ca
Project Title	Preventing & Reducing Homelessness Integrated Data Project

Part 2: Submission History

Please indicate the scenario that describes your current project material submission (check one):

- ☒ New Submission: The project material is being submitted to the DI Program for the first time and it has not yet been publicly disseminated/published in this format
- ☐ Revised Submission: This is a revised version of a previously submitted project material for review. It has not yet been publicly disseminated/published in this format.
- ☐ Final Version Submission: This is the final publicly disseminated/published version of a previously submitted project material provided for our records.

- ☐ Publicly Disseminated/Published, Never Reviewed: The project material has already been publicly disseminated/published but it has not gone through the pre-publication review process. Please note: All project materials must be submitted for pre-publication review. Please provide a reason why your project material was not submitted for pre-publication review in the comment box below.

- ☐ Other: This project material is being submitted for another reason. Please describe in the comment box below:

Note: If this submission is based off another project output in a different format (i.e. this is the presentation related to the abstract titled...), please indicate in section 6.3 "Additional Information".

Part 3: Type of Project Material for Public Disclosure

Please select type

- ☒ Meeting or Briefing Notes
- ☒ Slide Decks and/or meeting handouts
- ☐ Conference abstract
- ☐ Presentation of project materials (posters, seminars, lectures, etc.)
- ☐ Article for general public release (for example: newspaper/magazine/blog/wiki etc.)
- ☐ Op-ed for general public release (for example: newspaper/magazine/blog/wiki etc.)
- ☐ Journal publication
- ☐ Academic thesis or dissertation material (Please note: All theses and dissertations completed as part of a larger project MUST be pre-approved by the Data Steward(s) BEFORE the student engages in the work.)
- ☐ Interview (for example: radio, television, internet, etc.)
- ☐ Other. Please describe in the comment box below:

Part 4: Publication of Project Information and Results

Please check all data sets relevant to this project material. Relevant data sets include those used to create the study population, in the analysis, or used to derive any analytical output discussed in this project material.

- ☐ Advanced Education, Skills, and Training - Labour Market Program Data
- ☐ Attorney General - Family Maintenance and Enforcement
- ☒ BC Housing - Rental Subsidies, Shelter Data
- ☐ Children and Family Development - Child Welfare Program
- ☐ Community Living BC – Community Living Programs
- ☐ Education - K-12 (Edudata)
- ☐ ICBC - Road Safety

Health –

- | | |
|--|--|
| <input type="checkbox"/> Ambulatory Care Reporting System (NACRS) | |
| <input type="checkbox"/> Consolidation File (Registration, Demographics, and Census Geodata) | |
| <input type="checkbox"/> Hospital Patient Discharge Data (DAD) | <input type="checkbox"/> PharmaCare |
| <input type="checkbox"/> Home and Community Care | <input type="checkbox"/> PharmaNet |
| <input checked="" type="checkbox"/> Medical Services Plan (MSP) | <input checked="" type="checkbox"/> Registry & Premium Billings (RBPlites) |
| <input type="checkbox"/> Mental Health Services | <input checked="" type="checkbox"/> Vital Statistics |

☐ Provincial Health Service Authority – Perinatal

☒ Social Development and Poverty Reduction

☐ BC Benefits

☒ BCEA – BC Employment & Assistance (GRD)

☒ Statistics Canada/BC Statistics

☐ Income Band by Postal Code

☒ BC Population Projections 2018 to 2041 Aggregate

☐ Other. Please describe in the comment box below:

Part 5: Author Details

Please list all author names and indicate whether they have access to data released under this project. Please add rows as required.

Author Name	Has access to data released under this project? (check box)
Steve Forland	<input checked="" type="checkbox"/>
Sam Albers	<input checked="" type="checkbox"/>
Stephanie Hazlitt	<input checked="" type="checkbox"/>
Norris Miller	<input checked="" type="checkbox"/>
Tammy Bennett	<input checked="" type="checkbox"/>
Danielle Scott	<input checked="" type="checkbox"/>
Hannah Rabinovitch	<input checked="" type="checkbox"/>
Craig Hutton	<input checked="" type="checkbox"/>
Linda DeBenedictis	<input checked="" type="checkbox"/>
Steve Lau	<input checked="" type="checkbox"/>
Candice Gartner	<input checked="" type="checkbox"/>
Melanie Hope	<input type="checkbox"/>

Part 6: Project Material Details

6.1 Title of publication

Preventing & Reducing Homelessness Integrated Data Project Data Summary Report & Data Slides

6.2 Please describe how this project material connects to the Approved Project as described in the Data Access Request.

This material allows the project team to share and discuss results with executives across the government to strengthen a cross-government to achieve a collective impact in preventing and reducing homelessness. In particular, with these materials the project team can present findings which **improve the quality, coverage of existing statistical information** to use as an **evidence base for public policy decision making and service delivery decisions**. For example, including results into government materials, e.g., briefing notes and Treasury Board submissions. These materials will also enable the project team to share results with key partners to build partnerships for the next phase of this project, including the First Nations Health Authority, and BCCDC.

6.3 Additional Information

If you would like to include additional information (such as details of the journal to which you are submitting or the event at which you are making your project material public) please do so here.

Part 7: Confirmations

If you cannot answer 'Yes' to any of the confirmations below, please contact the DI Program at

Darcy.Lindberg@gov.bc.ca.

Confirmation	Check box to confirm
I confirm that the attached project material is the final draft to be submitted for publication or presentation.	<input checked="" type="checkbox"/>
I agree to notify the DI Program of any pre-publication changes made to this project material and to provide a copy of the final published or presented project material.	<input checked="" type="checkbox"/>
I confirm that this project material does not contain any risk of re-identification of an individual (e.g., small cell sizes, small geographic areas).	<input checked="" type="checkbox"/>
I confirm that all relevant data sources are properly referenced. For more information on referencing data sources, please refer to How to cite data sources .	<input checked="" type="checkbox"/>

Data Innovation Program

Submission Form for Pre-public Disclosure Review of Project Materials

Signed Data Access Requests require pre-publication review of project materials by the Data Innovation (DI) Program for confirmation that:

- The terms of the Engagement Agreement have been complied with;
- There has been no misuse of data;
- And the data has been appropriately cited.

To determine whether you are required to submit a pre-publication review please refer to [Table 1: Project Materials Review Requirements](#) at the end of this document to assist.

Please complete the form below for each item of project material which is being submitted for review.

PLEASE ENSURE THE FOLLOWING REQUIRED ACKNOWLEDGEMENTS ARE INCLUDED BEFORE SUBMITTING YOUR PROJECT MATERIALS

1. **Disclaimer:** The following disclaimer must be prominently displayed in all project materials:
"The results in [this report/these tables] have been created from information made available through the Data Innovation Program and are not official statistics. The opinions, findings, recommendations, and conclusions expressed in [this report/these tables] are solely those of the author(s)."
2. **Data source citations:** Data sources must be cited in all project materials (e.g., articles, journals, theses and dissertations). Please contact the Data Innovation Program page for further guidance.

For additional information on project material requirements, refer to the Engagement Agreement.

Part 1: General Information

Name	Dr. Craig P. Hutton
Position	Data Scientist
Work Email	Craig.Hutton@gov.bc.ca
Project Title	Historical profile of government service utilisation related to poverty and homelessness in Vancouver and the Downtown Eastside neighbourhood

Part 2: Submission History

Please indicate the scenario that describes your current project material submission (check one):

- ☒ New Submission: The project material is being submitted to the DI Program for the first time and it has not yet been publicly disseminated/published in this format
- ☐ Revised Submission: This is a revised version of a previously submitted project material for review. It has not yet been publicly disseminated/published in this format.
- ☐ Final Version Submission: This is the final publicly disseminated/published version of a previously submitted project material provided for our records.
- ☐ Publicly Disseminated/Published, Never Reviewed: The project material has already been publicly disseminated/published but it has not gone through the pre-publication review process. Please note: All project materials must be submitted for pre-publication review. Please provide a reason why your project material was not submitted for pre-publication review in the comment box below.
- ☐ Other: This project material is being submitted for another reason. Please describe in the comment box below:

Note: If this submission is based off another project output in a different format (i.e. this is the presentation related to the abstract titled...), please indicate in section 6.3 "Additional Information".

Part 3: Type of Project Material for Public Disclosure

Please select type

- ☐ Meeting Notes/Briefing Notes
- ☒ Slide Decks and /or meeting handouts
- ☐ Conference abstract
- ☐ Presentation of project materials (posters, seminars, lectures, etc.)
- ☒ Article for general public release (newspaper/magazine/blog/wiki etc.)
- ☐ Op-ed for general public release (newspaper/magazine/blog/wiki etc.)
- ☐ Journal publication
- ☐ Academic thesis or dissertation material (Please note: All theses and dissertations completed as part of a larger project MUST be pre-approved by the Data Steward(s) BEFORE the student engages in the work.)
- ☐ Interview (radio, television, internet, etc.)
- ☐ Other. Please describe in the comment box below:

Part 4: Publication of Project Information and Results

Please check all data sets relevant to this project material. Relevant data sets include those used to create the study population, in the analysis, or used to derive any analytical output discussed in this project material

- ☐ Advanced Education (Labour Market Data)
- ☐ Children and Families
- ☐ Education
- ☒ Vital Statistics, Mental Health Services, Hospital Patient Discharge Data (DAD), MSP - Registration & Premium Billing Data (R&PB + RAPID), Physician Billings Claims Data, Consolidation file & RPB Lite, National Ambulatory Care Reporting System (NACRS), PharmaNet Prescription Information & PharmaCare Registration Data, home and Community Care)
- ☐ Attorney General (Family Maintenance and Enforcement)
- ☐ Perinatal
- ☐ Community Living BC
- ☐ BC Housing (Rental Subsidies, Shelter Data)
- ☐ Public Safety and Solicitor General (Adult Corrections)
- ☒ Social Development and Poverty Reduction (Income and Benefits data)
- ☐ Statistics Canada (Income, Geo-census)
- ☐ Other. Please describe in the comment box below:

Part 5: Author Details

Please list all author names and indicate whether they have access to data released under this project. Please add rows as required.

Author Name	Has access to data released under this project? (check box)
Dr. Craig P. Hutton	<input checked="" type="checkbox"/>
Fabiha Binte Farooq	<input checked="" type="checkbox"/>
Linda DeBenedictis	<input checked="" type="checkbox"/>
Chad Stroomer	<input checked="" type="checkbox"/>
Robert Bruce	<input checked="" type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>

Part 6: Project Material Details

6.1 Title of publication

Social Assistance and Health in Vancouver's Downtown Eastside Neighbourhood from 1995-2017.

6.2 Please describe how this project material connects to the Approved Project as described in the Data Access Request.

This report and slide deck provide basic descriptive statistics on a major segment of the project's proposed study population (social assistance clients) as well as key details on how these economically disadvantaged residents of Vancouver and the DTES have been using health services over a 23-year period (and estimates of the costs of those services). The results presented in these presentation slides and written report provide numerous insights that are directly relevant to research question 1 in section 3.4 (study design and methodology) of the project's Data Access Request.

Another similar report will be written in the future addressing the remainder of research question 1 regarding the utilisation and costs of other services (e.g. work training programs, primary education, foster care, etc.) in Vancouver using the other approved data sources.

We are submitting this report & presentation slide deck for review prior to completing the processing and analysis of other data sources because we have identified some deeply concerning trends related to mental health & the opioid crisis that should be brought to the attention of HLTH & other BC Government executives and the Vancouver City Council as soon as possible.

6.3 Additional Information

If you would like to include additional information (such as details of the journal to which you are submitting or the event at which you are making your project material public) please do so here.

