# User Guide The Ontario Community Health Profiles Partnership (OCHPP) Website: A Step-by-Step Guide to Data, Charts and Maps

www.OntarioHealthProfiles.ca

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# Ontario Community Health Profiles Partnership

# Sharing high quality health equity data with everyone

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#### 1. Overview

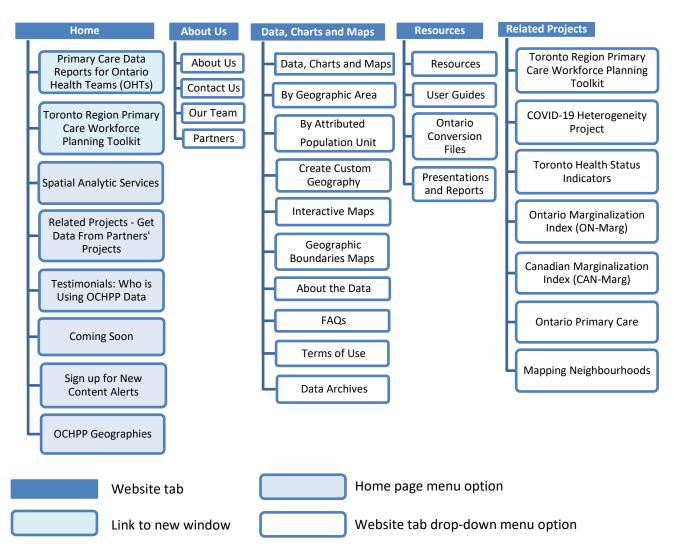
This section provides an overview of the Ontario Community Health Profiles Partnership (OCHPP) project website framework and structure. For step-by-step instructions on how to use the website, skip to Section 3. For information on how to read the data tables, static maps, and interactive maps skip to Section 4.

#### 1.1 About OCHPP

The OCHPP project website, <a href="www.OntarioHealthProfiles.ca">www.OntarioHealthProfiles.ca</a>, provides high-quality, area-specific, health-related data available to everyone. The website was created in response to continuing requests from community agencies and partners for data that could be used for planning and program development. The health indicators available on the site are deemed as some of the most important for population health planning and resource allocation. Data are provided in easy to read and downloadable Excel spreadsheets, bar charts and maps. The data available on the OCHPP site can assist users in making decisions about long-term planning and resource allocation. For example, health service providers can examine data in relation to the neighbourhoods within their catchment area to help determine patterns, establish priorities and forecast future needs. The website is updated regularly as data becomes available. New topics and indicators are also added based on partner suggestions and needs. Please note that the most up-to-date information about the data is found in the data files. We are transitioning our 'About the Data' documents into 'Technical Notes' which are now included in the data tables.

# 1.2 Structure of the OCHPP Website (Site Map)

The structure of the OCHPP website is summarized in Figure 1, below.



**Figure 1:** Structure of the OCHPP website (Site Map).

The main data components of the website can be found under the "Data, Charts and Maps" page, which is easily accessible from every page of the website.

# 2. OCHPP Reporting Structures

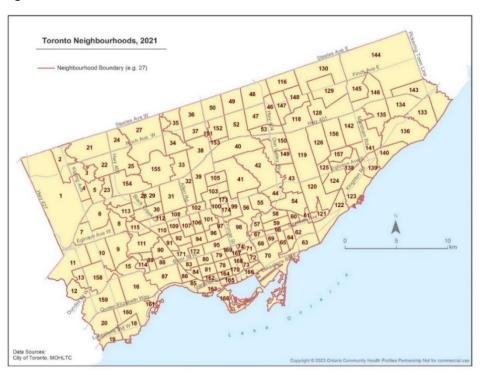
## 2.1 Ontario Geographical Levels

OCHPP reports the majority of health and socio-demographic data by four geographic levels: 1) Small Areas or Neighbourhoods, 2) Sub-Regions, 3) Local Health Integration Networks (LHINs), and 4) Health Regions.

# 1. Small Area or Neighbourhood Level

We provide data for the following Ontario neighbourhoods:

- 158 Neighbourhoods in the City of Toronto
- 194 Local areas\* in Ontario Health (OH) Central Region
- 116 Neighbourhoods in the City of Ottawa.
- 94 Neighbourhoods in Hamilton Niagara Haldimand Brant
- 37 Neighbourhoods in South West, and
- 38 Neighbourhoods in Erie St. Clair



**Figure 2**. Neighbourhood map of the City of Toronto.

<sup>\*</sup> OH Central uses the term "local areas."

# 2. Sub-Region Level

LHIN Sub-Regions ("Sub-Regions" for short) serve as a focal point for improved health system planning, performance improvement and service integration. There are 76 Sub-Regions across the province that provide a mid-level scale to report data. Sub-Regions were first established in 2016 by the LHINs; despite the name, they are not sub-geographies of the Regions defined by Ontario Health in 2019 and are no longer an official reporting geography for the Ministry of Health or for Ontario Health. However, OCHPP still reports data for the 76 LHIN Sub-Regions.

**Important note:** In April 2024, OCHPP made a number of small changes to Sub-Region boundaries in order to fully align with our main 'small area' reporting geographies (neighbourhoods and local areas). These adjustments are indicated in our data and map collections by the name "Modified Sub-Regions". Although the adjustment are relatively small, it is important to remember that the two versions of Sub-Region boundaries and resulting data summaries within them are slightly different. For more information please contact the OCHPP team.

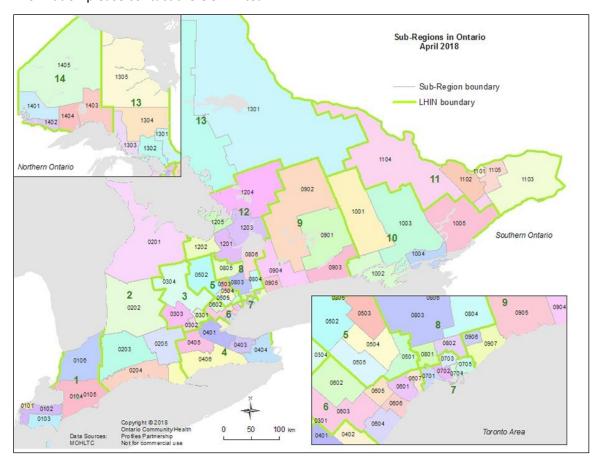


Figure 3. Sub-Region level map

# 3. Local Health Integration Network (LHIN) Level

While LHINs have largely been phased out for planning, OCHPP still reports data for 14 (legacy) LHINs in Ontario. LHINs are currently known, and operate in a limited function, as Home and Community Care Support Services.

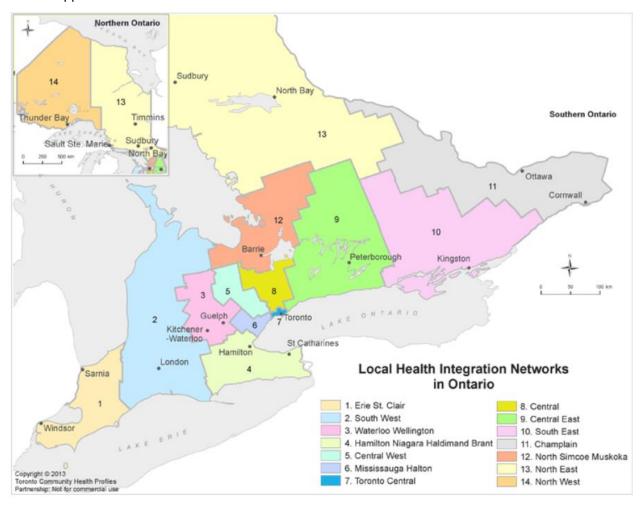


Figure 4. LHIN level map.

