Canadian Community Health Survey (CCHS) Annual component

Complement to the user guide 2019-2020 Public Use Microdata file



The following document is a complement to the 2019-2020 Canadian Community Health Survey (CCHS) Microdata User Guide and presents the approach used to transform the 2019-2020 Master files into Public Use Microdata Files (PUMF). Note that CCHS PUMFs are only comprised of the content of the master file and excludes any Rapid Response content, sub-samples, or sample buy-ins. For more information on these types of content, see the main CCHS user guide.

1. Documentation

The 2019-2020 questionnaire serves as reference for the 2019-2020 PUMF data file. The questionnaire will display additional questions that are not represented in the PUMF due to suppressions and other restriction methods that have been applied to the data.

The 2019-2020 PUMF data dictionary does not include the corresponding question names which can be found in the questionnaire. For variables that have been grouped or capped, the category `Not Stated' includes the responses `Don't Know', `Refusal' and `Not Stated'.

2. Conversion of 2019-2020 Master File to Public Use Microdata File (PUMF)

The approach for creating a PUMF is intended to balance the requirements for maintaining respondent confidentiality by minimizing disclosure risks, while providing the most useful data to users at the provincial level. The following paragraphs outline some of the procedures applied to convert the CCHS master file into a PUMF.

Geography: Health regions fall under provincial jurisdiction and are used as the basis for the sample design of the CCHS. As mentioned in Section 5.2 of the User Guide, there are 107 health regions across Canada.

Some health regions have population sizes that were considered to be too small to appear individually in the PUMFs. These health regions were grouped with other(s) for the purpose of publication. The approach for keeping or collapsing health region geography in the PUMF entails applying a minimum population size for the given geography -70, 000 inhabitants. This resulted in:

- i. collapsing 25 HRs into 12 health region groupings in Newfoundland and Labrador, New Brunswick, Ontario, Manitoba, Saskatchewan, and British Columbia;
- ii. one Quebec HR (Nord-du-Québec, 2410) being excluded from the PUMF due to its small population size and its demographic characteristics that did not lend itself well to being collapsed with other HRs;
- iii. The territories (Yukon, Nunavut, and the Northwest Territories) have sample sizes too small to appear individually in the PUMFs. Thus, the territories were grouped together for the purpose of publication.

After the grouping of HR, the CCHS PUMF is comprised of 91 HRs/HR groupings across the country. The list of regions before and after collapsing is available in section 5 of this document.

Optional content suppression: Because optional content selection in CCHS is done at the provincial and territorial levels, with the grouping of the territories it becomes necessary to adjust the optional content. If an optional module was included in at least one, but not all three territories, this data cannot be kept on the PUMF. Only optional content that was selected by all three can be kept.

Additionally, the 2019-2020 master and PUMF files only contain optional content data for modules that were asked in both years, which applies to the vast majority of optional content data.

Disclosure control: As mentioned earlier, the 2019-2020 PUMF is designed to preserve the analytical value of data as much as possible while ensuring the potential for identifying individual respondents is minimal. Several controls were implemented in creating the PUMF file. Restriction methods such as removing direct identifiers (e.g., sample ID, name, telephone number), reducing, recoding, and/or suppressing detail based on small frequencies given

specific socio-demographic characteristics were used. Examples of variables from the master file that were not included in the PUMF due to a high risk of disclosure (either because the variable is a risk on its own or is so in combination with other variables) include: attempted suicide in the past 12 months, used ecstasy in lifetime, and whether the respondent is presently pregnant.

In addition, some response categories were deemed to be at possible risk of disclosure and were regrouped so as to be included on the PUMF. Examples include: employment status, number of times consulting health professionals, number of years since stopping smoking, and main source of household income. With these regroupings in place, the 2019-2020 PUMF contains both fewer variables and is less detailed compared with the master file, while still preserving the analytical value of the data.

Age of respondent: Respondents' age is provided as age grouping in the CCHS PUMFs. These groupings follow the sample allocation design for CCHS. The following age groups are available on the 2019-2020 CCHS PUMF:

- i) 12 to 17 years
- ii) 18 to 34 years
- iii) 35 to 49 years
- iv) 50 to 64 years
- v) 65 and older

Although information on some variables were collected for people of a specific age bracket, some data for certain ages still had to be suppressed to ensure confidentiality. For example, labour force data were collected for respondents aged 15 to 75. Because there is an age group limitation of 65 years and older on the PUMF, publishing labour force data for 65 to 75 year olds would reveal more detail about their age within the 65+ group. Therefore, labour force data (LBF) and some main activity data (MAC) are only available on the PUMFs for respondents aged 18-64 (similar treatment is applied for the 15-17 year old respondents).

