



# The Canadian Urban Environmental Health Research Consortium

## Canue Metadata - Neighborhood Canadian Marginalization Index

2021-02-15

### DATA SET INFORMATION

**Dataset Code:** CMG\_A\_YY

**Description:**

CAN-Marg is multifaceted, allowing researchers and policy and program analysts to explore multiple dimensions of marginalization in urban and rural Canada. The index was developed using a theoretical framework based on previous work on deprivation and marginalization. It was then empirically derived using principal components factor analysis. It has been demonstrated to be stable across time periods and across different geographic areas (e.g. cities and rural areas). It has also been demonstrated to be associated with health outcomes including hypertension, depression, youth smoking, alcohol consumption, injuries, body mass index and infant birthweight. Canadian Marginalization Index (CAN-Marg) data for 1991, 1996, 2001 and 2006 for dissemination areas are freely available in Excel format (CAN-Marg\_EA\_1991.xls; CAN-Marg\_EA\_1996.xls; CAN-Marg\_DA\_2001.xls; and CAN-MargDA\_2006.xls). CANUE staff downloaded Excel files for 2001 and 2006 on March 15, 2018; data for 1991 and 1996 were downloaded on August 21, 2018. ArcGIS was used by CANUE staff to associate the single link DMTI Spatial postal codes to the Statistics Canada dissemination or enumeration areas boundary files, and then join the CAN-Marg data to the postal codes, using dissemination or enumeration area unique identifiers. There may be many postal codes within a single dissemination area - these will have the same index values and may not be suitable for summation, etc. Please refer to the CAN-Marg documentation, listed below under Supporting Documentation.

**Keywords:** socioeconomic status|SES|marginalization|census|dissemination area

**Place Keywords:** Canada|national

### GEOSPATIAL REFERENCE

**Upper Left Corner:** 65.14N , -141.02W

**Lower Right Corner:** 41.68N , -52.62W

**Coordinate System:** GCS\_WGS84 - EPSG:4326

**Geometry Type:** POINT - Units: Decimal Degree

**Geometry Data Source:** DMTI Spatial Inc. (postal codes)

### QUALITY ASSESSMENT

**QA/QC Procedures:**

CANUE did not assess the quality of the CAN-Marg data. Users should review the supporting documentation and any recommended citations.

**Geographic Coordinate Positional Accuracy:**

These metrics are linked to the corresponding annual postal codes files for mapping and analysis purposes. Refer to the postal code metadata file in Supporting Documentation for more information.

**Vertical Positional Accuracy:** N/A

**Attribute Accuracy:** N/A

**Data Validity:** NoData = -9999 (for numeric fields) - NoData=null (for category fields) - Data insufficient to calculate value = -1111

**Associated Files:** N/A

**Data Comment:**

There may be many postal codes within a single dissemination area - these will have the same index values and may not be suitable for summation.

### DATA SOURCE

**Data Source**

Centre for Urban Health Solutions, St. Michaels Hospital, Toronto, ON (CAN-Marg data)|DMTI Spatial Inc (postal codes)|Statistics Canada (enumeration/dissemination area boundary file). See supporting documentation.

**Spatial Resolution:** Dissemination/Enumeration Areas

**Data Preparation Date:** 2018-07-03

**Beginning Date:** 1991

**End Date:** 2006

**Sampling Frequency of Data:** Annual - census years only

**Years Available:**

1991 - 1996 - 2001 - 2006

**MAINTENANCE**

**Description:** N/A

**File Type:** Comma separated values(.csv)

**File Size:** Each file is between 62 MB to 67 MB in size

**Number of Data Files:** 4

**DATA USE CONDITIONS****The Data User is REQUIRED:**

- (i) to acknowledge data sources listed under Acknowledgement(s)
- (ii) cite the publication(s) listed under Recommended Citation(s) as the providers and source of these data when using them in support of research, analysis, operations, policy decision or any other undertaking including publication
- (iii) complete and sign the CANUE Data Use and Sharing Agreement (available at <http://canue.ca/data/>), in which the name and signature of the researcher/analyst who takes responsibility for ensuring all conditions are met.