# 4. Ontario Health Region Level

Ontario Health Regions are administrative geographies established by the Ontario Ministry of Health and Long-Term Care in December 2019. Ontario Health has six regions to link communities with health providers.

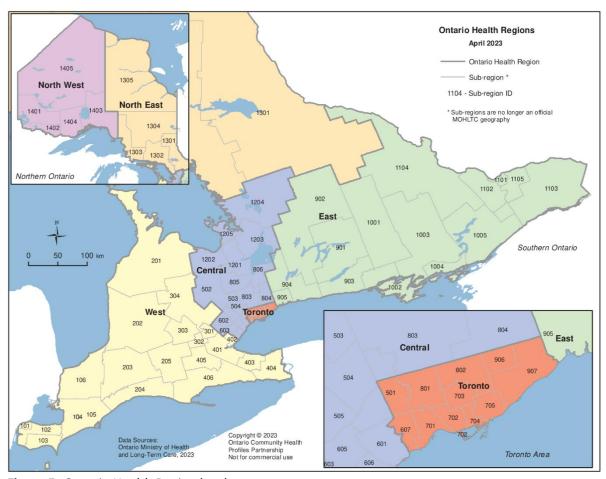


Figure 5. Ontario Health Region level map.

## 2.2 Archived Ontario Geographic Levels

Other historical geographic boundaries, data and maps can be found under the "Data, Charts and Maps" tab in the "Data Archives" section of the OCHPP website.

#### 2.3 Ontario Health Teams (OHTs)

Ontario Health Teams have been introduced to provide a new way of organizing and delivering care that is more connected to patients in their local communities. Each Ontario resident with an OHIP card is attributed to one OHT based on the primary care, or other health services the patient received in the past. Under Ontario Health Teams, health care providers (including hospitals, doctors and home and community care providers) work as one coordinated team – no matter where they provide care<sup>1</sup>. OCHPP does not regularly report data for OHTs but through collaboration with Inspire-PHC, OHT primary care data reports and updates are available on the OHCPP site<sup>2</sup>. The current OHT reports include data on primary care attachment status for populations attributed to each OHT.

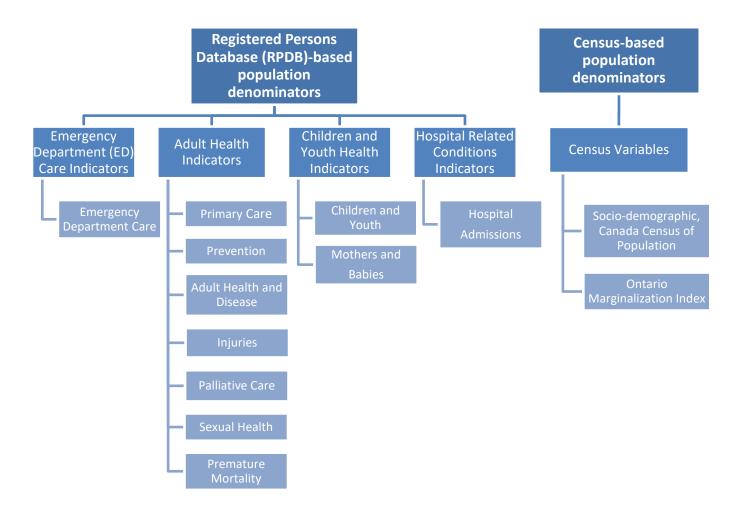
<sup>&</sup>lt;sup>1</sup> For more information on OHTs visit: <a href="https://www.ontario.ca/page/ontario-health-teams">https://www.ontario.ca/page/ontario-health-teams</a>

<sup>&</sup>lt;sup>2</sup> Link to Inspire-PHC site visit: https://www.ontariohealthprofiles.ca/ontarioHealthTeam.php

# 3. Data Representations

#### 3.1 Health and Health-Related Indicators

OCHPP provides health and health-related indicators available for download under the "Data, Charts and Maps" page. Indicators are categorized under two main population denominators: census-based and registered persons database (RPDB). Figure 6 illustrates the main categories of indicators available on the website.



**Figure 6.** Main categories of health and health-related indicators available on the OCHPP website.

#### 3.2 HOW TO access Data

OCHPP data is primarily accessible under the "Data, Charts and Maps" page. Under this page there are varying options for downloading data, charts and/or maps.

#### 1. Selecting Geographic Unit

Table 1 shows the type of geographic level available for each tab under the "Data, Charts and Maps" page.

**Table 1.** *Geographic levels of data.* 

	Tabs available under "Data, Charts and Maps" page		
Geographic Levels	Data, Charts and Maps	Create Custom Geography	Interactive Maps
Small areas	✓	✓	<b>✓</b>
Sub-Regions	✓		
LHINs	✓		
Ontario Health Regions	✓		

**Small Area indicators:** this micro-level data provides detailed statistics about populations living in communities by sex\*and relevant age groups for each health indicator at the local area or neighbourhood level. Note: Rates and population counts published by OCHPP exclude persons whose postal codes are located within areas classified by Statistics Canada as First Nations or Indigenous communities.

Ontario-wide (large area) indicators: Similar to small area indicators, detailed statistics by sex and relevant age groups are provided for most populations across Ontario at three regional geographic scales: Sub-Regions, (former) LHINs, and Ontario Health Regions. Note: Rates and population counts published by OCHPP exclude persons whose postal codes are located within areas classified as First Nations or Indigenous communities.

<sup>\*</sup> OCHPP acknowledges that the use of language such as male/female does not include those who do not identify as such. We are limited in the way data is provided to us but are mindful of the concerns of those who may query this use of language. Revisions to terminology and language are part of our website's review process and will be revised on an on-going basis.

# 2. Selecting Data Type

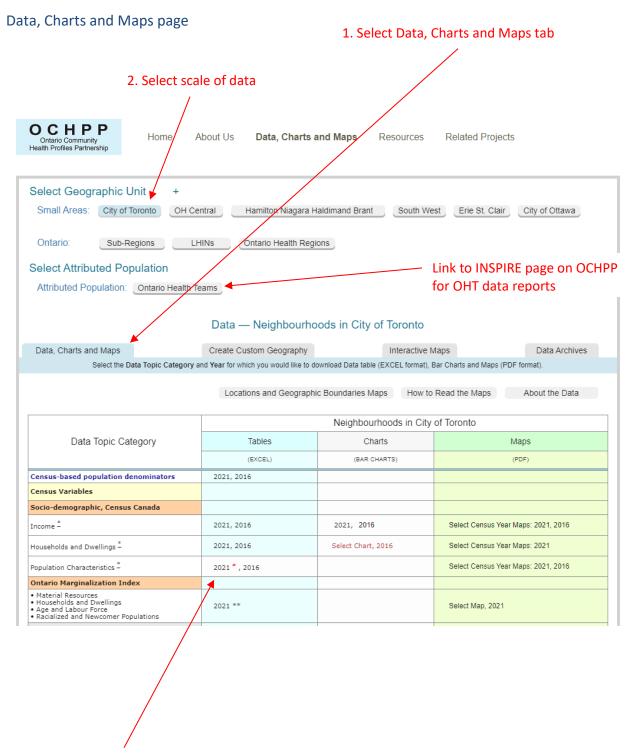
Table 2 shows which data types are available for viewing or downloading for each tab under the "Data, Charts and Maps" page.

