

# Canadian Community Health Survey (CCHS) Annual component

## Complement to the user guide Public Use Microdata Files 2014 and 2013-2014

March 2016



Statistics  
Canada

Statistique  
Canada

Canada

The following document is a complement to the 2014 and 2013-2014 Canadian Community Health Survey (CCHS) Microdata User Guide. It presents the approach used to transform the 2014 and 2013-2014 Master files into Public Use Microdata Files (PUMF), how the content differs between the two PUMFs, and lists which health regions have been grouped.

## **1. One year and two year files**

In addition to the two year PUMF, which has been produced since the survey's first cycle (Cycle 1.1 - 2000-2001), a one year PUMF has also been produced for 2014. The annual PUMF covers a 12 month collection period and was produced with the same approach used for the two year file. While the one year file has a sample size half the size of the two year file, it has additional modules not available in the two year file (see section 4).

## **2. Questionnaire**

The 2014 questionnaire serves as reference for both data files, 2014 and 2013-2014.

## **3. Conversion of CCHS 2014 and 2013-2014 Master Files to Public Use Microdata Files (PUMF)**

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

**Health regions:** Health regions fall under provincial jurisdiction. As mentioned in Section 5.2 of the User Guide, there are 110 health regions across Canada. Thus, the master data file provides representative information for 110 HRs.

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 19 HRs in 9 health region groupings in all provinces except P.E.I., Quebec, Nova Scotia, Manitoba, Alberta, and British Columbia;
- ii) grouping the three territories into a single entity, which resulted in the suppression of many optional content modules for the territories;
- iii) one Quebec HR (Nord-du-Québec) 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;
- iv) all sample design variables being excluded.

After the grouping of some HR's, the CCHS PUMFs are comprised of 97 HRs/HR groupings across the country. The list of HR's before and after collapsing is shown in section 5 of this document.

**Optional content suppression:** Due to the grouping of some HRs, optional content that was not common to each health region within the grouping would have been suppressed. Since 2005, the regions and provinces have opted to coordinate the optional content selected in order to ensure a uniform selection of optional modules provincially; therefore this suppression was not necessary for any

provinces. However, because the three territories were grouped, optional content was suppressed in the territories in cases where only one or two of the territories selected the content.

The 2013-2014 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. Since the 2014 Master and PUMF file only cover one year, it explains why certain modules are part of the one year files but not the two year files.

**Disclosure control:** As mentioned earlier, the 2014 and 2013-2014 PUMFs are 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 two PUMF files. 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 files that were not included in the PUMFs 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, has skin cancer, 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: body part affected by most serious injury, number of times consulting health professionals, number of years since stopping smoking, and main source of household income. With these regroupings in place, the 2014 and 2013-2014 PUMFs contain both fewer variables and are less detailed compared with the corresponding master files, while still preserving the analytical value of the data.

**Age of respondent:** Respondents' age is provided as age grouping in the CCHS PUMFs. Most of these groupings are found in 5-year age bands, from age 20-24 to age 75-79, with all respondents aged 80 and over comprising a single group. Prior to the CCHS 2005 PUMF, youth age groups included those aged 12-14 and 15-19. Beginning with the CCHS 2005 PUMF, the older youth age group has been split between those aged 15-17 and those aged 18-19. As a result, these groupings have three important benefits:

- i) BMI data can be presented for those aged 12-17;
- ii) data for those aged 18-19 is no longer automatically suppressed for variables that were only asked to those aged 18 and over;
- iii) users can still compare youth data from previous PUMFs by grouping the 15-17 year olds with the 18-19 year olds to create the age group 15-19.

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 75-79 on the PUMF, publishing labour force data for 75-year olds would reveal their exact age by default. Therefore, labour force data (LBS) and some waiting times data (WTM) are only available on the PUMFs for respondents aged 15-74. Similar suppression was done for education (EDU) data of 12-14 year olds and maternal experience (MEX, MXS, and MXA) data for 50-year old women.

Special suppression was done for the three modules on maternal experiences (MEX, MXS, and MXA), data for women aged 15-19 because there was concern for a high risk of disclosure for women in this

age group. As such, though MEX, MXS, and MXA data on the master file are shown for all women aged 15 to 55, the PUMFs only present data for women aged 20 to 49.

#### 4. Content

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

##### Optional content

As mentioned in section 3, the main difference between the 2014 and 2013-2014 PUMFs' optional content is that the two year file requires a module to have been asked in for both years by a PUMF health region in order to be loaded to the file.

##### Common content

As mentioned in section 4.1 of the User Guide, common content modules include questions asked of all respondents. This common content is divided into three components: the annual, one year, and two-year common content. What differs between the 2014 and 2013-2014 PUMFs is the one year common content.

The 2014 one year common content is comprised of six modules. All modules are included in the 2014 PUMF.