We would very much like Dr. Hutton to be able to present a subset of the content from these materials in a breakout session he will be leading on "how to use data to improve healthcare in a public health crisis" at UBC's upcoming 10th Annual E-Mental Health Conference: Virtual Care in Times of Crisis and Beyond on **March 3rd** and 4th, **2021** (session scheduled for March 3rd).

The descriptive analyses presented in these documents will be combined with subsequent regression analysis results and additional summary results for homeless individuals (the other main segment of our study population) into a more comprehensive manuscript that we intend to submit for publication in a peer-reviewed journal (after the DIP pre-publication review of course).

The current outputs will be shared directly with BC Provincial and Municipal Government entities (e.g. Vancouver City Council) and with other local scientists (e.g. academic researchers working at universities in BC and staff scientists working with the BC Centre for Disease Control & BC Centre on Substance Use) to more rapidly stimulate policy development and further research on this important topic. A link to the knowledge update report may also be posted on the public facing SDPR website. The presentation slides might also be presented at the upcoming annual meeting of the Canadian Association for Neuroscience (<https://can-acn.org/meeting-2021/>), which happens to be in Vancouver this year.

Part 7: Confirmations

If you cannot answer 'Yes' to any of the confirmations below, please contact the DI Program at Brittany.Decker@gov.c.ca .

Confirmation	Check box to confirm
I confirm that the attached project material is the final draft to be submitted for publication or presentation.	<input checked="" type="checkbox"/>
I agree to notify the DI Program of any pre-publication changes made to this project material and to provide a copy of the final published or presented project material.	<input checked="" type="checkbox"/>
I confirm that this project material does not contain any risk of re-identification of an individual (e.g., small cell sizes, small geographic areas).	<input checked="" type="checkbox"/>
I confirm that all relevant data sources are properly referenced. For more information on referencing data sources, please refer to How to cite data sources .	<input checked="" type="checkbox"/>

Table 1: Project material review requirements

Type of Project Material	Intended Audience	Submission to DI Program required	Citation requirement	Disclaimer requirement	When to submit? *No less than 3 weeks before planned dissemination
Presentations and Meetings: seminars, conferences, lectures, meetings					
Presentations to or meetings with colleagues internal to your organization or institution	Internal	No	No	yes	N/A
Presentations to or meetings with external stakeholders or general public	Public	Yes	No	Yes	3 weeks prior
Abstracts	Public	Yes	No	No	At time of submission to conference (or minimum for 3 weeks prior)
Instructional use (lectures, lab exercises, etc.)	Public	Yes	No	Yes	3 weeks prior
Publications: articles, op-ed, journals, theses and dissertations					
Article or Op-ed for general public release (newspaper, magazine, blog, wiki, etc.)	Public	Yes	No	Yes	At time of submission (or minimum for 3 weeks prior)
Journal publication	Public	Yes	Yes	Yes	At time of submission to the journal (initial submission or minimum for 3 weeks prior)
Academic thesis or dissertation material Please note: All theses and dissertations completed as part of a larger project MUST be pre-approved by the DI Program BEFORE the student engages in the work	Public	Yes	No	Yes	At time of final submission to committee or minimum for 3 weeks prior)
Other output types					
Radio, television, internet, interview, etc.	Public	Yes	No	No	3 weeks prior

Historical profile of government service utilization related to poverty and homelessness in Vancouver and the Downtown Eastside neighbourhood (DTES).



Dr. Craig P. Hutton, Ph.D.

Data Scientist

Research Branch

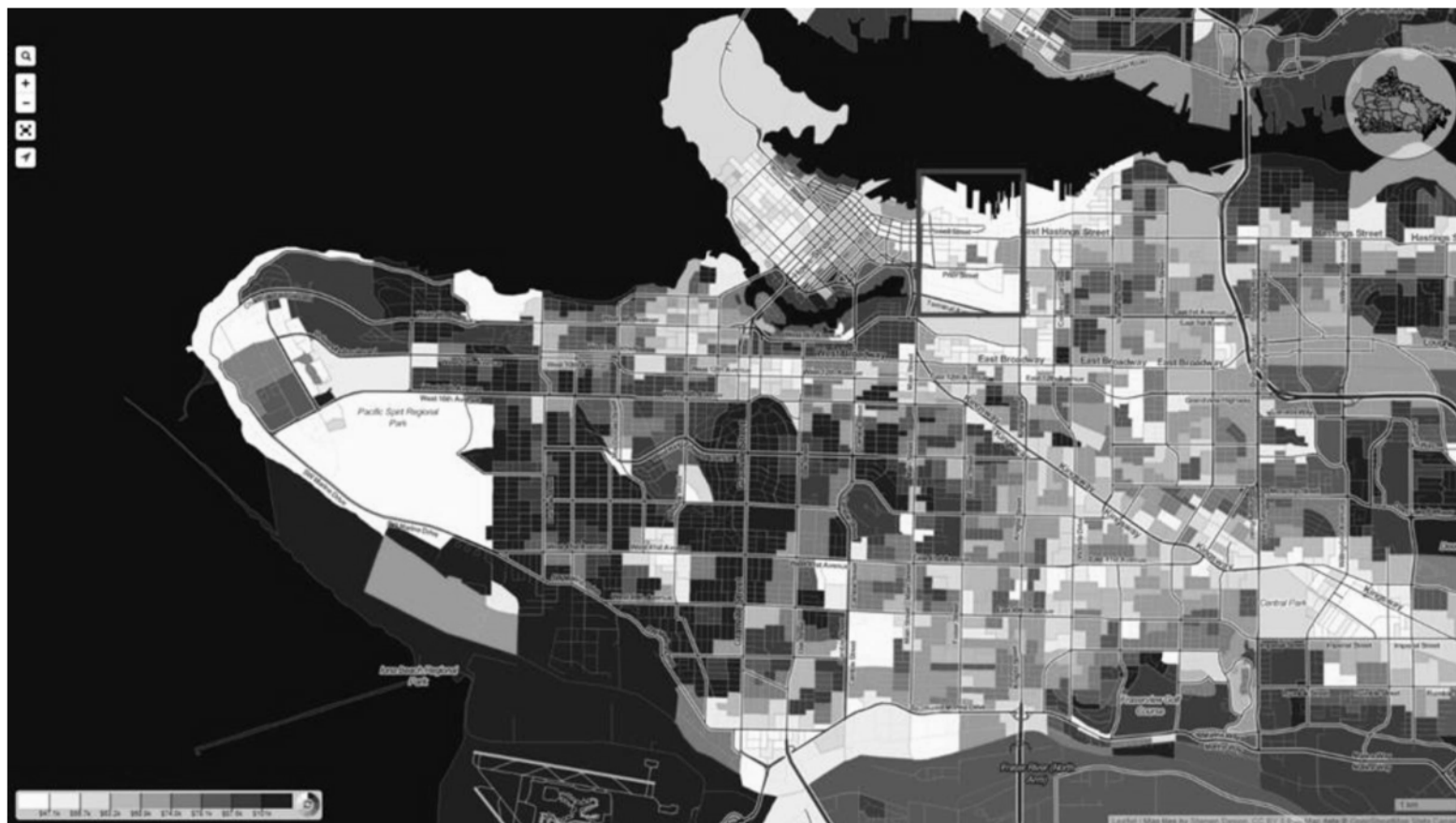
Ministry of Social Development & Poverty Reduction

Why focus on the DTES?

- ▶ DTES has deteriorated in recent years due to a surge in the **homeless population, mental health problems, criminal activity, and opioid overdoses**¹⁻³.
- ▶ reputation as “Canada’s poorest postal code”⁴
- ▶ ~62% of Vancouver’s homeless population resides in the DTES⁵.
- ▶ ~88% of DTES residents rent their shelter vs. only 42% of residents for the Metro Vancouver area.
 - ▶ ~56% of DTES renters live in subsidized housing vs. 13% for Metro Vancouver.
 - ▶ Reliance on subsidized housing is almost 10x greater in the DTES.
- ▶ The DTES is considered the epicentre of the opioid crisis (in Canada).

Map of Vancouver and showing neighbourhood median household income (2016 Census)

< \$47.1K/year (light beige) to > \$101,000/year (dark blue); **red box = DTES**



How can we move forward? Learn from data!



- ▶ A **huge** barrier has been the lack of research using detailed and comprehensive population-level data.

- ▶ This research is finally feasible via the **Data Innovation Program**



- ▶ What are the determinants of poverty & addiction?

- ▶ Both are **very complicated**

- ▶ Many factors are probably important (age, physical health, income, education, social support, etc.)
 - ▶ **Statistics** and **machine learning** can help us figure out which ones matter for the population of interest.

- ▶ Overarching goal: identify meaningful relationships that can inform policy decisions

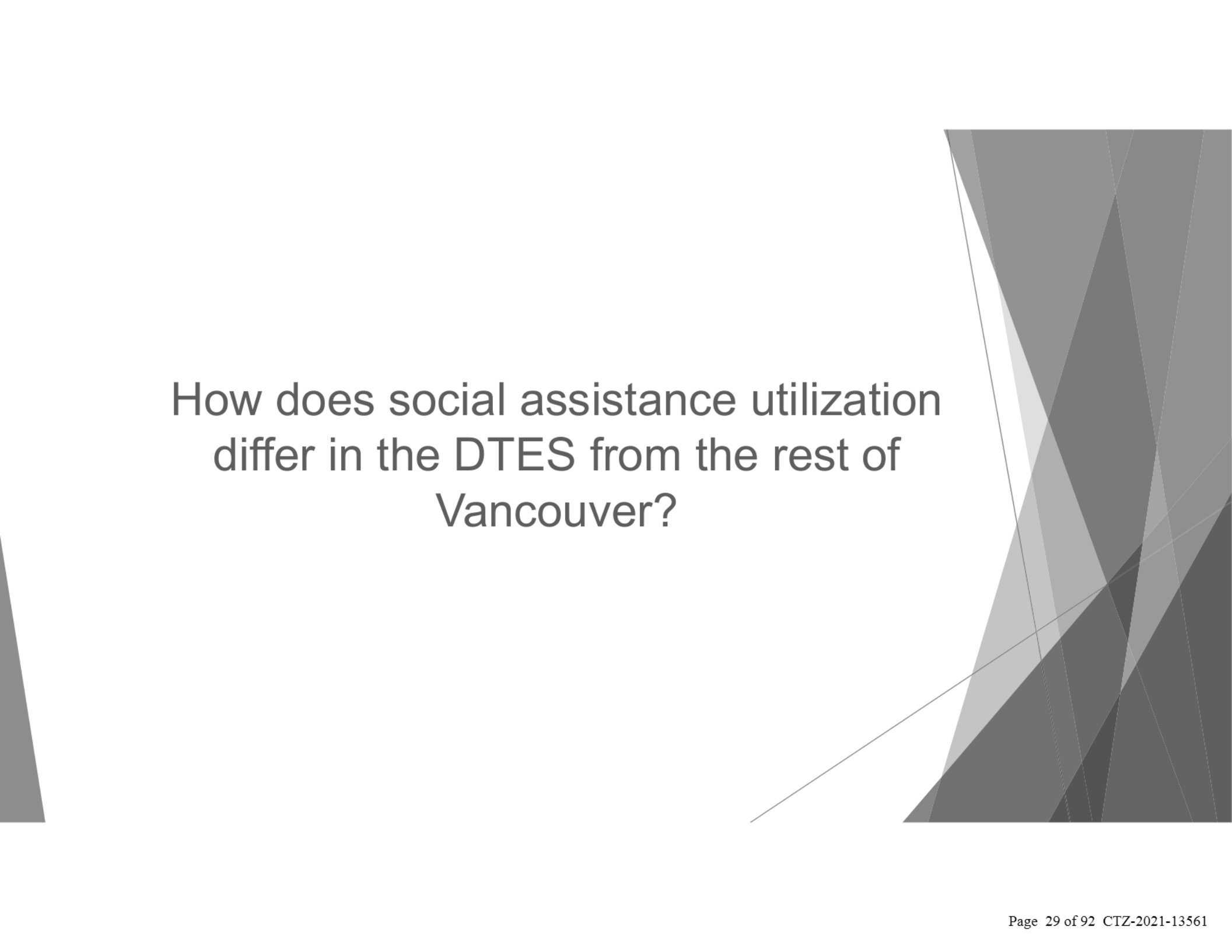
- ▶ How: 3 analytical “lenses” or techniques - descriptive, explanatory, and predictive

project overview

- ▶ Hundreds of millions of records from multiple sources:
 - ▶ **SDPR**
 - ▶ **MoH – MSP, vital stats, DAD**
 - ▶ MED, LMID (MAESD)
 - ▶ MCFD
 - ▶ Income (Stats. Can.) – not available yet
 - ▶ BC housing - not available yet
- ▶ Focusing on records when we have SDPR data under current BCEA program definitions (1995-2017)
- ▶ **Phase 1 (2020) - social assistance and health:**
 - ▶ **Mortality, hospitalisations, health care provider visits**
- ▶ **Phase 2 (2021) - social assistance and other socioeconomic metrics:**
 - ▶ homelessness, education, employment, etc.