 Table 2. Data formats.

	Tabs available under "Data, Charts and Maps" page		
Data Formats	Data, Charts and Maps	Create Custom Geography	Interactive Maps
Tables (Excel files)	✓	<b>√</b>	✓
Bar Charts	✓	✓	
Maps (PDF)	✓		✓

#### 3.3 HOW TO Access Data Tables for All Areas

Access Data Tables for all areas from "Data, Charts and Maps" tab.

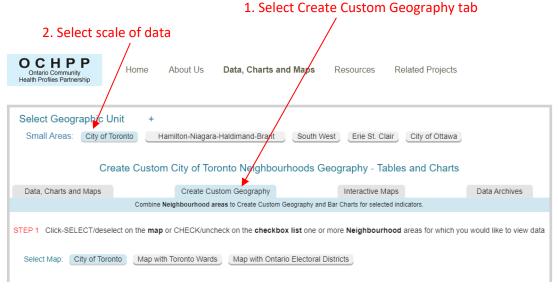


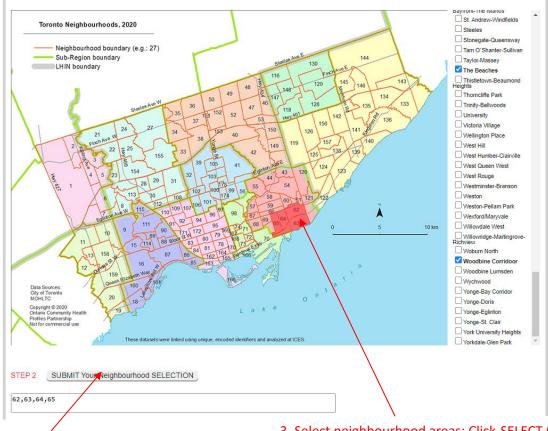
3. Select data link from "Tables" column

#### 3.4 HOW TO Create Data Tables for Custom Selected Areas

Create Data Tables for custom selected areas from "Create Custom Geography" tab.







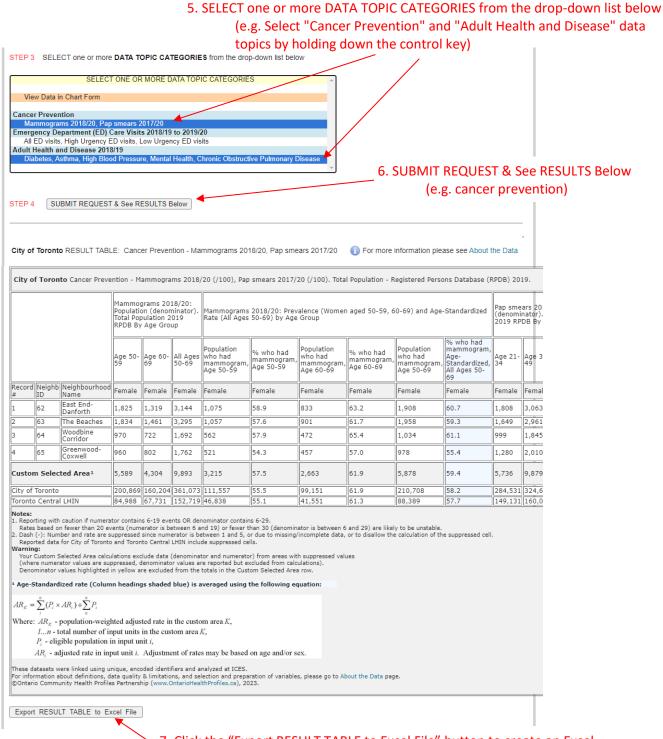
4. SUBMIT your neighbourhood SELECTION

3. Select neighbourhood areas: Click-SELECT (or deselect) one or more neighbourhood areas for which you would like to view data tables

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# 3.4 HOW TO Create Data Tables for Custom Selected Areas (continued)

Create Data Tables for custom selected areas from "Create Custom Geography" tab.

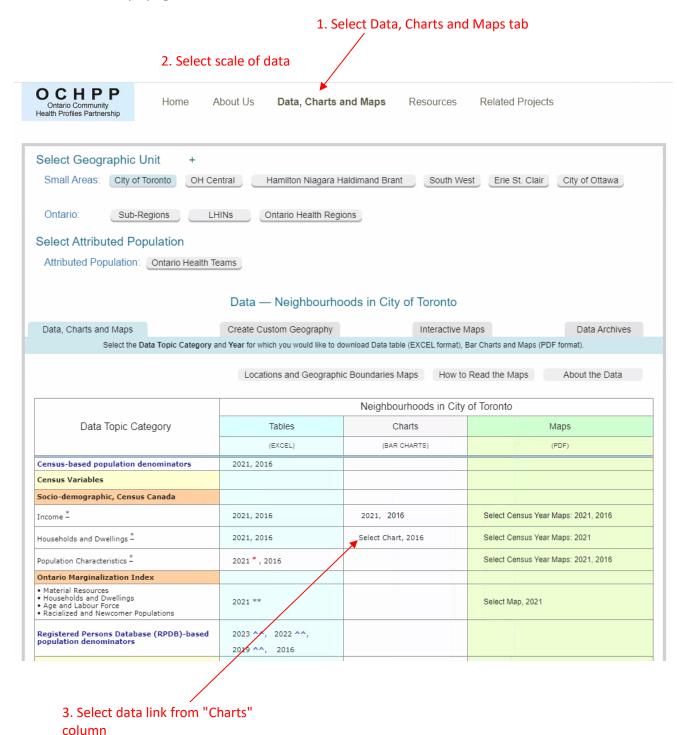


7. Click the "Export RESULT TABLE to Excel File" button to create an Excel data table with all available indicators for your chosen neighbourhoods

#### 3.5 HOW TO Access Bar Charts for All Areas

Access Bar Charts for all areas from "Data, Charts and Maps" tab.

# Data, Charts and Maps page

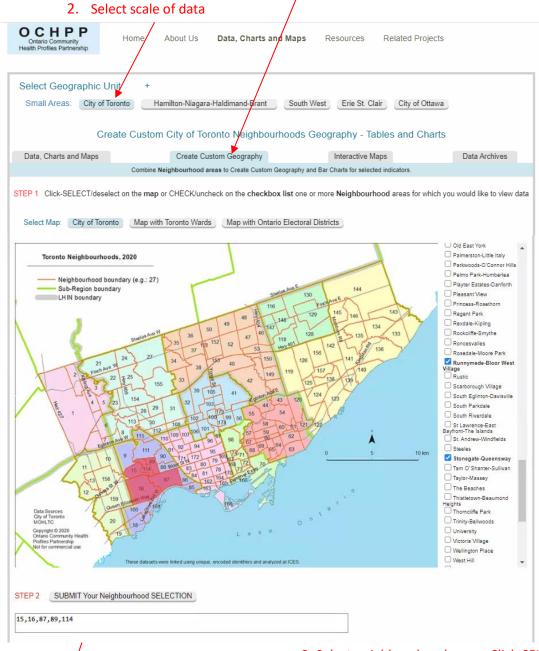


#### 3.6 HOW TO Create Bar Charts for Custom Selected Areas

Create Bar Charts for custom selected areas from "Create Custom Geography" tab.