3. Bootstrap Weights for the PUMF

The 2019-2020 PUMF includes bootstrap weights which are disseminated for users to estimate variances. For confidentiality reasons, the bootstrap weights for the public-use-microdata-file (PUMF) are not generated using the same methodology as for the CCHS master and share files. All bootstrap weights on the PUMF are strictly positive.

Also note that due to the removal of one health region from the PUMF, the sums of bootstrap weights by replicate are not exactly equal. The effect on the variance is negligible.

4. Content

The CCHS content can be divided into two categories, optional content and common content modules.

Optional content

The optional content component is designed to give provinces and territories the opportunity to select content that addresses their own public health priorities. The 2019-2020 PUMF includes only those modules that were selected for both years by a province or by all three Territories.

Common content

As mentioned in sections 4.1 and 4.2 of the User Guide, common content modules include questions asked of all respondents. This common content is divided into three components: the annual core content, and one year and two-year theme content.

5. Health Region Groupings

The 2019-2020 Master file 107 health regions have been grouped into 91 health regions for the PUMF. These groupings are detailed below. The PUMF health regions (variable GEODGHR4) are similar to what was produced for previous CCHS years, with additional grouping compared to the last 2017-2018 PUMF.

Health regions for dissemination, before PUMF

Newfoundland and Labrador Newfoundland and Labrador Eastern Regional Integrated Health Authority Eastern Regional Integrated Health Authority Central Regional Integrated Health Authority Central Regional Integrated Health Authority 1013 Western Regional Integrated Health Authority 10913 Western Region/Labrador-Grenfell Regional Integrated HA 1014 Labrador-Grenfell Regional Integrated Health Authority **Prince Edward Island Prince Edward Island** 1100 Prince Edward Island 11901 Prince Edward Island Nova Scotia Nova Scotia Zone 1 - Western Zone 1 - Western 12901 1201 1202 Zone 2 - Northern 12902 Zone 2 - Northern 1203 Zone 3 - Eastern 12903 Zone 3 - Eastern 1204 Zone 4 - Central 12904 Zone 4 - Central **New Brunswick New Brunswick** 13901 1301 Zone 1 Zone 1 1302 Zone 2 13902 Zone 2 1303 Zone 3 13903 Zone 3 1304 Zone 4 13904 Zones 4 and 5 Zone 5 1305 1306 Zone 6 13906 Zones 6 and 7 Zone 7 1307 Quebec Quebec 24901 2401 Région du Bas-Saint-Laurent Région du Bas-Saint-Laurent Région du Saguenay - Lac-Saint-Jean 24902 Région du Saguenay - Lac-Saint-Jean 2402 2403 Région de Québec 24903 Région de Québec 2404 Région de la Mauricie et du Centre-du-Québec 24904 Région de la Mauricie et du Centre-du-Québec 24905 2405 Région de l'Estrie Région de l'Estrie Région de Montréal 24906 Région de Montréal 2406 Région de l'Outaouais 24907 Région de l'Outaouais 2407 Région de l'Abitibi-Témiscamingue 24908 Région de l'Abitibi-Témiscamingue 2408 2409 Région de la Côte-Nord 24909 Région de la Côte-Nord 2410 Région du Nord-du-Québec N/A - dropped from PUMF 2411 Région de la Gaspésie - Îles-de-la-Madeleine 24911 Région de la Gaspésie - Îles-de-la-Madeleine Région de la Chaudière-Appalaches 24912 Région de la Chaudière-Appalaches 2412 24913 2413 Région de Laval Région de Laval 24914 2414 Région de Lanaudière Région de Lanaudière 2415 Région des Laurentides 24915 Région des Laurentides Région de la Montérégie 24916 Région de la Montérégie 2416