Phase 1 descriptive analysis (covered here)

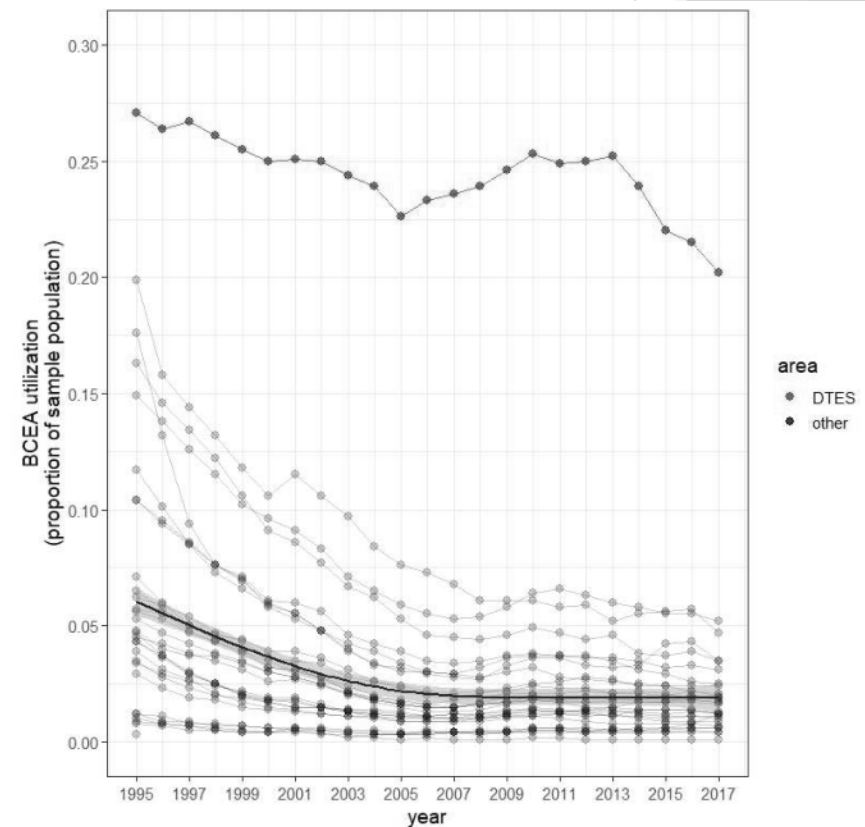
- ▶ MSP registry data – defines overall population
 - ▶ Joined with SDPR, vital statistics death, MSP billing, and hospital separation records.
 - ▶ Data on a total of 1,731,220 Vancouver/UBC residents over a 23-year period (85,125 in the DTES [FSA = “V6A”]).
- ▶ social assistance utilization rates and life expectancy
- ▶ major causes of death, hospitalization, and reasons for visiting health care providers



How does social assistance utilization
differ in the DTES from the rest of
Vancouver?

The proportion of the DTES population relying on employment and income assistance (BCEA program clients) is much higher than the rest of Vancouver

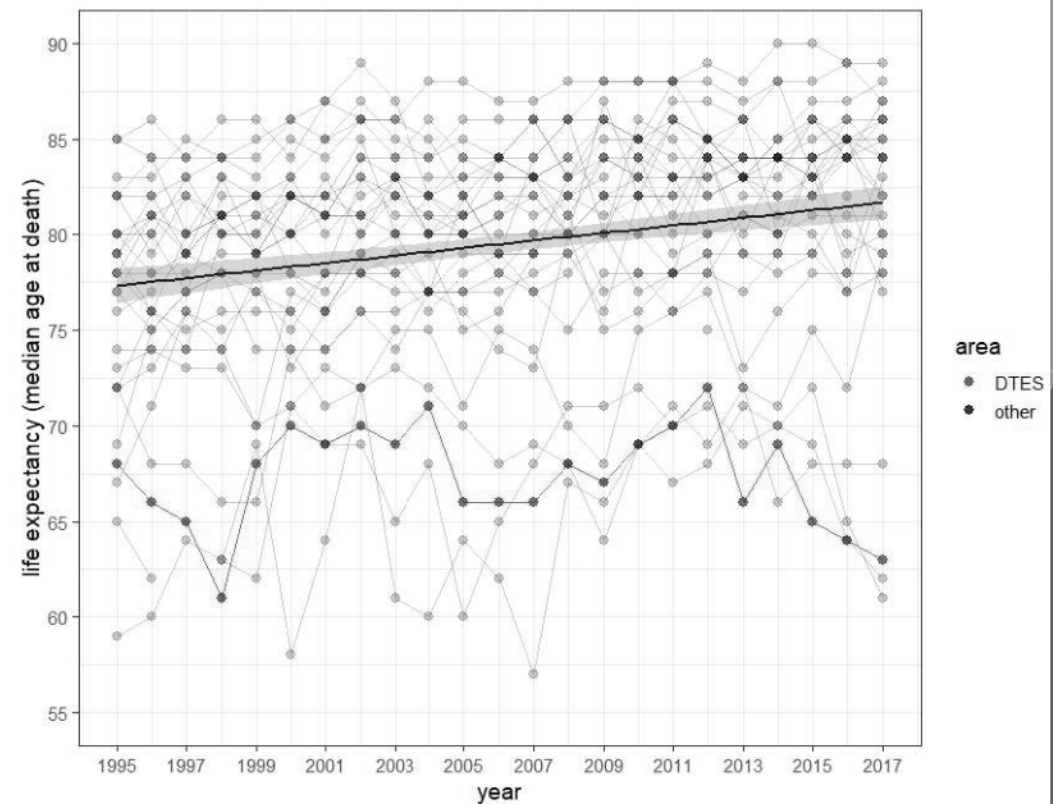
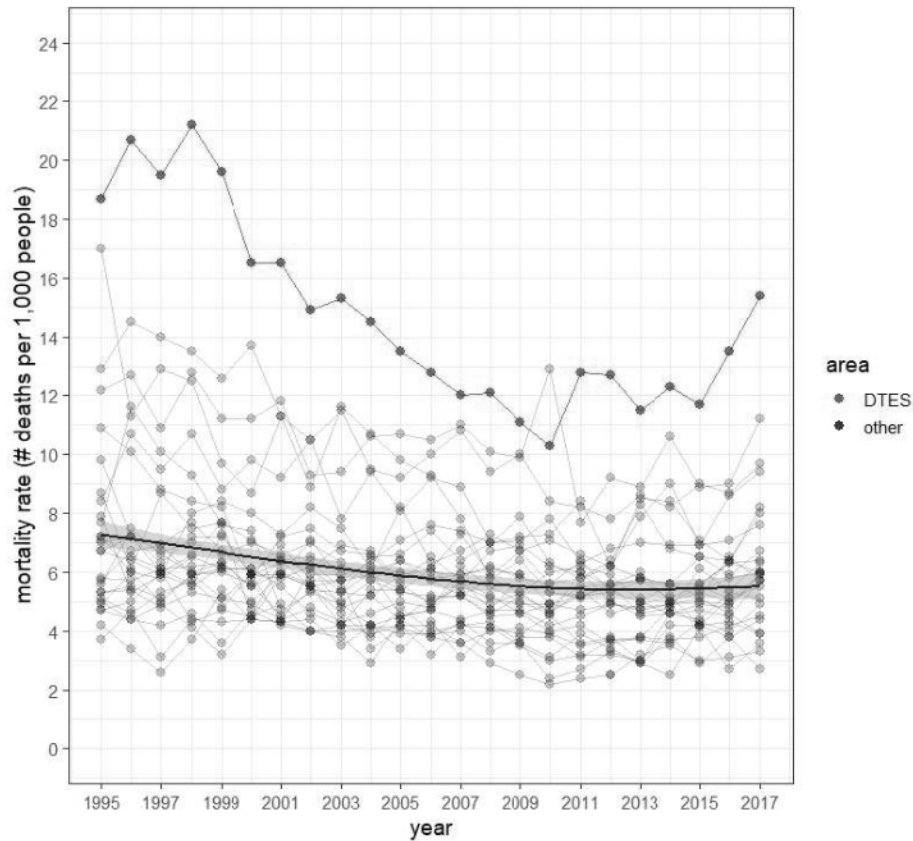
- BCEA utilization rates for the DTES ranged from ~26% in the mid 1990s to 20% in 2017
- Utilization rates for the rest of Vancouver were lower:
 - 5-7% in 1995 on average for non-DTES FSAs, down to ~2.5% for 2007-2017
- Compared to the average for the rest of Vancouver, BCEA utilization rates were therefore:
 - ~3-4x higher in the mid-1990s
 - > 8x higher after 2005
- Since 2010, BCEA costs for the DTES have also been ~7-9x higher than avg. of other areas of Vancouver






Do life expectancy and mortality
rates differ for the DTES?

Annual mortality rate in the DTES is 2-3x higher than most areas of Vancouver, and DTES residents tend to live ~10-15 years shorter than residents of most other areas