# Data, Charts and Maps page

1. Select Create Custom Geography tab

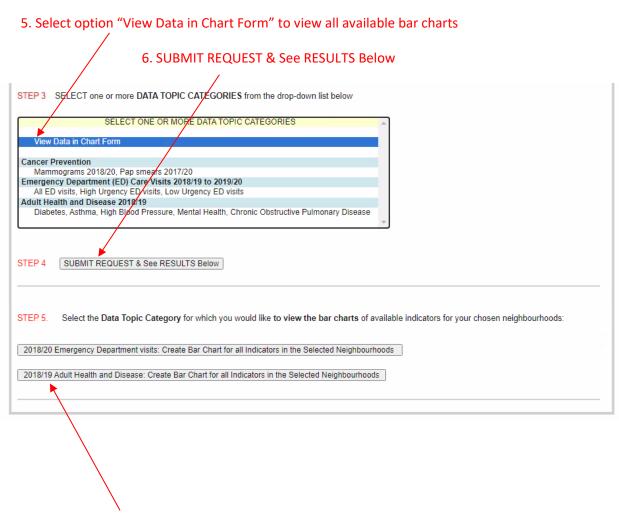


4. SUBMIT your neighbourhood SELECTION

3. Select neighbourhood areas: Click-SELECT (or deselect) one or more neighbourhood areas for which you would like to view data tables

# 3.6 HOW TO Create Bar Charts for Custom Selected Areas (continued)

# **OPTION 1: Select only Data in Chart Form**

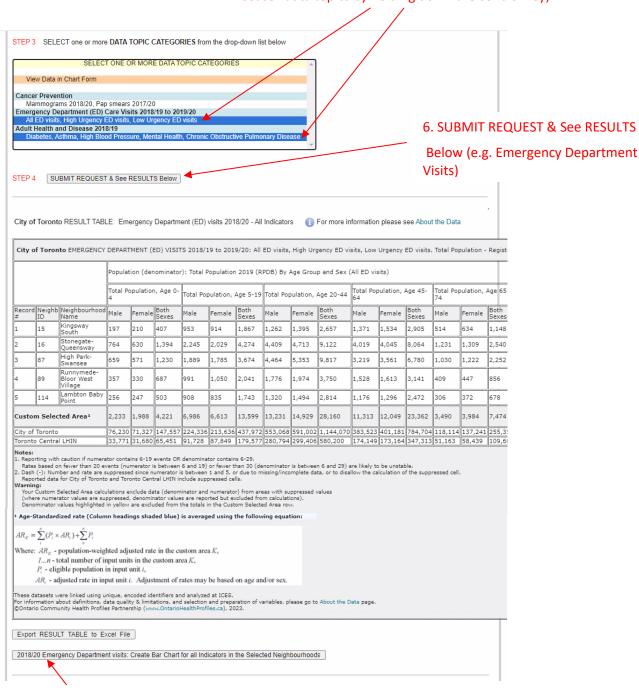


7. Select one of the data topic categories or indicators available as a bar chart. An interactive chart will open in a separate window. Additional selections from the same list are permitted; each will open in a separate browsing tab. Ensure you read the notes when you see the bar chart regarding the indicator i.e. descending values.

# 3.6 HOW TO Create Bar Charts for Custom Selected Areas (continued)

#### **OPTION 2: Select Data Topics and view Bar Charts**

5. SELECT one or more DATA TOPIC CATEGORIES from the drop-down list below (e.g. Select "Emergency Department visits" and "Adult Health and Disease" data topics by holding down the control key)



7. Select one of the data topic categories or indicators available as a bar chart. An interactive chart will open in a separate window. Additional selections from the same list are permitted; each will open in a separate browsing tab.

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# 3.7 HOW TO Access Maps (PDF files)

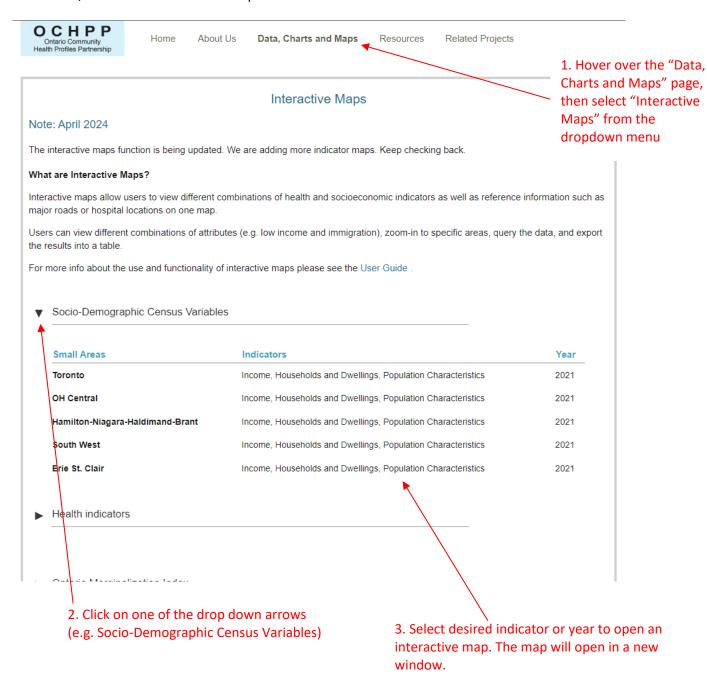
Access Maps (PDF files) from "Data, Charts and Maps" tab.



3. Hover over the button under the "Maps" column and select map. If there are two years available (e.g. 2021 and 2016), the most recent year will be selected (e.g. 2021). To view all years of data available select the **All maps** button – additional maps not shown in the drop-down menu may also be available.

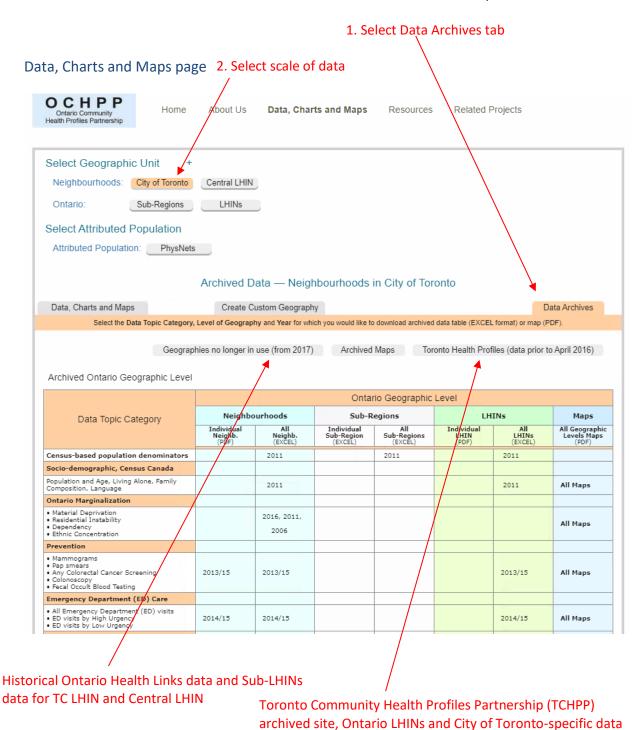
# 3.8 HOW TO Access Interactive Maps

Access Interactive Maps through the Data, Charts and Maps tab. Hover over the tab to access the drop down menu, then select "Interactive Maps."