<i><b>One year common content 2014 only</b></i>	
<i><b>Health Care Utilization</b></i> <ul style="list-style-type: none"> <li>• Contact with health professionals part 2 (CP2)</li> <li>• Unmet health care needs (UCN)</li> </ul>	<i><b>Economic Burden</b></i> <ul style="list-style-type: none"> <li>• Loss of productivity (LOP)</li> <li>• Chronic fatigue syndrome (CC3)</li> <li>• Fibromyalgia (CC4)</li> <li>• Multiple chemical sensitivities (CC4)</li> </ul>

Three of these modules (CP2, UCN, LOP) are in both PUMFs since they were part of the one year 2014 common content and were also optional content in 2013. Thus, only the provinces and territories that selected these modules both in 2013 and in 2014 were loaded to the 2013-2014 PUMF file:

- CP2: loaded only for Newfoundland and Labrador
- UCN: loaded only for Newfoundland and Labrador, Ontario, and Alberta
- LOP: loaded only for Newfoundland and Labrador

#### 5. Health Region Groupings

The 2014 and 2013-2014 Master files 110 health regions have been grouped into 97 health regions for the PUMFs. Theses groupings are detailed below. The PUMF health regions (variable GEODPMF) are similar to what was produced for previous CCHS years. Users can refer to the Derived Variables documentation to learn which groupings have changed since the 2011-2012 PUMF was published.

## Health regions for dissemination, before PUMF

### **Newfoundland and Labrador**

- 1011 Eastern Regional Integrated Health Authority
- 1012 Central Regional Integrated Health Authority
- 1013 Western Regional Integrated Health Authority
- 1014 Labrador-Grenfell Regional Integrated Health Authority

### **Prince Edward Island**

- 1100 Prince Edward Island

### **Nova Scotia**

- 1210 South Shore/South West Nova
- 1223 Annapolis Valley District Health Authority
- 1230 Colchester East Hants/Cumberland
- 1240 Pictou County/Guysborough Antigonish Strait
- 1258 Cape Breton District Health Authority
- 1269 Capital District Health Authority

### **New Brunswick**

- 1301 Zone 1
- 1302 Zone 2
- 1303 Zone 3
- 1304 Zone 4
- 1305 Zone 5
- 1306 Zone 6
- 1307 Zone 7

### **Quebec**

- 2401 Région du Bas-Saint-Laurent
- 2402 Région du Saguenay - Lac-Saint-Jean
- 2403 Région de Québec
- 2404 Région de la Mauricie et du Centre-du-Québec
- 2405 Région de l'Estrie
- 2406 Région de Montréal
- 2407 Région de l'Outaouais
- 2408 Région de l'Abitibi-Témiscamingue
- 2409 Région de la Côte-Nord
- 2410 Région du Nord-du-Québec
- 2411 Région de la Gaspésie - Îles-de-la-Madeleine
- 2412 Région de la Chaudière-Appalaches
- 2413 Région de Laval
- 2414 Région de Lanaudière
- 2415 Région des Laurentides
- 2416 Région de la Montérégie

## Health regions for PUMF

### **Newfoundland and Labrador**

- 10911 Eastern Regional Integrated Health Authority
- 10912 Central Regional Integrated Health Authority
- 10913 Western Region/Labrador-Grenfell Regional Integrated HA

### **Prince Edward Island**

- 11901 Prince Edward Island

### **Nova Scotia**

- 12910 South Shore/South West Nova
- 12923 Annapolis Valley District Health Authority
- 12930 Colchester East Hants/Cumberland
- 12940 Pictou County/Guysborough Antigonish Strait
- 12958 Cape Breton District Health Authority
- 12969 Capital District Health Authority

### **New Brunswick**

- 13901 Zone 1
- 13902 Zone 2
- 13903 Zone 3
- 13904 Zones 4 and 5
  
- 13906 Zones 6 and 7

### **Quebec**

- 24901 Région du Bas-Saint-Laurent
- 24902 Région du Saguenay - Lac-Saint-Jean
- 24903 Région de Québec
- 24904 Région de la Mauricie et du Centre-du-Québec
- 24905 Région de l'Estrie
- 24906 Région de Montréal
- 24907 Région de l'Outaouais
- 24908 Région de l'Abitibi-Témiscamingue
- 24909 Région de la Côte-Nord
  
- 24911 Région de la Gaspésie - Îles-de-la-Madeleine
- 24912 Région de la Chaudière-Appalaches
- 24913 Région de Laval
- 24914 Région de Lanaudière
- 24915 Région des Laurentides
- 24916 Région de la Montérégie