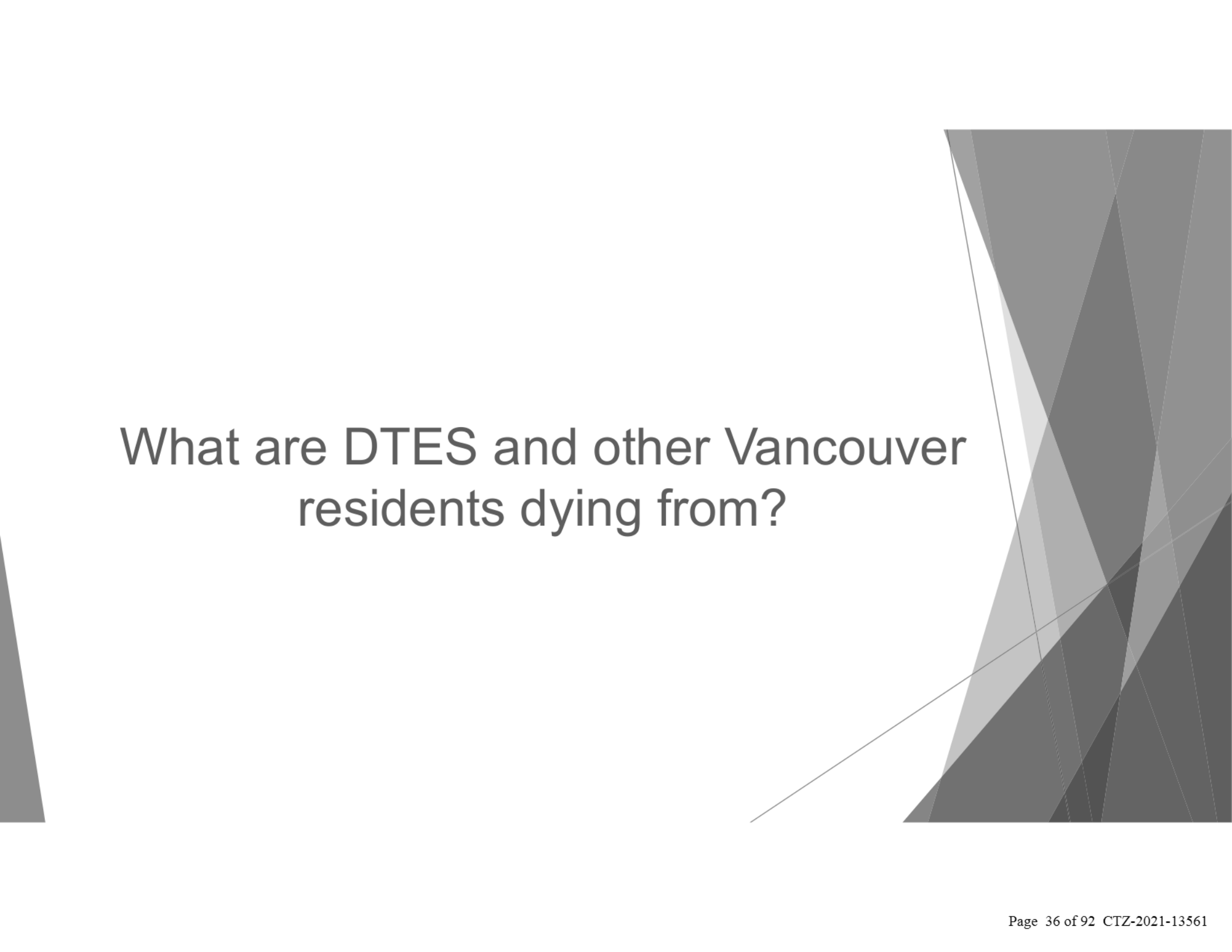
Which health conditions are driving service use and mortality in SDPR client and non-client residents of Vancouver?

Thousands of raw diagnosis codes assigned to 38 health categories

- | | | | |
|-----|--|-----|--|
| 1. | Cancer | 21. | Diabetes |
| 2. | Non-cancerous growth | 22. | Obesity |
| 3. | Neurodegenerative disease or dementia | 23. | Malnutrition |
| 4. | Alcohol-related condition | 24. | Other endocrine or metabolic condition |
| 5. | Opioid-related condition | 25. | Liver disease (non-alcoholic) |
| 6. | Other drug-related condition | 26. | Other (non-liver) digestive system disease |
| 7. | Psychosis | 27. | Skin disease |
| 8. | Mood or anxiety disorder | 28. | Musculoskeletal disease (muscles or bone) |
| 9. | Other mental disorder | 29. | Kidney disease |
| 10. | Non-degenerative neurological disorder | 30. | Other (non-kidney) genitourinary disease |
| 11. | Ear or eye disease | 31. | Pregnancy-related or perinatal condition |
| 12. | Blood disease | 32. | Congenital abnormality (birth defect) |
| 13. | Hypertension | 33. | Injury or accident |
| 14. | Heart disease | 34. | Suicide (non-overdose) |
| 15. | Stroke-related condition | 35. | Homicide |
| 16. | Other circulatory disease | 36. | Other external cause |
| 17. | Infection (other than influenza) | 37. | Unknown cause |
| 18. | Influenza or pneumonia | 38. | Other factor influencing health status |
| 19. | Chronic lower respiratory disease | | |
| 20. | Other respiratory disease | | |

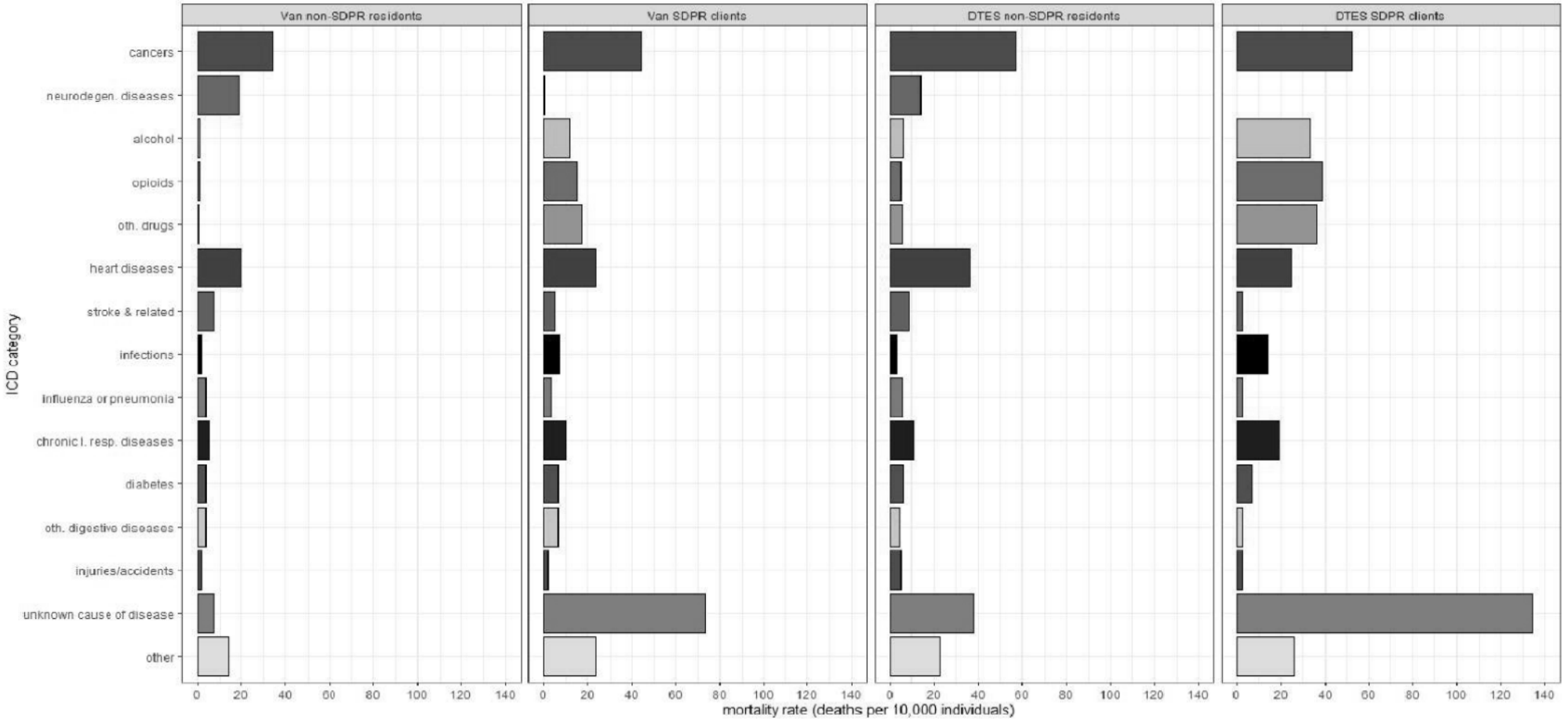
Of these 38 original categories...

- ▶ 4 (obesity, malnutrition, non-overdose suicide, and homicide) were excluded from consideration of hospital records for due to extremely low incidence & data disclosure concerns.
- ▶ 2 categories (non-overdose suicide and homicide) were excluded from analysis of the MSP billing records
- ▶ Only the top 14 causes of death for the DTES were examined, with all other causes being pooled into a generic “other” category.
- ▶ We also focused on data from individuals between the ages of 20-79 due to insufficient data for SDPR clients from each end of the age spectrum.

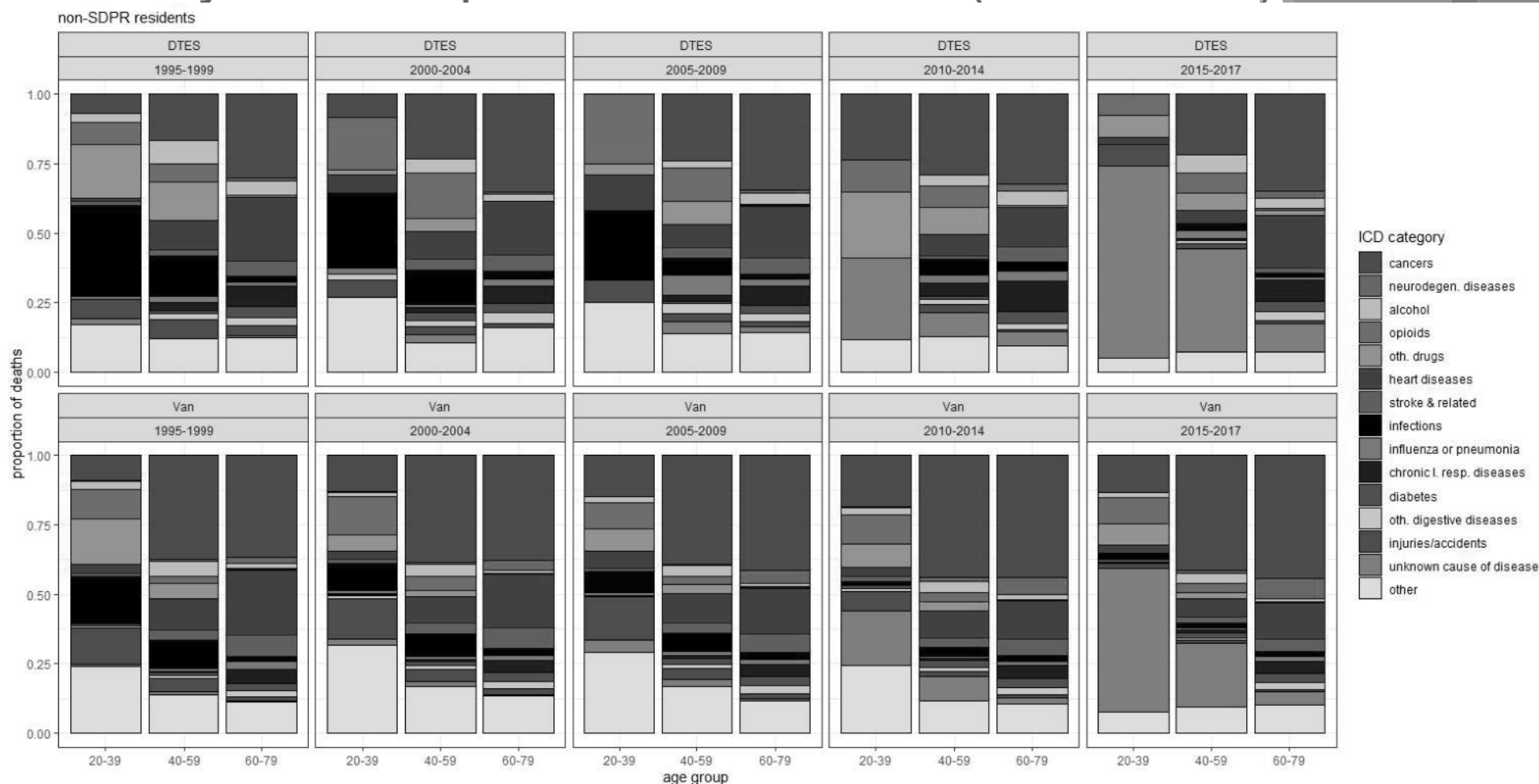


What are DTES and other Vancouver residents dying from?