#### 3.9 HOW TO Access Data Archives

Access Archived data from "Data Archives" tab. Archives include Historical Ontario Health Links data, sub-LHINs data for TC LHIN and Central LHIN and other data/files not currently in use.



## 3.8 HOW TO Access Data Archives (continued)

Access archived Central LHIN (legacy) data from bottom of the page for OH Central.

Data, Charts and Maps page



Central LHIN (legacy) data

# 3.8 HOW TO Access Data Archives (continued)

Access archived City of Ottawa (legacy) data from bottom of the page for the City of Ottawa.



2. Select the temporary Link to view archived the City of Ottawa (legacy) data

# 4. Interpreting Data Tables and Maps

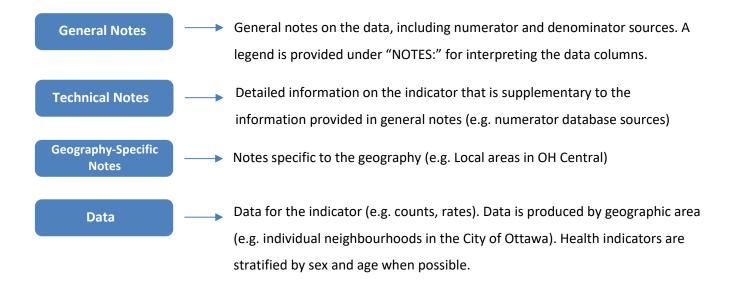
#### **4.1 Interpreting Data Tables**

Data tables under the "Data, Charts and Maps" page are available as Excel spreadsheets.

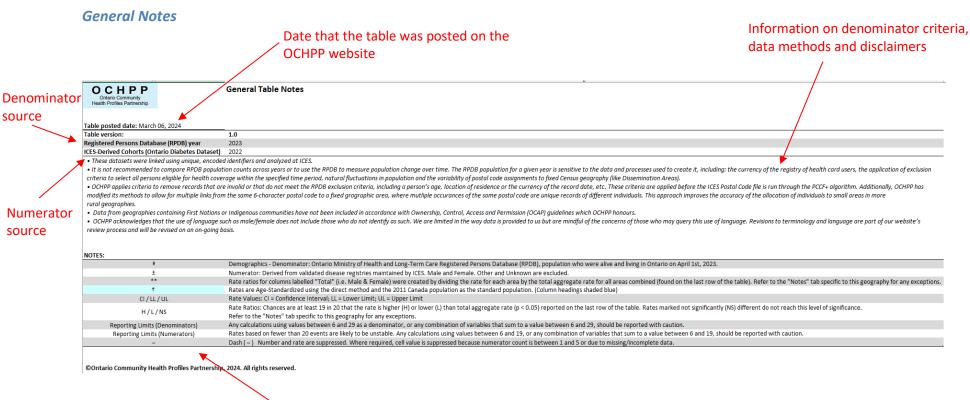
Starting in 2024, data tables for most health indicators will include information about the source data replacing the About the Data documents. Users will be able to access older data documents in the archives section.

Data tables may contain several tabs, e.g. general notes, technical (about the data) notes, a tab with geography-specific information (if applicable), and the actual data tab. Data tabs may contain data at different geographic levels covering the area in question, e.g. Toronto neighbourhoods include data for the former Toronto Central LHIN.

Note: Exceptions to formatting standards may vary including Census-based indicators and Ontario Marginalization Index where technical notes are available elsewhere (via the ON-Marg page of the OCHPP website) or upon request.



**Figure 7.** Health data table formatting.



NOTES: contains Information on symbology and column headings that are used in the data tab. These include denominator description, numerator description, rate ratios, agestandardization, confidence interval symbols, any reporting limits for the numerator and denominator and data suppression

Technical notes provide additional information on the data topic not included in the general notes

OCHPP Ontario Community Health Profiles Partnership	Technical Notes			
General Information				
Data Category	Adult Health			
Indicator	Adult Health and Disease			
Data Topic		sease (COPD), Mental Health and Addiction-related Visits, 2+ Chronic disease, 4+ Chronic disease		
Technical Notes	,			
Numerator Database(s) Descriptio	ICEs HYPER (Hypertension) Dataset created from the Canadian Institute for Health Information Discharge Abstract Database (CIHI-DAD) including same day surgery and Ontario Health Insurance Plan (OHIP) Database.      Ontario Hyptertension Dataset contains all Ontario hyptertension patients identified since 1991.			
Inclusion Criteria	Individuals are considered to have hypertension* if they have had: a) one hospital admission with a hypertension diagnosis, or b) an OHIP claim with a hypertension diagnosis followed within two years by either an OHIP claim or a hospital admission with a hypertension diagnosis. The following diagnostic codes are used for diagnosis of hypertension: 401.x, 402.x, 403.x, 404.x, or 405.x (International Classification of Disease, 9th revision) or I10, I11, I12, I13, or I15 (International Statistical Classification of Diseases and Related Health Problems, 10th revision).			
Inclusion Reference(s)	Tu K. Campbell NR. Chen Z. Cauch-Dudek K. McAlister FA. Accuracy of administra	tive databases in identifying patients with hypertension. Open Medicine 2007 April; 1(1): 18-26.		
Exclusions	If the hyptertension record is between 120 days before and 180 days after a gestational admission date.      People with no health system contact for the previous ten years from the date of data as many of those people would no longer be alive and living in Ontario.			
Additional Notes	<ul> <li>All the chronic disease data are based on physician-diagnosed cases and do not capture individuals who may have a condition, but who have not been diagnosed by a physician.</li> <li>Community Health Centre (CHC) claims and non-OHIP visits are not available.</li> <li>The date an individual meets the case definition criteria does not necessarily equal the date of diganosis (e.g., a person could be diagnosed prior to data availability, but only their recent contact with the healthcare system is captured in the dataset).</li> </ul>			
*Hypertension and High Blood Pressur	may be used interchangeably			
©Ontario Community Health I	Profiles Partnership, 2024. All rights reserved.			
General information	indicate the everall data category indicator	Technical notes contain information on the numerator database(s), inclusion criteria, exclusion criteria and any references used to define these criteria. Additional notes may		
	indicate the overall data category, indicator, ld font) of the specific data table	contain any further details		

#### **Geography-Specific Notes**



#### Table Notes - Neighbourhoods in City of Toronto

1 Toronto neighbourhood IDs are not all sequential; there are gaps between 1 and 174 to accommodate changes made to neighbourhood boundaries by the Social Development, Finance and Administration division of the City of Toronto. Refer to the OCHPP FAQ page for more information

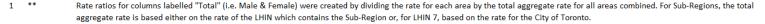
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Information specific to neighbourhood (or small area) groupings, etc.

