## Interactive Map User Guide

# Ontario Community Health Profiles Partnership (OCHPP) Website: www.OntarioHealthProfiles.ca

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## **Interpreting Interactive Maps**

Below is a step-by-step guide of how to navigate and interpret interactive maps provided on the OCHPP website. For more information on data, charts and maps please view the full OCHPP user guide available on the 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 OCHPP user guide for more information on static maps.) 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.

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.

Legend	*	×
Recent Immigrants (Choropleth)		
Population who Received Immigration Status Between 2016 - 2021 (%)		
> 16.3 - 28		
> 12 - 16.3		
> 8.1 - 12		
> 3.8 - 8.1		
0 - 3.8		
OHC Local Areas		

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.

Print	* ×
Map title:	OHC Census 2021
Layout:	Letter ANSI A Landscape 🔹
Format:	PDF
	🏾 🏶 Advanced 🛛 🚍 Print

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.

Persons Living Alone (%)		
	Sort ascending	
11.90	Sort descending	
12.30	Statistics	
5.10		
7.80		
10.70		
11.00		

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.

# **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: <u>HealthProfiles@unityhealth.to</u>

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