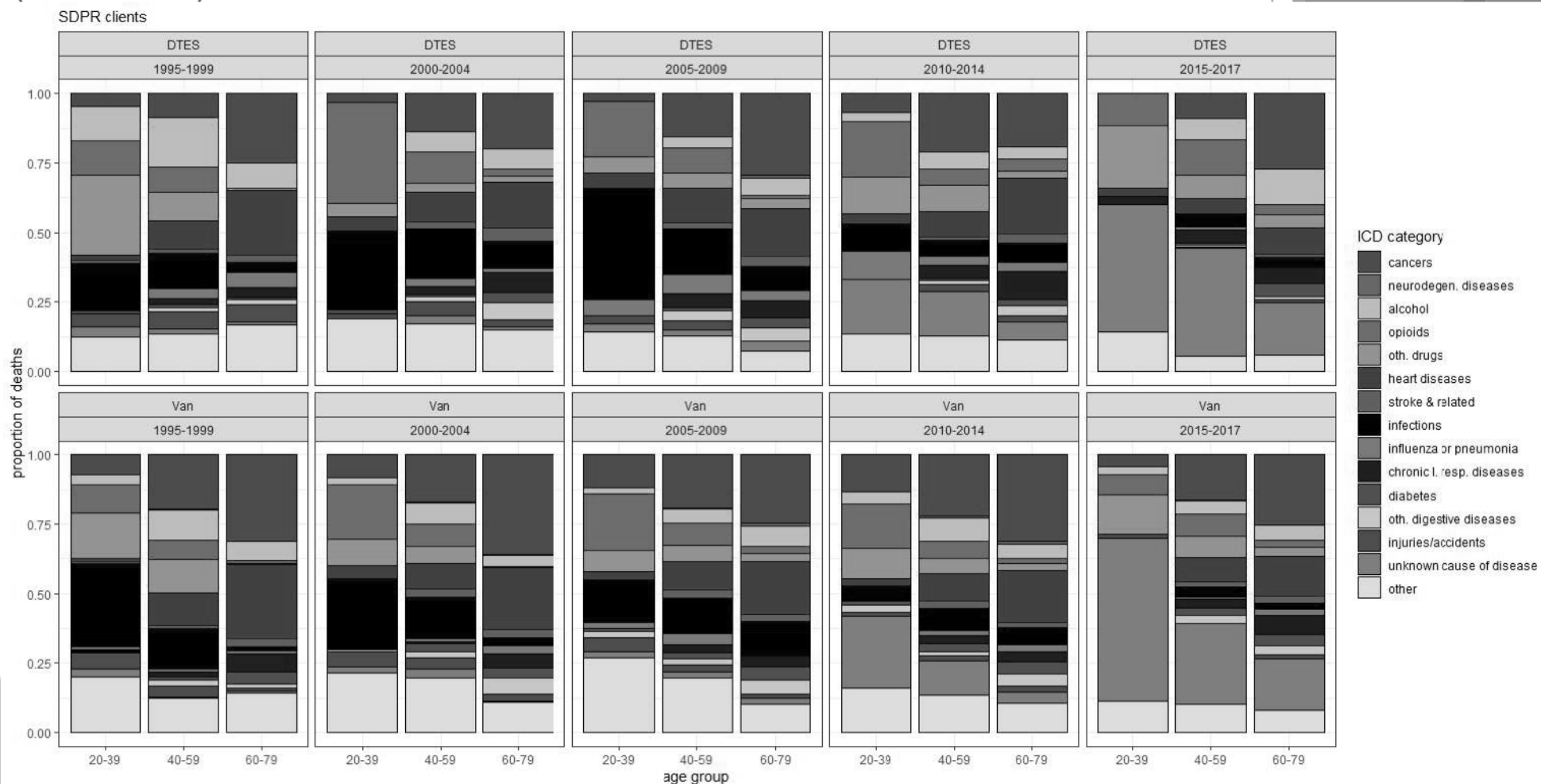
mortality rates (deaths per 10,000 individuals) for each of the DTES's top 14 causes of death (and an "other" category), for non-SDPR residents and SDPR client residents of the DTES and the rest of Vancouver between 2015-2017.

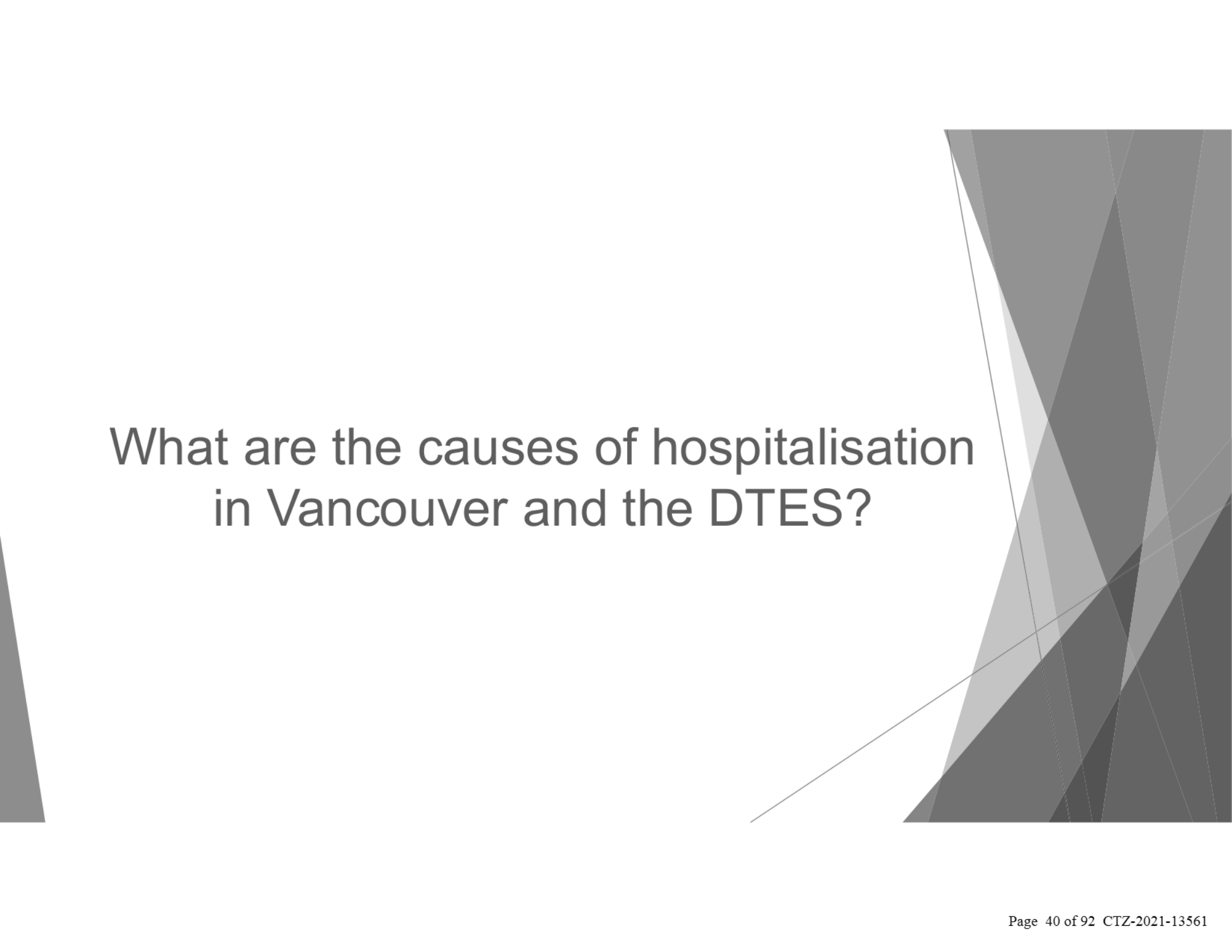


Among non-SDPR residents, those in the DTES are more likely to die of preventable causes (1995-2017)



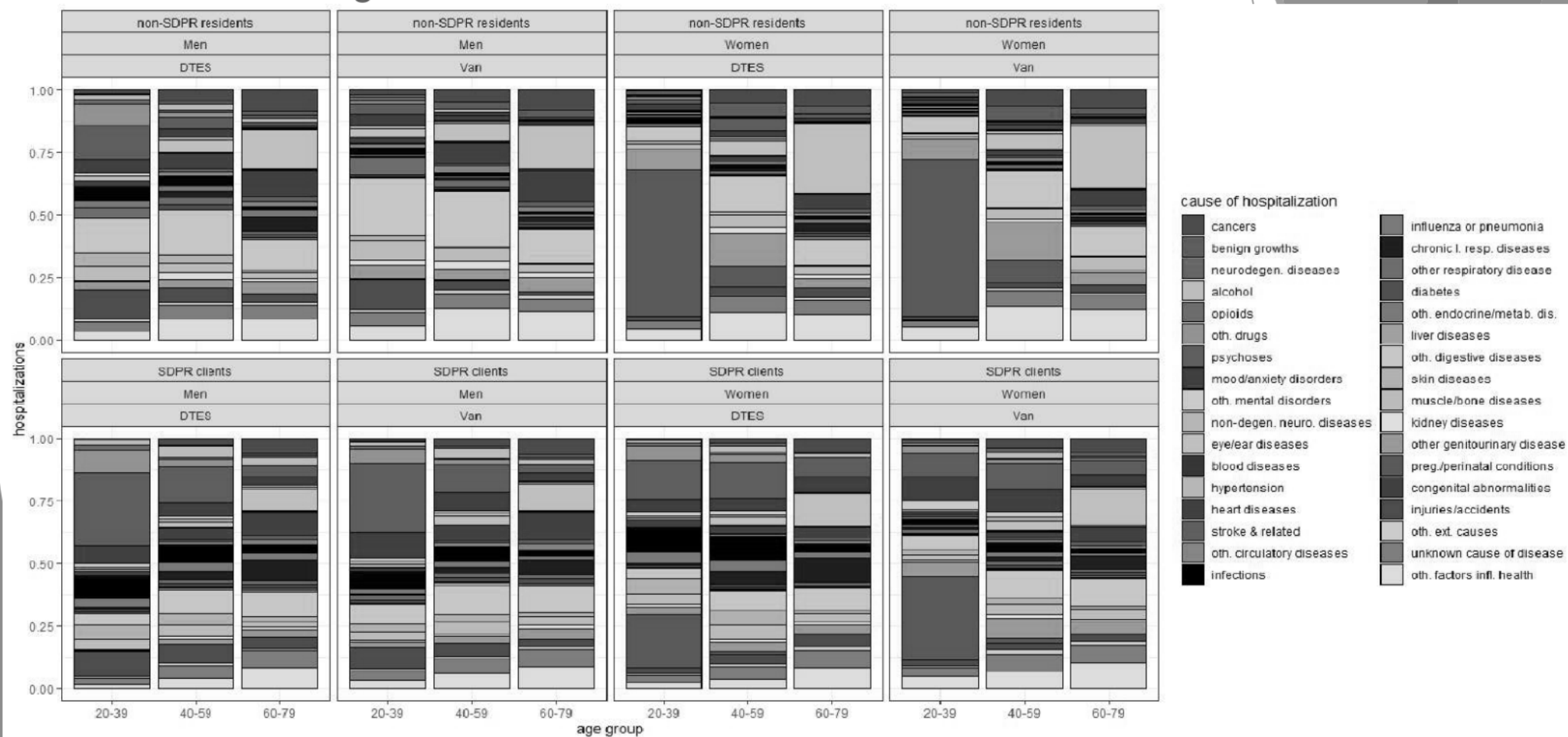
Things look even worse for SDPR clients... (1995-2017)