Data reporting for some geographies may include specific information that differs from other geographies



Table Notes - Sub-Regions (SRs) in each Ontario Local Health Integration Network (LHIN)



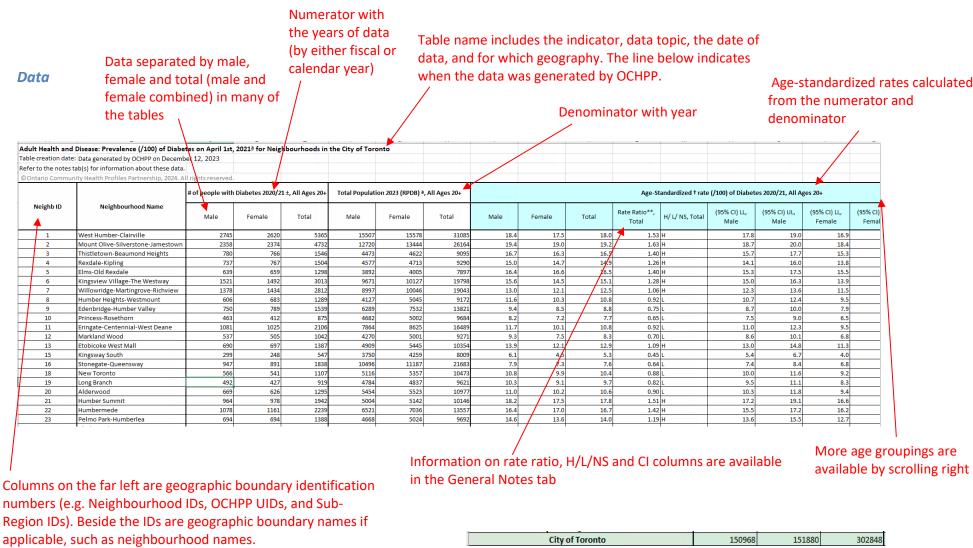
2 H / L / NS Rate Ratios: Calculations for Sub-Regions are reported based either on the LHIN rate or, for LHIN 7, based on the rate for the City of Toronto. The level of significance is reported as follows: Chances are at least 19 in 20 that the rate is higher (H) or lower (L) than the total aggregate rate (p < 0.05) reported for the LHIN containing the Sub-Region, unless noted otherwise.

Rates marked not significantly (NS) different do not reach this level of significance.

For Sub-Regions within LHIN 7, chances are at least 19 in 20 that the rate is higher (H) or lower (L) than the total aggregate rate (p < 0.05) reported for the City of Toronto. Rates marked not significantly (NS) different do not reach this level of significance.

3 In LHIN 2 and LHIN 4, the sum of "Male," "Female," and "Total" populations within each tabulated age category may not equal to the LHIN sums due to the extension of Sub-Region #406 into LHIN 2 and the mixed assignment of 25 DAs on the west side of the boundary for LHIN 4. To match reporting procedures from the Ontario Health Analytics Branch, the full boundary of Sub-Region #406, including the western-most 25 DAs, captures RPDB data at the Sub-Region level; at the LHIN-level, these 25 DAs are reassigned to LHIN 2.

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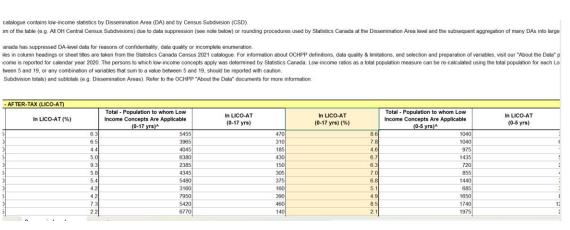


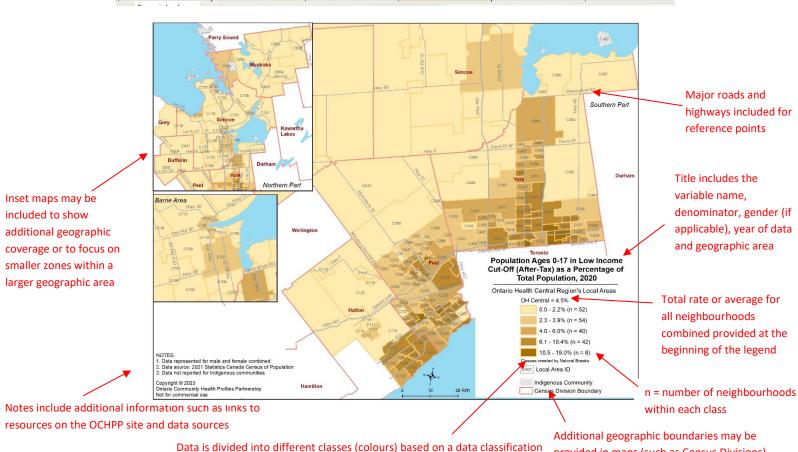
numbers (e.g. Neighbourhood IDs, OCHPP UIDs, and Sub-Region IDs). Beside the IDs are geographic boundary names if

Totals available on the last row of each column. These are totals for the overall geography.

## **4.2 Interpreting Static Maps**

Data used in maps are taken directly from the data tables. Below is an example of an Ontario Health Central map for the variable: population ages 0-17 in low-income cut-off (LICO-AT). This data was taken from the table on our website "2021 Census of Population – Socio-Demographic Variables Income for Persons in Low Income Categories – Local Areas in Ontario Health Central Region (OH Central)". The data column used for the map is "In LICO-AT (0-17 yrs) (%)" as highlighted in yellow. This is column I in the data table.





Return to Tab method. This example uses 5 classes created by the data classification method known as natural breaks. For more information on data classification methods please read "Static maps types" on page 31

provided in maps (such as Census Divisions). These may vary depending on the geographic area

# **Static Map Types**

## 1. Choropleth Maps

Choropleth maps are the most common statistical maps on OCHPP. Choropleth maps are typically used to depict rate or ratio variables. They are not suitable for displaying counts or frequencies.

#### Classification methods:

Values of the depicted variable, which are usually captured within standard statistical or geographical areas, are first sorted from the lowest to the highest, and then divided into several categories or groups using one of several standard or custom classification methods.

The majority of choropleth maps on the OCHPP site use the Jenks Natural Breaks classification method, which reduces the variance within classes and maximizes the variance between classes. With the right data distribution and a correct number of classes picked this method produces fairly natural groupings of similar values making it very desirable for depicting true data patterns across the study area.

Another common classification method groups data into quintiles, with each quintile containing more or less the same number of geographic units. This method is particularly suitable for data with uniform distribution patterns, or for attributes that are grouped into quintiles prior to the mapping stage.

Some maps utilize custom classification methods to better reflect data distribution or a specific character of the depicted variable.

For more information on classification methods please visit:

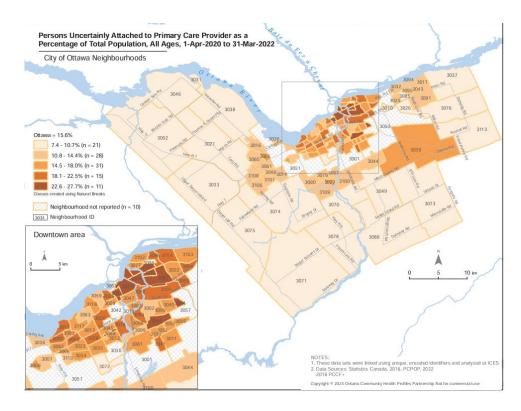
https://www.spatialanalysisonline.com/HTML/classification\_and\_clustering.htm?zoom\_highlightsub=Se\_lected+univariate+classification+schemes

https://gisgeography.com/choropleth-maps-data-classification/

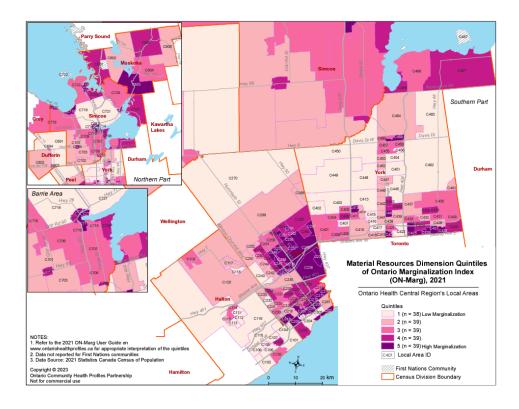
https://en.wikipedia.org/wiki/Jenks natural breaks optimization

#### Colours:

Each data class is depicted with a specific saturation of a colour, with higher values usually shown by darker colours. In some cases, a gradient between two colours is used, especially when the low values of the variable may be perceived as negative, while higher values may reflect a more positive outcome.