Health regions for PUMF

Health regions for dissemination, before PUMF

Health regions for PUMF

Ontario		Ontari	Ontario	
3526	Algoma	35926	Algoma	
3527	Brant	35927	Brant	
3530	Durham	35930	Durham	
3533	Grey Bruce	35933	Grey Bruce	
3534	Haldimand-Norfolk	35934	Haldimand-Norfolk	
3535	Haliburton, Kawartha, Pine Ridge	35935	Haliburton, Kawartha, Pine Ridge	
3536	Halton	35936	Halton	
3537	Hamilton	35937	Hamilton	
3538	Hastings and Prince Edward Counties	35938	Hastings and Prince Edward	
3539	Huron	35939	Huron/Perth	
3554	Perth			
3540	Chatham-Kent	35940	Chatham-Kent	
3541	Kingston, Frontenac and Lennox and Addington	35941	Kingston, Frontenac and Lennox and Addington	
3542	Lambton	35942	Lambton	
3543	Leeds, Grenville and Lanark	35943	Leeds, Grenville and Lanark	
3544	Middlesex-London	35944	Middlesex-London	
3546	Niagara	35946	Niagara	
3547	North Bay Parry Sound	35947	North Bay Parry Sound/Timiskaming	
3563	Timiskaming			
3549	Northwestern	35949	Northwestern/Porcupine	
3556	Porcupine			
3551	Ottawa	35951	Ottawa	
3553	Peel	35953	Peel	
3555	Peterborough	35955	Peterborough	
3557	Renfrew	35957	Renfrew	
3558	Eastern Ontario	35958	Eastern Ontario	
3560	Simcoe Muskoka	35960	Simcoe Muskoka	
3561	Sudbury	35961	Sudbury	
3562	Thunder Bay	35962	Thunder Bay	
3565	Waterloo	35965	Waterloo	
3566	Wellington-Dufferin-Guelph	35966	Wellington-Dufferin-Guelph	
3568	Windsor-Essex	35968	Windsor-Essex	
3570	York	35970	York	
3575	Oxford Elgin St. Thomas	35975	Oxford Elgin St. Thomas	
3595	City of Toronto	35995	City of Toronto	
Manitoba		Manitoba		
4601	Winnipeg Regional Health Authority	46901	Winnipeg Regional Health Authority	
4602	Prairie Mountain Health	46902	Prairie Mountain Health	
4603	Interlake-Eastern Regional Health Authority	46903	Interlake-Eastern /Northern	
4604	Northern Regional Health Authority			
4605	Southern Health	46905	Southern Health	

Health regions for dissemination, before PUMF		Health regions for PUMF			
Saskatchewan		Saskatchewan			
4701	Sun Country RHA	47901	Sun Country/Five Hills/Cypress		
4702	Five Hills RHA				
4703	Cypress RHA				
4704	Regina Qu'Appelle RHA	47904	Regina Qu'Appelle RHA		
4705	Sunrise RHA	47905	Sunrise/Kelsey Trail		
4708	Kelsey trail RHA				
4706	Saskatoon RHA	47906	Saskatoon RHA		
4707	Heartland RHA	47907	Heartland/Prairie North		
4710	Prairie North RHA				
4709	Prince Albert Parkland RHA	47909	Prince Albert Parkland/Mamawetan-Keewatin Yatthé- Athabaska		
4714 Mamawetan/Keewatin/Athabasca RHA					
Albert		Alberta			
4831	South Zone	48931	South Zone		
4832	Calgary Zone	48932	Calgary Zone		
4833	Central Zone	48933	Central Zone		
4834	Edmonton Zone	48934	Edmonton Zone		
4835	North Zone	48935	North Zone		
British Columbia		British Columbia			
5911	East Kootenay	59911	East Kootenay		
5912	Kootenay-Boundary	59912	Kootenay-Boundary		
5913	Okanagan	59913	Okanagan		
5914	Thompson/Cariboo	59914	Thompson/Cariboo		
5921	Fraser East	59921	Fraser East		
5922	Fraser North	59922	Fraser North		
5923	Fraser South	59923	Fraser South		
5931	Richmond	59931	Richmond		
5932	Vancouver	59932	Vancouver		
5933	North Shore/Coast Garibaldi	59933	North Shore/Coast Garibaldi		
5941	South Vancouver Island	59941	South Vancouver Island		
5942	Central Vancouver Island	59942	Central Vancouver Island		
5943	North Vancouver Island	59943	North Vancouver Island		
5951	Northwest	59951	Northwest/Northeast		
5953	Northeast				
5952	Northern Interior	59952	Northern Interior		
	tories	Territories			
6001	Yukon Territory	60901	Yukon/Northwest Territories/Nunavut		

6101 Northwest Territories

6201 Nunavut