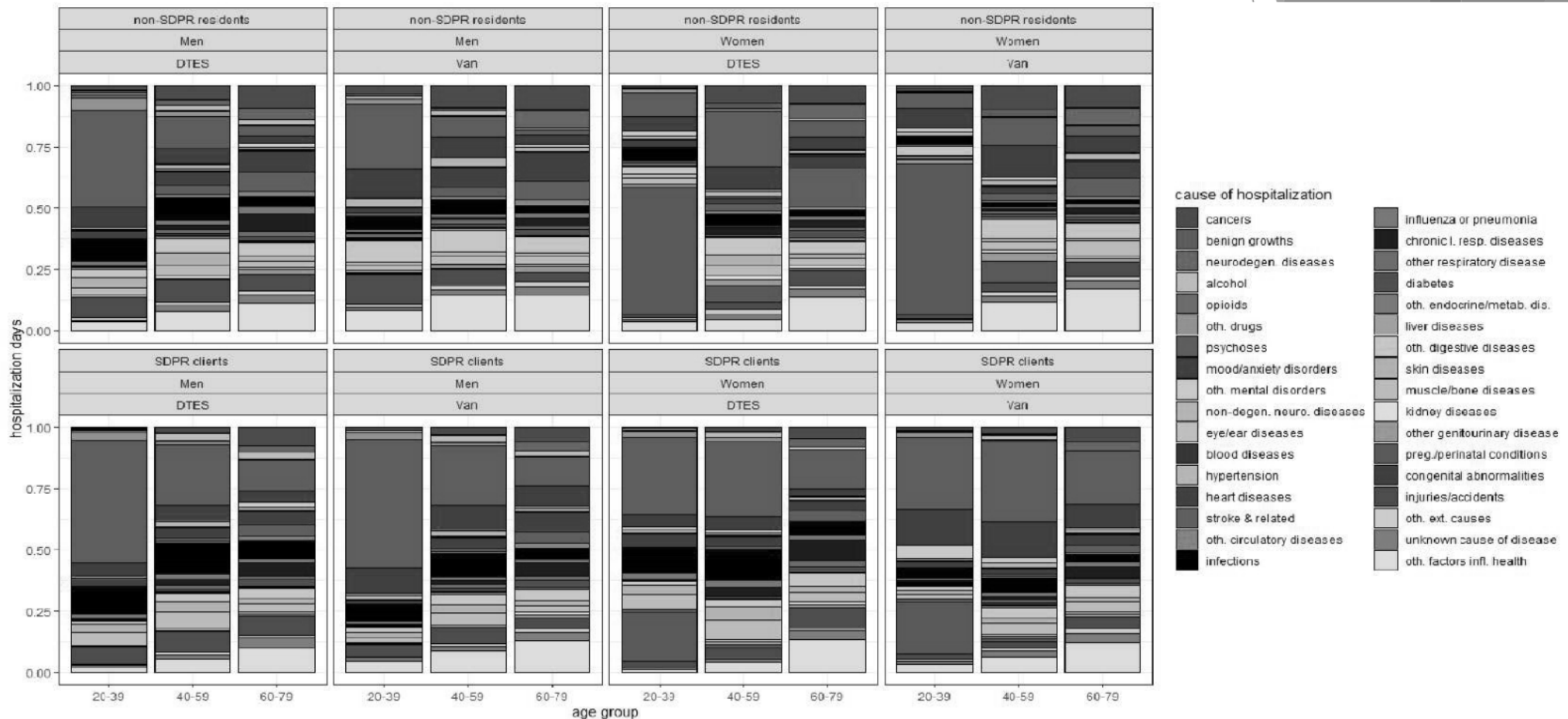


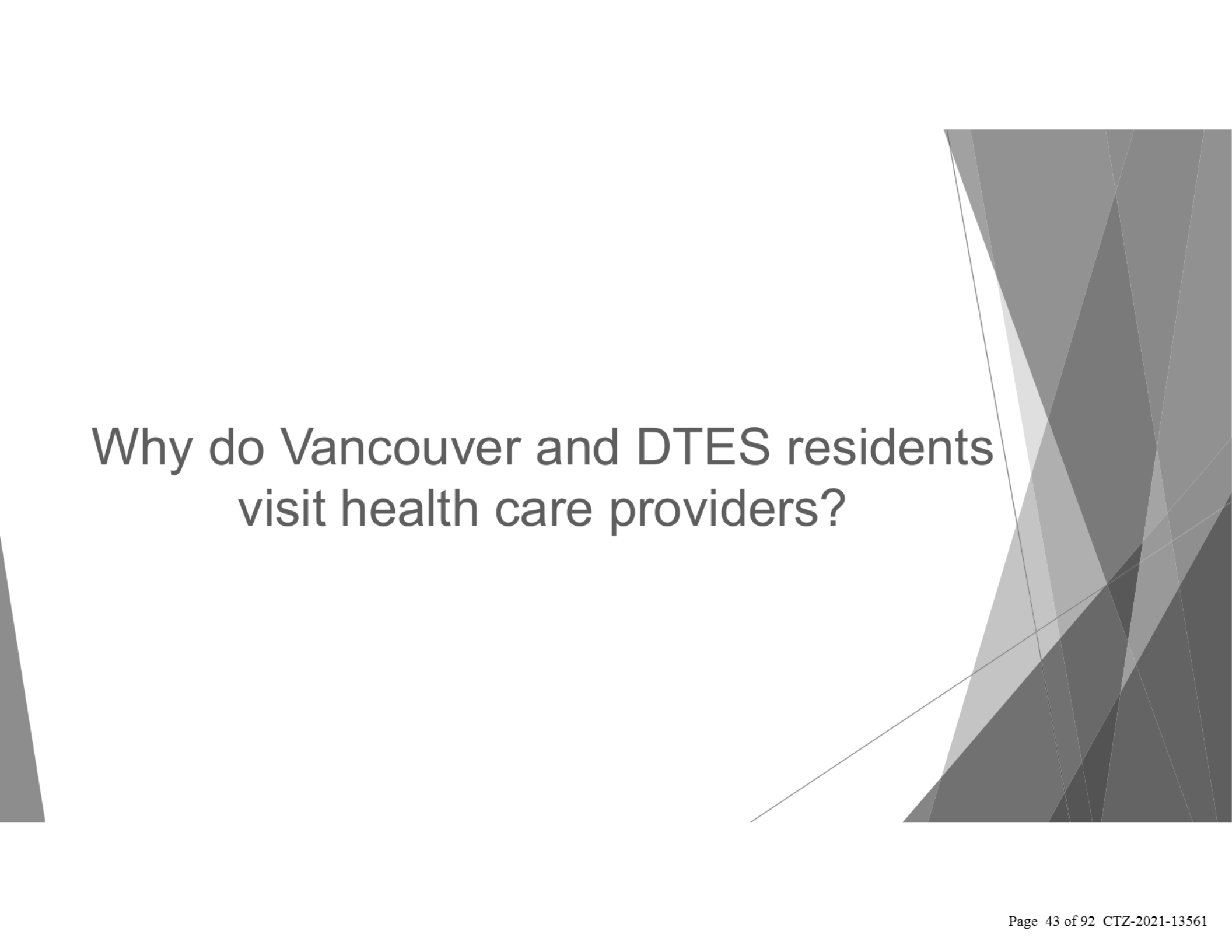
What are the causes of hospitalisation
in Vancouver and the DTES?

Psychoses (e.g. schizophrenia), substance use, and mood/anxiety disorders are major causes of hospitalisation among SDPR clients and non-client men living in the DTES



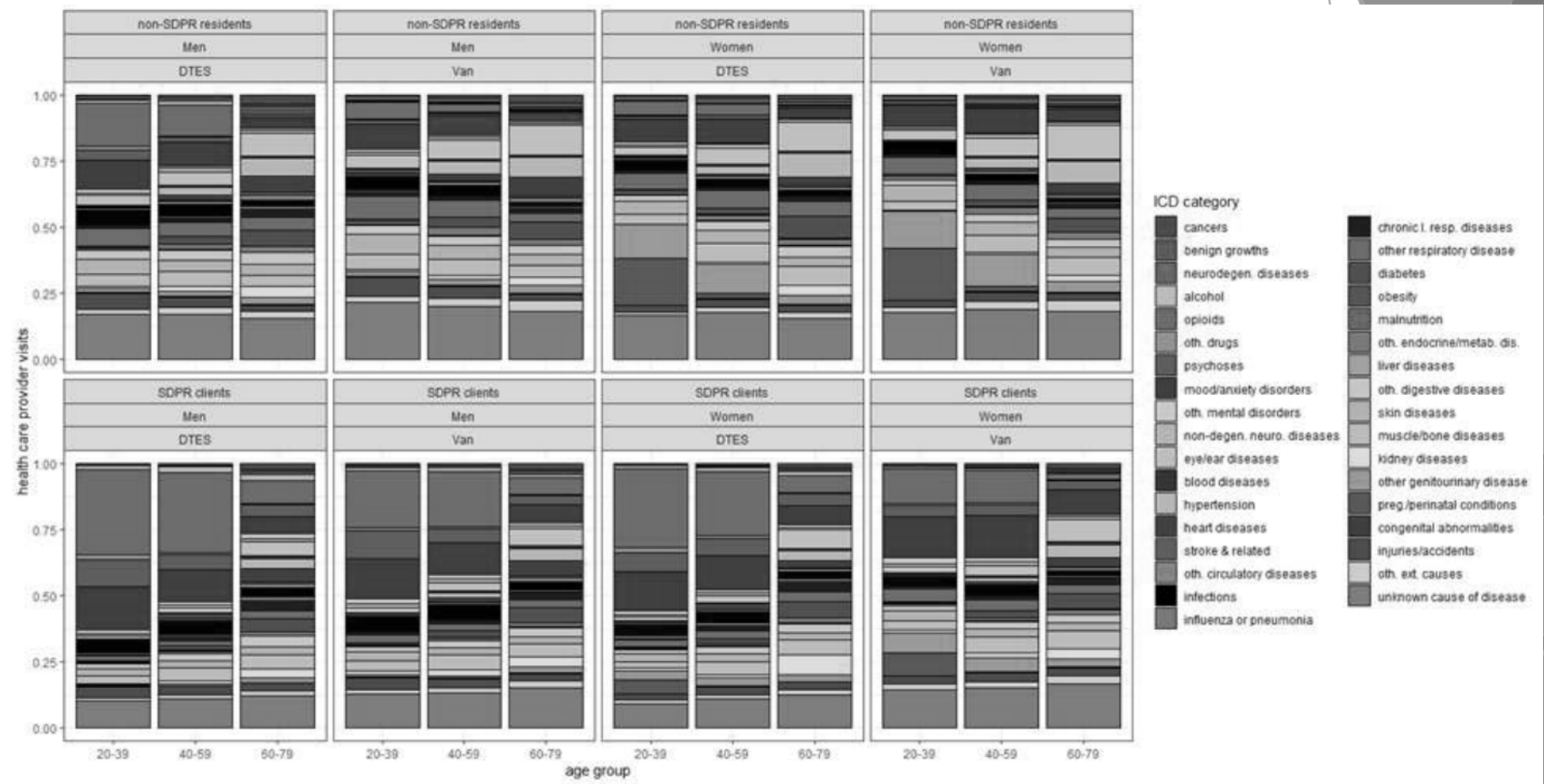
Psychoses and affective disorders in particular lead to longer hospital stays






Why do Vancouver and DTES residents
visit health care providers?