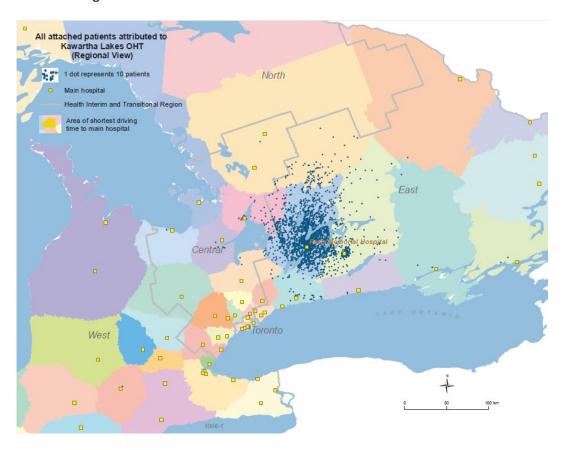
**Figure 8.** Example of a choropleth map, natural breaks classification.



**Figure 9**. Example of a choropleth map, quintiles classification.

#### 2. Dot Density Maps

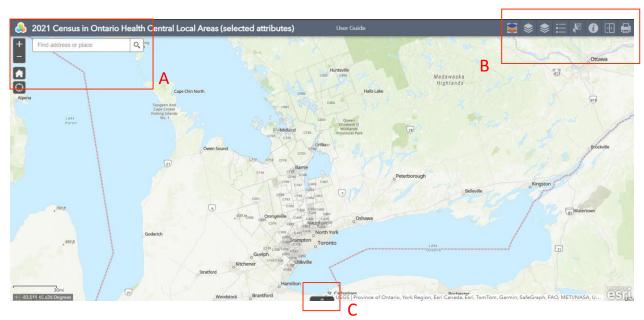
Dot density maps are typically used to show the count or frequency of specific attributes, such as the total number of residents or patients, within a given area. To create this type of map, counts of a given attribute are calculated for a pre-defined area, such as a neighbourhood or local area, and dots are placed randomly within their boundaries. The higher the density of dots the more cases of the attribute occurring in a given area. One dot can represent one case of the mapped attribute but usually data values require use of higher values, e.g. 1 dot represents 10, 50, 100, 1000 or more cases. On the sample map shown below each dot represents 10 patients. Patients are summed within Dissemination Areas (DA), and each dot represents a group of 10 patients which are placed randomly within DA boundaries; for clarity in the map below, the DA boundaries are not shown. It is important to remember that if areas on the map are very different in size, but have similar counts of the mapped attribute, the smaller areas may appear to have a higher concentrations of cases even though the absolute number of cases is similar. This is because the same number of dots will be placed closer together within smaller areas than within larger areas.



**Figure 10.** Example of a dot density map.

# 4.3 Interpreting Interactive Maps (Interactive Maps User Guide)

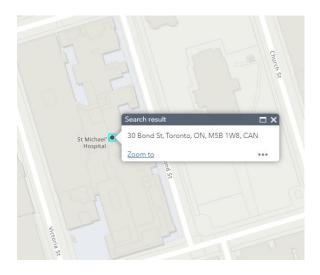
Below is a step-by-step guide of how to navigate and interpret interactive maps provided on the OCHPP website.



**Figure 11.** Example of an interactive maps home page. A: navigation tools, B: data tools, C: attribute/data table.

## A. Navigation Tools

- Zoom in or zoom out on the map.
- Return to the preset geographic location on the map.
- Zoom in automatically to your current location if you have location services turned on in your browser.
- Search for an address or place. The address will appear on the map. Select the three dots in the bottom right of the pop up window for more options. There is an option to pan to the location, or to add a marker.



**Figure 12**. Search to a location using the search tool bar. Add a marker for reference by selecting the three dots for more options.

#### **B.** Data Tools

All map layers are available to view in this tool. Toggle layers on and off by selecting the checkboxes. Additional functions are available by selecting the three dots on the right side of the layer name. Data included in the interactive maps are taken directly from the data tables and are also represented in static pdf maps available on the OCHPP website. (See section above on static maps.)

Layers are divided into two different categories: choropleth and graduated symbols. Choropleth layers are shaded layers that fill in the entire neighbourhood or local area boundary with a colour, while graduated symbols are, in these maps, circles that are proportional in size to the relative magnitude of the numercial data within the dataset. The symbols are positioned within the boundary of the area (e.g. neighbourhood or local area) polygon. Graduated symbol map layers use the size of the circle to represent differences among the data points, and choropleth maps represent these differences using colour/shade. Each variable (e.g. recent immigrants) is available as both a choropleth and a graduated symbol layer. This allows for different indicators available in the interactive map to be layered and represented at the same time. To compare two variables, the recommendation is to select one as a choropleth layer, and one as a graduated symbol layer. To compare two choropleth map layers it is recommended to use the swipe tool described later in the guide.

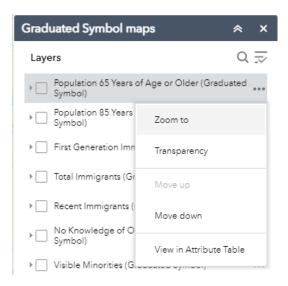


Figure 13. Layer tool.

Zoom to: Zoom to the layer

*Transparency:* Change transparency of the layer by sliding the bar from opaque to transparent. No interpretation of the data can be made from settings in-between opaque and transparent; that is, it is not recommended to compare results among areas by blending the transparencies of two or more choropleth or graduates symbol layers.

Move up/down: Move layers up or down in the layer tool. When selecting multiple layers, the layer closest to the top of the layer tool will appear first.

*View in Attribute Table:* View the variable in the attribute table located at the bottom of the interactive map.

View all selected layers and their associated symbology in a legend. Each layer is divided into several 'classes' categorized by the natural breaks in the data sets. See page 31 for more information on map legend classes and classification methods.



**Figure 14.** Example of map legend with the layer "Recent Immigrants (Choropleth)" selected.

Select specific neighbourhoods/local areas by using the select tool. First, select desired layers to view from the layers tool. If mapping data using a graduated symbols layer, the layer that includes the boundaries for the neighbourhood or local area polygons must also be selected; if mapping choropleth layers, separately selecting the neighbourhood or local area boundaries is not necessary. Next choose which shape to select features by (point, rectangle or polygon). Drag the cursor over the map to select areas. The selected areas will be highlighted in blue. The custom area will include all indicators and data available in the interactive map, regardless of the starting choropleth map used to make the selection. But it can be filtered, as described above, for ease of reference or before exporting. If the layer hasn't been saved in the "Create Layer" step described below, to clear your selection, click on the clear button. If options are not loading properly, click the refresh button on the web page.