## Health regions for dissemination, before PUMF

### **Ontario**

3526 Algoma  
3527 Brant  
3530 Durham  
3531 Elgin-St. Thomas  
3533 Grey Bruce  
3534 Haldimand-Norfolk  
3535 Haliburton, Kawartha, Pine Ridge  
3536 Halton  
3537 Hamilton  
3538 Hastings and Prince Edward Counties  
3539 Huron  
3554 Perth  
3540 Chatham-Kent  
3541 Kingston, Frontenac and Lennox and Addington  
3542 Lambton  
3543 Leeds, Grenville and Lanark  
3544 Middlesex-London  
3546 Niagara  
3547 North Bay Parry Sound  
3563 Timiskaming  
3549 Northwestern  
3551 Ottawa  
3552 Oxford  
3553 Peel  
3555 Peterborough  
3556 Porcupine  
3557 Renfrew  
3558 Eastern Ontario  
3560 Simcoe Muskoka  
3561 Sudbury  
3562 Thunder Bay  
3565 Waterloo  
3566 Wellington-Dufferin-Guelph  
3568 Windsor-Essex  
3570 York  
3595 City of Toronto

### **Manitoba**

4601 Winnipeg Regional Health Authority  
4602 Prairie Mountain Health  
4603 Interlake-Eastern Regional Health Authority  
4604 Northern Regional Health Authority  
4605 Southern Health

## Health regions for PUMF

### **Ontario**

35926 Algoma  
35927 Brant  
35930 Durham  
35931 Elgin-St. Thomas  
35933 Grey Bruce  
35934 Haldimand-Norfolk  
35935 Haliburton, Kawartha, Pine Ridge  
35936 Halton  
35937 Hamilton  
35938 Hastings and Prince Edward  
35939 Huron/Perth  
  
35940 Chatham-Kent  
35941 Kingston, Frontenac and Lennox and Addington  
35942 Lambton  
35943 Leeds, Grenville and Lanark  
35944 Middlesex-London  
35946 Niagara  
35947 North Bay Parry Sound/Timiskaming  
  
35949 Northwestern  
35951 Ottawa  
35952 Oxford  
35953 Peel  
35955 Peterborough  
35956 Porcupine  
35957 Renfrew  
35958 Eastern Ontario  
35960 Simcoe Muskoka  
35961 Sudbury  
35962 Thunder Bay  
35965 Waterloo  
35966 Wellington-Dufferin-Guelph  
35968 Windsor-Essex  
35970 York  
35995 City of Toronto

### **Manitoba**

46901 Winnipeg Regional Health Authority  
46902 Prairie Mountain Health  
46903 Interlake-Eastern Regional Health Authority  
46904 Northern Regional Health Authority  
46905 Southern Health

## Health regions for dissemination, before PUMF

### **Saskatchewan**

4701 Sun Country RHA  
4702 Five Hills RHA  
4703 Cypress RHA  
4704 Regina Qu'Appelle RHA  
4705 Sunrise RHA  
4708 Kelsey trail RHA  
4706 Saskatoon RHA  
4707 Heartland RHA  
4710 Prairie North RHA  
4709 Prince Albert Parkland RHA  
  
4714 Mamawetan Churchill River RHA/Keewatin Yatthé  
RHA/Athabaska HA

### **Alberta**

4831 South Zone  
4832 Calgary Zone  
4833 Central Zone  
4834 Edmonton Zone  
4835 North Zone

### **British Columbia**

5911 East Kootenay  
5912 Kootenay-Boundary  
5913 Okanagan  
5914 Thompson/Cariboo  
5921 Fraser East  
5922 Fraser North  
5923 Fraser South  
5931 Richmond  
5932 Vancouver  
5933 North Shore/Coast Garibaldi  
5941 South Vancouver Island  
5942 Central Vancouver Island  
5943 North Vancouver Island  
5951 Northwest  
5952 Northern Interior  
5953 Northeast

### **Territories**

6001 Yukon Territory  
6101 Northwest Territories  
6201 Nunavut

## Health regions for PUMF

### **Saskatchewan**

47901 Sun Country/Five Hills/Cypress  
  
47904 Regina Qu'Appelle RHA  
47905 Sunrise/Kelsey Trail  
  
47906 Saskatoon RHA  
47907 Heartland/Prairie North  
  
47909 Prince Albert Parkland/Mamawetan-Keewatin Yatthé-  
Athabaska

### **Alberta**

48931 South Zone  
48932 Calgary Zone  
48933 Central Zone  
48934 Edmonton Zone  
48935 North Zone

### **British Columbia**

59911 East Kootenay  
59912 Kootenay-Boundary  
59913 Okanagan  
59914 Thompson/Cariboo  
59921 Fraser East  
59922 Fraser North  
59923 Fraser South  
59931 Richmond  
59932 Vancouver  
59933 North Shore/Coast Garibaldi  
59941 South Vancouver Island  
59942 Central Vancouver Island  
59943 North Vancouver Island  
59951 Northwest  
59952 Northern Interior  
59953 Northeast

### **Territories**

60901 Yukon Territory/Northwest Territories/Nunavut