**Data Sharing Restrictions:**

These data files are provided solely for the purposes stated in the CANUE Data Sharing and Use Agreement and should not be re-distributed for any reason. These data also contain proprietary postal code data and may only be used for the project named in the CANUE Data Sharing and Use Agreement. Data can be shared only within a project team for the exclusive purposes of teaching, academic research and publishing, and/or planning of educational services in accordance to DMTI End User Agreement associated with the Spatial Mapping Academic Research Tools (SMART) Program.

**Include the following references in any publications resulting from the use of these data:**

- [1] Matheson et al. "Development of the Canadian Marginalization Index: a new tool for the study of inequality." Canadian Journal of Public Health, 2012;103(Suppl. 2):S12-S16.
- [2] CanMap Postal Code Suite v2016.3. [Computer file] Markham: DMTI Spatial Inc., 2016.

**Include the following acknowledgements:**

- 1. Canadian Marginalization Index (CAN-Marg), indexed to DMTI Spatial Inc. postal codes , were provided by CANUE (Canadian Urban Environmental Health Research Consortium)

**SUPPORT DOCUMENTATION**

- 1 - CAN-Marg data link: (<http://www.torontohealthprofiles.ca/ont/onmargON.php>)
- 2 - Canadian Marginalization Data User Guide ([https://canue.ca/wp-content/uploads/2018/07/CANMARG\\_user\\_Guide\\_2012.pdf](https://canue.ca/wp-content/uploads/2018/07/CANMARG_user_Guide_2012.pdf))
- 3 - Canadian Marginalization Data Summary ([https://canue.ca/wp-content/uploads/2018/09/CANMARG\\_1991-1996\\_DevelopmentSummary.pdf](https://canue.ca/wp-content/uploads/2018/09/CANMARG_1991-1996_DevelopmentSummary.pdf))
- 4 - Postal Code metadata (<https://canue.ca/wp-content/uploads/2019/09/CANUE-Browser-Metadata-PostalCodes.pdf>)

**VARIABLES**

CMGY\_01 - Province Code

Province code (AB, BC, MB, NB, NL, NS, NT, NU, ON, PE, QC, SK, YT)

CMGY\_02 - Community Name

Community name

CMGY\_03 - Municipality

Municipality

CMGY\_04 - Dissemination/Enumeration Area Unique Identifier

Dissemination/Enumeration area unique identifier

CMGY\_05 - Maximum Distance from Postal Code to Nearest Dissemination Area

Maximum distance from postal code to nearest dissemination area

CMGY\_06 - Quintiles of Instability

Quintiles of instability (1 = least unstable, 5 = most unstable)

CMGY\_07 - Quintiles of Deprivation

Quintiles of deprivation (1 = least deprived, 5 = most deprived)

CMGY\_08 - Quintiles of Dependency

Quintiles of dependency (1 = least dependent, 5 = most dependent)

CMGY\_09 - Quintiles of Ethnic Concentration

Quintiles of ethnic concentration (1 = least ethnically concentrated, 5 = most ethnically concentrated)

CMGY\_10 - Principal Component Factor Score - Instability

Principal component factor score - instability (higher values = higher instability)

CMGY\_11 - Principal Component Factor Score - Deprivation

Principal component factor score - deprivation (higher values = higher deprivation)

CMGY\_12 - Principal Component Factor Score - Dependency

Principal component factor score - dependency (higher values = higher dependency)

CMGY\_13 - Principal Component Factor Score - Ethnic Concentration

Principal component factor score - ethnic concentration (higher values = higher ethnic concentration)

## SUPPORT CONTACT

**Data Set Support Contact:** [info@canue.ca](mailto:info@canue.ca)

**Affiliated Organization:**

CANUE (Canadian Urban Environmental Health Research Consortium)

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## DATA SOURCE CONTACT

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