Additional actions are available for the selected areas. Click on the three dots on the right side of the indicator name in the Select tool menu to reveal the following options:

Zoom to: zoom to the selected neighbourhoods/local areas.

Pan to: pan to the selected neighbourhoods/local areas.

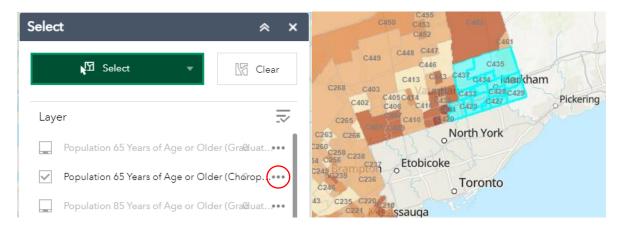
Flash: flash to show the neighbourhood/local area boundaries.

Statistics: use the drop down menu in the statistics pop up window to select the desired variable statistics. The statistics will be calculated for the areas selected using the select tool. Note that there are limitations on how this tool can be implemented in the interactive map platform (ArcGIS). While the aim

is to provide a convenient and useful statistical summary of the data fields selected, not all statistical fields are applicable to all data types. For example, an average value of data reported in the attribute table as "percent" (e.g. average of percent low income) is not meaningful; instead, we would recommend reporting the median value of the tabulated percent measures. This would require a manual calculation. Interpret the output from the Statistics feature with caution. See additional comments under the "column features" heading of the Attribute Table section.

Create Layer: Save the group of neighbourhoods (or local areas) as a custom selectable layer for future reference during the current interactive maps session. Once 'create layer' is selected, enter a custom layer name in the pop up window. The new layer will appear in all layer tabs (all layers, choropleth layers and graduated symbol layers). The layer will appear as shaded polygons within the neighbourhood/local area and has the same functions as all other layers. These include zoom to, transparency, move up/down, and view in attribute table. A custom layer cannot be used to create choropleth or graduated symbol maps for the subset of small areas selected. Note that a saved custom layer is best suited to export the data from the attributes table (see below). A saved, custom layer cannot be deleted from the session; it can only be turned off in the menus of the layers tabs. If the interactive map window is closed or refreshed, the custom layer will be removed even if it has been saved.

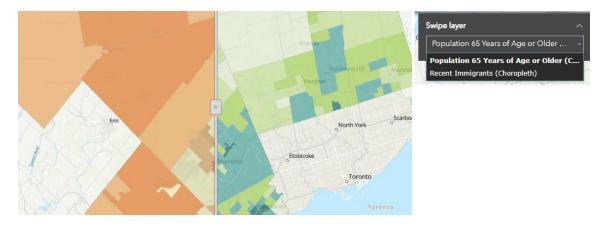
*View in attribute table:* View the selected areas in the attribute table. These areas will be highlighted in bright blue within the table. All attribute table functions (e.g. running queries, exporting the data) will apply to the selected areas only. More information on the attribute table functions are in section C.



**Figure 15.** Select tool. Areas selected are highglighted in blue. All data functions will apply to the areas selected. Select the three dots (circled) for the data functions.

Provides a link to the OCHPP website for more information.

Use the swipe tool as a way to compare two layers. Select the desired layers in the layers tool first. This is most useful for comparing two layers of the same type (e.g. Choropleth vs choropleth, and graduated symbol vs graduated symbol) by revealing the layer underneath the top layer.



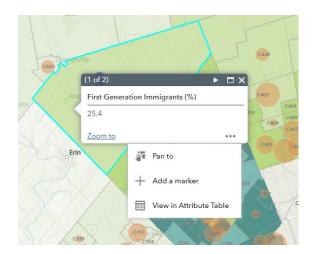
**Figure 16**. Swipe tool showing two selected choropleth layers. Drag the bar across the screen to compare layers.

Save or print image files of the map through this option. Click Advanced for customization options on how to create the image file of the map. Certain map features such as the scale bar, map extent and print quality can be adjusted in this option. Click the drop down menus for different layout and format options. After selecting "print" a document will be available for download.



**Figure 17.** Print tool. Select print to download the image file of the map.

Pop-up window tool: This tool is not available from the toolbar. After selecting desired layers, navigate to a specific neighbourhood/local area on the map and click within the polygon. A pop-up window will appear with the variable value for that neighbourhood/local area. If multiple layers are selected, use the top right arrow button to navigate between the values for those variables. Select the bottom right three dots for options to pan to the location of the area, to add a marker, or to view the selected neighbourhood/local area in the attribute table.



**Figure 18.** Pop-up window appearing after local area 270 is manually selected on the map.

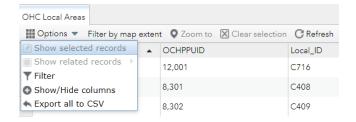
#### C. Attribute Table

The attribute table is the data table containing the variables to be shown on the interactive map. Data is organized by individual geography (e.g. neighbourhood) in rows and columns. On the left side of the table are the neighbourhood/local area IDs and names. Variables are in columns to the right.

Filtering and quering data: There are choices to filter data at the top left corner of the attribute table. These options are available for either all of the data, or by selected areas if the select tool has been used. Data can be filtered by the map extent or by selected areas. Under the options drop down are more options to filter data through queries. To query the data, first ensure the data you wish to query is appearing in the attribute table by selecting the desired data layers. Then select the filter button and then add an expression or a set. For example, to see all areas where low income is greater than 8%, select "add expression", then enter "In low income measure" "is greater than" and then enter "8.0". Neighbourhoods/local areas that have LIM-AT greater than 8% will appear on the map, and areas with less than 8% will not be shown. For more complex queries, use the add set option which will allow a set of queries to filter the data. To clear any queries or selections, use the "clear selection" button.

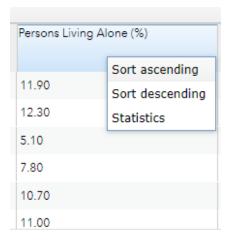
Show/Hide columns: Show or hide columns. A pop up window will appear when this option is selected, where columns can be checked/unchecked.

Export to CSV: Data can be exported to a csv (Excel table) using this option. Either all of the data can be exported at once, or the data can be exported based on selected areas or filters/queries. If the select tool has been used to select 5 neighbourhoods, only those neighbourhoods will be exported in the table. If a query has been run and has filtered the data, only those neighbourhoods/local areas will be exported.



**Figure 19.** Options available in the attribute table.

Column features: Columns can be sorted by ascending and descending values by clicking on the column heading. Statistics for that paticular variable are also available. Caution: values of percent and rate-type attributes shown in the 'Average' and 'Standard deviation' fields of the Statistics tool are in most cases inaccurate since they show an unweighted mean of areas with different denominator values (e.g. population counts). To view correct averages for custom selections of areas please use 'Create Custom Geography' tool on the main OCHPP website.



**Figure 20.** Other features available in the attribute table: sorting data columns and statistics.

# Interactive Maps Tutorials Coming Soon

Video tutorials on how to use interactive maps are coming soon. These videos will provide further information on how to navigate the interactive map interface and different ways to use the data.

# 5. Contact Us

For more information on the website, data content or method or to find out more please email us. We also welcome comments and suggestions. Email: <a href="mailto:HealthProfiles@unityhealth.to">HealthProfiles@unityhealth.to</a>

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