Substance use disorders (esp. opioid-related) and mood/anxiety disorders are major reasons SDPR clients and male DTES residents visited health care providers



Phase 1 (SDPR & health) descriptive analysis summary

- ▶ ~20% of DTES stably-housed residents rely on BCEA support, this is ~8x higher than most parts of Vancouver.
- ▶ The mortality rate is ~2.5x higher in the DTES @ ~15 per 1,000 population (1.5%) vs. 0.6% elsewhere in Vancouver. DTES residents also live ~10-15 years shorter.
- ▶ DTES residents are more likely to die of preventable causes than other Vancouver residents, especially true of SDPR client population.
- ▶ Psychoses, substance use, and affective disorders are major causes of hospitalisation among SDPR clients and non-client men living in the DTES

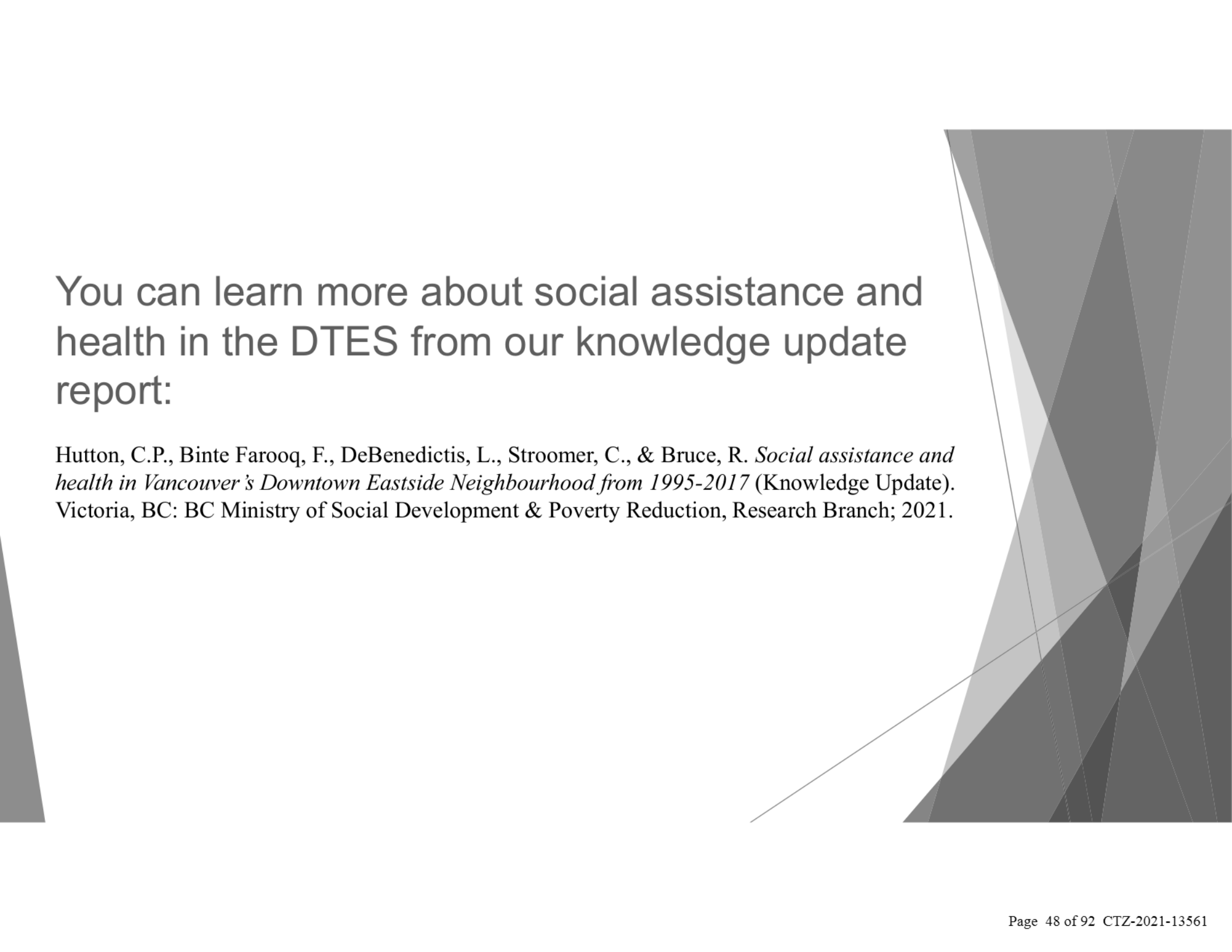


Vancouver is facing **a crisis of mental health**, not just drug overdoses!

Data Source Information

- British Columbia Ministry of Social Development and Poverty Reduction [creator] (2019): BC Employment & Assistance Program (BCEA) caseload and involvement files. Population Data BC [publisher]. Data Extract. URL: <http://www.popdata.bc.ca/data>.
- British Columbia Ministry of Health [creator] (2019): Medical Services Plan (MSP) payment information, & demographic files. Population Data BC [publisher]. Data Extract. URL: <http://www.popdata.bc.ca/data>.
- British Columbia Ministry of Health [creator] (2019): Digital Abstract Database (DAD) hospital separations file. Population Data BC [publisher]. Data Extract. URL: <http://www.popdata.bc.ca/data>.
- British Columbia Vital Statistics Agency [creator] (2019): deaths (VSD) file. Data Extract. URL: <http://www.popdata.bc.ca/data>.

These slides have been created from information made available through the Data Innovation Program and are not official statistics. The opinions, findings, recommendations, and conclusions expressed in this presentation are solely those of the author(s)



You can learn more about social assistance and health in the DTES from our knowledge update report:

Hutton, C.P., Binte Farooq, F., DeBenedictis, L., Stroomer, C., & Bruce, R. *Social assistance and health in Vancouver's Downtown Eastside Neighbourhood from 1995-2017 (Knowledge Update)*. Victoria, BC: BC Ministry of Social Development & Poverty Reduction, Research Branch; 2021.

Questions?

References

1. Linden, I. A., Mar, M. Y., Werker, G. R., Jang, K., & Krausz, M. (2013). Research on a vulnerable neighbourhood—the Vancouver Downtown Eastside from 2001 to 2011. *Journal of Urban Health*, 90(3), 559-573.
2. Wilson-Bates, F., & Chu, J. (2008). *Lost in transition: how a lack of capacity in the mental health system is failing Vancouver's mentally ill and draining police resources*. Vancouver Police Department.
3. Thompson, S. (2014). *Policing Vancouver's Mentally Ill: The Disturbing Truth: Beyond Lost in Transition*. Vancouver Police Department.
4. Krausz, M., & Jang, K. (2015). Lessons from the creation of Canada's poorest postal code. *The Lancet Psychiatry*, 2(3), e5.
5. <https://vancouver.ca/files/cov/vancouver-homeless-count-2019-final-report.pdf>

This guide is intended for all projects working with the Data Innovation Program.

Data Innovation Program

Pre-publication Review Form

Prior to release, communications and publications generated by Data Innovation (DI) Program Projects require review of their disclosures for confirmation that:

- The terms of the Engagement Agreement have been complied with;
- There has been no misuse of data;
- And the data has been appropriately cited.

For full details, see the DI Program's Communication and Pre-publication Guidelines section of the Onboarding Guide to the Project Main Contact.

Please complete the form below for each item of project material which is being submitted for review.

PLEASE ENSURE THE FOLLOWING REQUIRED ACKNOWLEDGEMENTS ARE INCLUDED BEFORE SUBMITTING YOUR PROJECT MATERIALS

1. **Disclaimer:** The following disclaimer must be prominently displayed in all project materials:
"The results in [this report/these tables] have been created from information made available through the Data Innovation Program and are not official statistics. The opinions, findings, recommendations, and conclusions expressed in [this report/these tables] are solely those of the author(s)."
2. **Data source citations:** Data sources must be cited in all project materials (e.g., articles, journals, theses and dissertations). Please contact the DI Program or see the Communication and Pre-Publication Guidelines for more details.

For additional information on project material requirements, refer to the Engagement Agreement.

Part 1: General Information

Name	Steve Forland
Position	Manager
Work Email	Steve.Forland@gov.bc.ca
Project Title	Preventing & Reducing Homelessness Integrated Data Project

Part 2: Submission History

Please indicate the scenario that describes your current project material submission (check one):

- ☒ New Submission: The project material is being submitted to the DI Program for the first time and it has not yet been publicly disseminated/published in this format
- ☐ Revised Submission: This is a revised version of a previously submitted project material for review. It has not yet been publicly disseminated/published in this format.
- ☐ Final Version Submission: This is the final publicly disseminated/published version of a previously submitted project material provided for our records.

- ☐ Publicly Disseminated/Published, Never Reviewed: The project material has already been publicly disseminated/published but it has not gone through the pre-publication review process. Please note: All project materials must be submitted for pre-publication review. Please provide a reason why your project material was not submitted for pre-publication review in the comment box below.

- ☐ Other: This project material is being submitted for another reason. Please describe in the comment box below:

Note: If this submission is based off another project output in a different format (i.e. this is the presentation related to the abstract titled...), please indicate in section 6.3 "Additional Information".

Part 3: Type of Project Material for Public Disclosure

Please select type

- ☒ Meeting or Briefing Notes
- ☒ Slide Decks and/or meeting handouts
- ☐ Conference abstract
- ☐ Presentation of project materials (posters, seminars, lectures, etc.)
- ☐ Article for general public release (for example: newspaper/magazine/blog/wiki etc.)
- ☐ Op-ed for general public release (for example: newspaper/magazine/blog/wiki etc.)
- ☐ Journal publication
- ☐ Academic thesis or dissertation material (Please note: All theses and dissertations completed as part of a larger project MUST be pre-approved by the Data Steward(s) BEFORE the student engages in the work.)
- ☐ Interview (for example: radio, television, internet, etc.)
- ☐ Other. Please describe in the comment box below:

Part 4: Publication of Project Information and Results

Please check all data sets relevant to this project material. Relevant data sets include those used to create the study population, in the analysis, or used to derive any analytical output discussed in this project material.

- ☐ Advanced Education, Skills, and Training - Labour Market Program Data
- ☐ Attorney General - Family Maintenance and Enforcement
- ☒ BC Housing - Rental Subsidies, Shelter Data
- ☐ Children and Family Development - Child Welfare Program
- ☐ Community Living BC – Community Living Programs
- ☐ Education - K-12 (Edudata)
- ☐ ICBC - Road Safety

Health –

- | | |
|--|--|
| <input type="checkbox"/> Ambulatory Care Reporting System (NACRS) | |
| <input type="checkbox"/> Consolidation File (Registration, Demographics, and Census Geodata) | |
| <input type="checkbox"/> Hospital Patient Discharge Data (DAD) | <input type="checkbox"/> PharmaCare |
| <input type="checkbox"/> Home and Community Care | <input type="checkbox"/> PharmaNet |
| <input checked="" type="checkbox"/> Medical Services Plan (MSP) | <input checked="" type="checkbox"/> Registry & Premium Billings (RBPlites) |
| <input type="checkbox"/> Mental Health Services | <input checked="" type="checkbox"/> Vital Statistics |

☐ Provincial Health Service Authority – Perinatal

☒ Social Development and Poverty Reduction

☐ BC Benefits

☒ BCEA – BC Employment & Assistance (GRD)

☒ Statistics Canada/BC Statistics

☐ Income Band by Postal Code

☒ BC Population Projections 2018 to 2041 Aggregate

☐ Other. Please describe in the comment box below:

Part 5: Author Details

Please list all author names and indicate whether they have access to data released under this project. Please add rows as required.

Author Name	Has access to data released under this project? (check box)
Sam Albers	<input checked="" type="checkbox"/>
Stephanie Hazlitt	<input checked="" type="checkbox"/>

Part 6: Project Material Details

6.1 Title of publication

Preventing & Reducing Homelessness Integrated Data Project Technical Document

6.2 Please describe how this project material connects to the Approved Project as described in the Data Access Request.

This material allows the project team to share and discuss results with executives across the government to strengthen a cross-government to achieve a collective impact in preventing and reducing homelessness. In particular, with these materials the project team can present findings which **improve the quality, coverage of existing statistical information** to use as an **evidence base for public policy decision making and service delivery decisions**. For example, including results into government materials, e.g., briefing notes and Treasury Board submissions. These materials will also enable the project team to share results with key partners to build partnerships for the next phase of this project, including the First Nations Health Authority, and BCCDC.

6.3 Additional Information

If you would like to include additional information (such as details of the journal to which you are submitting or the event at which you are making your project material public) please do so here.

Part 7: Confirmations

If you cannot answer 'Yes' to any of the confirmations below, please contact the DI Program at Darcy.Lindberg@gov.bc.ca.

Confirmation	Check box to confirm
I confirm that the attached project material is the final draft to be submitted for publication or presentation.	<input checked="" type="checkbox"/>
I agree to notify the DI Program of any pre-publication changes made to this project material and to provide a copy of the final published or presented project material.	<input checked="" type="checkbox"/>
I confirm that this project material does not contain any risk of re-identification of an individual (e.g., small cell sizes, small geographic areas).	<input checked="" type="checkbox"/>
I confirm that all relevant data sources are properly referenced. For more information on referencing data sources, please refer to How to cite data sources .	<input checked="" type="checkbox"/>

Preventing & Reducing Homelessness Integrated Data project: Data Summary Report

This Data Summary Report includes results that may be shared and are accompanied by the tables and figures in the PowerPoint presentation.

The project team will seek Pre-Publication Review for other materials as necessary.

The results in these bullets have been created from information made available through the Data Innovation Program and are not official statistics. The opinions, findings, recommendations, and conclusions expressed in these bullets are solely those of the authors.

2019 Homeless Cohort includes people who have experienced homelessness in B.C. in 2019. This includes an annual and monthly population estimate of the number of people experiencing homelessness in B.C. The 2019 Homeless Cohort also consists of de-identified data on this population, data from other sources will be added as part of future project phases.

Understanding the Data Sources

Slides 4-9 are operationally focused data. These summaries help provide an understanding of how these datasets/services (SDPR & BC Housing) interact with the homelessness challenge in BC.

Note: these slides provide a broad overview and are not specific to the 2019 homeless cohort estimate.

SLIDE 4. Background: Income Assistance Claims Over Time

- What you're looking at here is that although the income assistance claims are in line with population growth, s.12
- NFA cases have increased^{s.12} the rate compared to the growth in income assistance claims.
- There is a financial incentive to provide an address, shelter support (\$375/month for a single client).

s.12

SLIDE 5-8. Background: Pattern of Shelter Use for 2019

- Total shelter users – count of individuals who accessed a shelter by duration of stay (days).

- This represents s.12 total shelter users – more than the Homeless Cohort due to the linking.

s.12

- This graph helps to highlight that shelters not only serve significant populations of people, s.12
- This demonstrates that shelters serve populations with different needs, s.12

s.12

SLIDE 9. Background: Service Use Overlap for 2019

- Count of all BCEA clients (not limited to NFA) that accessed a shelter in 2019.
- In 2019 there were s.12 individuals accessed a shelter and were linked to the MSP spine. s.12 individuals accessed income/disability assistance. This includes an overlap of s.12 individuals.
 - o In 2019, s.12 of all shelter users in the study were also in receipt of BCEA income or disability assistance.

s.12

- o In 2019, s.12 of all income or disability recipients accessed a shelter.

Data Linkage

SLIDE 10. Background Administrative Data Linkage Status for 2019 Homeless Cohort

- Over s.12 were not able to be linked to the MSP spine and therefore not included in the cohort.
- The majority of the unlinked studyIDs were from HIFIS.
- This could include, instances where individuals are not providing their official information (i.e., using an alias) or duplicates from the data. It also includes individuals that are missed in the population. These also could be individuals that are not residents of British Columbia who don't have a corresponding MSP record.

s.12

s.12

Homelessness Category

SLIDE 11. 2019 Homeless Cohort & Sub-Population

- The 2019 Homeless Cohort population estimate is s.12
- This estimate represents the number of individuals in BC who are thought to have an experience with homelessness in 2019.

s.12

- The experience of homelessness is further categorized into non-chronic homelessness and chronic homelessness.
- The number of individuals in each of the two homelessness categories: Chronic and Non-Chronic s.12
 - o s.12 of the 2019 Homeless Cohort experienced non-chronic homelessness.
 - o s.12 of the 2019 Homeless Cohort experienced chronic homelessness.

s.12

- For the NFA data, using 3 consecutive timeframes to indicate homelessness provides a conservative estimate. Three months allows more confidence in the outcomes, and avoids any process related confounds.

Homelessness Service Use

SLIDES 12-13. 2019 Homeless Cohort by Data Source (% & #)

- s.12 individuals are identified from the SDPR BCEA NFA data, s.12
- s.12 individuals are identified from the HIFIS shelter use data only.
 - o As per the chronic and non-chronic definitions, this means to be in the cohort have had at least s.12 in 2019.

SLIDES 14-19. 2019 Homeless Cohort– Monthly Distribution

- The table on slide 19 the number of individuals in the cohort by month.
- s.12 unique individuals are experiencing homelessness each month.
- When compared to the annual totals this highlights that there is a flow of individuals into and out of homelessness each month and highlights the magnitude of the challenge on an annual basis.
- This early work is a preview to our Phase 3 analysis which focus on flows into and out of the homeless cohort.
- We can take away the knowledge that embedded in these graphs are multiple individual stories with homelessness
- This graph demonstrates that more people are entering the Homelessness Cohort in November and December.
- The 2018 PiT count, which occurred April and May in different communities in B.C. counts s.12 This is noted as an undercount.
- Monthly population estimates include total number of individuals who experienced homelessness for that month – some individuals experience homelessness in 1 or 2 months of the year and others for many months of the year.
s.12
- Comparison with PiT Count Estimate:
 - o The Integrated Data Project and the PiT counts are unique and complementary. Each data source has a distinct methodology, and direct comparisons are not advised, each methodology can fill gaps in the other and enhance our understanding of homelessness in B.C.
 - o It is recognized that the PiT counts are an underestimate of the population experiencing homelessness, yet we do anchor our understanding to the 2018 count totals s.12
 - o The PiT count estimates the number of people who experience homelessness on a single day. The counts likely identify a minimal number and tend to capture visible homelessness.

Demographics

Age and Gender

SLIDE 20-21. Demography by Age & Gender

- The gender data is derived from the 2018 BC Vital Statistics Demographic file, identifying 'current sex'. As this source defines sex according to male/female binary definitions, this is acknowledged as a limitation of the cohort definition. s.12

s.12

- As datasets are revised to recognize non-binary definitions, these datasets can be brought in to provide a more nuanced portrayal of gender diverse categories.
 - o *An operational analysis of HIFIS data indicated that the number of cases self-reporting* s.12
- Demographic information is available for over 99% of the cohort, 97 studyIDs do not have a gender or age associated.
- The results highlight that overall males are overrepresented. Breaking ages into three groupings:

s.12

- Older and younger people are underrepresented in the homeless population while People of working age 25-54-year old's s.12
 - o The under 24 group represents approximately s.12
 - o The over 55 group represents approximately s.12

s.12

SLIDE 22. Comparison of Demographics

- These graphs compare demographics for 2019 Homeless Cohort, the 2018 PiT counts and BC Population 2019.
- The percent males and females within the administrative-data derived 2019 homeless cohort is very similar to the pattern observed with the 2018 PiT count s.12

s.12

- When compared to the population of BC, the results highlight that males are ^{s.12} in the homeless cohort ^{s.12} whereas the population of BC is an even 50% to 50% split.
- As well, the age distribution of the 2019 estimated homeless cohort is very, similar to the distributed estimate from PiT count.
 - o The **under 24** group represents approximately ^{s.12} of the cohort.
 - o The **over 55** group represents approximately ^{s.12} of the cohort.
- What we see here is that, Older and younger people are ^{s.12} in the homeless cohort compared to the population of BC.
- Lastly, the similarities in the demographic data provide us with some confidence that our definition is capturing the same individuals/themes as the PiT counts which is intended.
- The similarities in the demographic data provide us with some confidence that our definition is capturing the same individuals/themes as the PiT counts which is intended.
- These results of the mirror the homeless count results closely, but the distribution of the homeless cohort is not reflective of the general BC population.
- Further investigation into the age and gender distribution could help shed light on the discrepancies.

Movement

SLIDES 23-27. Geography Movement Summary (Table & Graphs by ER, CD & CSD)

- Generally, the project team will roll it up to the Census Division. The geospatial location of the 2019 Homeless Cohort is aggregated to the CD level for safer disclosure practices, specifically for smaller communities. This also reduces the possibility of interferences about a population based on other available datasets, such as census ^{s.12}
- Location is determined by where the services (Income Assistance and shelters) were accessed in 2019. Shelter use data was selected as the primary indicator for location. For the ^{s.12} of the cohort that entered the cohort only as NFA from the SDPR BCEA data, the SDPR/Service BC office where the clients claimed their monthly cheque was used as the indicator for location.
- The majority of the cohort ^{s.12} in 2019. In 2019:
 - o ^{s.12} of the cohort stayed in one Economic Region (ER), such as the Kootenay Region.
 - ^{s.12} accessed services in more than 1 ER.
 - o ^{s.12} of the cohort stayed in one Census Division (CD), i.e., region, such as the Cowichan Valley.
 - ^{s.12} accessed services in more than 1 CD.

- s.12 of the cohort stayed in one Census Subdivision (CSD), i.e., municipality, such as Surrey.
 - s.12 accessed services in more than 1 CSD.

Location

SLIDES 28-31. 2019 Homeless Cohort by CD (non-movers)

- The table on slide 31 identifies the number of individuals in the homeless cohort by Census Division.
- The majority of the cohort (that have not moved between CDs) resided in Great Vancouver, Fraser Valley and the Capital region.
 - There are s.12 individuals in the cohort that did not move CD in 2019 that were experiencing homelessness in s.12
 - There are s.12 individuals in the cohort that did not move CD in 2019 that were experiencing homelessness in s.12
 - There are s.12 individuals in the cohort that did not move CD in 2019 that were experiencing homelessness in s.12
- s.12 has nearly 5 times the number of people experience homelessness than the next highest CD, s.12

SLIDE 30. 2019 Homeless Cohort by CD (non-movers) Per Capita

- Looking at the 2019 Homeless Cohort (non-movers) as a proportion of the CD population shows a different picture across the province.
- On this per capita basis, s.12
s.12 based on their population.

Preventing & Reducing Homelessness Integrated Data Project: Master Data Slides

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The results in these tables and graphs have been created from information made available through the Data Innovation Program and are not official statistics.

The opinions, findings, recommendations, and conclusions expressed in the attached bullets are solely those of the authors.

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Purpose

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Background: Income Assistance Claims Over Time

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Background: Pattern of Shelter Use for 2019

s.12

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Background: Pattern of Shelter Use for 2019

s.12

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Background: Pattern of Shelter Use for 2019

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Background: Pattern of Shelter Use for 2019

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Background: Service Use Overlap for 2019

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Background: Administrative Data Linkage Status for Homelessness Definition Counts

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2019 Homeless Cohort & Sub-Population

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2019 Homeless Cohort by Data Source

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2019 Homeless Cohort by Data Source

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2019 Homeless Cohort Monthly Distribution

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B.C. Homelessness Population: Monthly Estimates for 2019

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B.C. Homelessness Population: Monthly Estimates for 2019

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B.C. Homelessness Population: Monthly Estimates for 2019

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Comparison with PiT Count Estimate

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Homeless Cohort by Month

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Demography - Age and Gender

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Demography - Age and Gender

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Comparison of Demographics

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Geography - Movement Summary Table

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Movement Among Census Subdivisions

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Movement Among Census Divisions

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Movement Among Economic Regions

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Movement Summary

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2019 Homeless Cohort by Census Division (Non-Movers)

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2019 Homeless Cohort by Census Division (Non-Movers)

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2019 Homeless Cohort by Census Division (Non-Movers)

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2019 Homeless Cohort by Census Division

s.12

2019 Homeless Cohort by Census Division (Non-Movers) Per Capita

s.12

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