

miTracking

MDHHS
Michigan Department of
Health & Human Services



Creating Maps

Michigan Environmental Public Health Tracking

Creating Maps

Welcome to the Michigan Environmental Public Health Tracking, or MiTracking, tutorial on Creating Maps.

Maps are one of the useful ways to view query results. This tutorial will show you how to create them.

Let's get started!



Running a query

We'll find the data portal at michigan.gov/mitracking.

To enter the data portal, click on the blue **Go to the Data** button.

The screenshot shows the MDHHS website with the following structure:

- Header:** Michigan Department of Health & Human Services logo and navigation tabs: Assistance Programs, Adult & Children's Services, Safety & Injury Prevention, Keeping Michigan Healthy, Doing Business with MDHHS, Inside MDHHS.
- Left Sidebar:** Safety & Injury Prevention (highlighted), Children's & Adult Protective Services, Children's Trust Fund - Abuse Prevention, Domestic & Sexual Violence, Injury & Violence Prevention, Patient Safety, Public Safety & Environmental Health (highlighted), Bureau of EMS, Trauma & Preparedness, Crime Victim Services, Division of Emergency Preparedness & Response, Great Lakes Border Health Initiative, Michigan Sports Concussion Law, Toxic Substances, Safe Delivery, Safe Sleep.
- Main Content:**
 - MDHHS / SAFETY & INJURY PREVENTION / PUBLIC SAFETY & ENVIRONMENTAL HEALTH / TOXIC SUBSTANCES
 - MiTracking - Michigan Environmental Public Health Tracking**
 - Welcome**
 - Text: "For many years, public health systems across the U.S. faced a knowledge gap about environmental hazards and public health. The Michigan Environmental Health Tracking Program, MiTracking, can help bridge this gap. The MiTracking Program gathers existing Michigan-specific environmental and health data and provides them in one online location. These data can be easily queried on the MiTracking data portal. Results are provided in tables, charts, and maps that can be downloaded, saved, and printed. The data provided by the MiTracking program can create greater awareness of environmental health concerns, and inform public health actions and programs."
 - Go to the Data** button (highlighted with a blue arrow)
 - Text: "The MiTracking Program is part of the Centers for Disease Control and Prevention's National Tracking Network."
 - TRACKING** logo
 - Environmental Topics:**
 - Air Quality
 - Drinking Water
 - Health Conditions:**
 - Asthma
 - Cancer
 - Carbon Monoxide Poisoning
 - Childhood Cancer
 - Childhood Lead Exposure
 - Heart Attack
 - Heat Illness
 - Reproductive and Birth Outcomes
 - Population:**
 - Population Health
- Right Sidebar:** Quick links: About, Metadata, Training, Glossary, Resources, Contact Us.

Terms of Use

I accept the Terms of Use, so I'll click **Agree.**

MiTracking Home Contact

Terms of Use

These data are provided by the Michigan Department of Health and Human Services (MDHHS) [MiTracking Program](#) through a cooperative agreement with the Centers for Disease Control and Prevention (CDC). Please acknowledge MDHHS and CDC as original data sources in all reports or presentations based on these data.

By accessing these data and using the MiTracking Program, I acknowledge and agree to the following:

- I will use the data for statistical reporting and analysis only.
- I will not attempt to learn the identity of any person included in the data, and will not combine these data with other data for the purpose of matching records to identify individuals.
- In the event I discover the identity of any person or establishment through my use of this database; I will not disclose or make use of such information, and will immediately report the incident to mdhhs-mitracking@michigan.gov.
- I will not imply or state, either in written or oral form, that interpretations based on these data are those of the original data sources unless I am formally collaborating with the data source.
- The environmental hazard and health outcome data shown on this website are not necessarily related. Some, but not all, environmental hazards are currently known or suspected to affect human health. Many personal risk factors that may be related to health outcome data are not represented.
- These data cannot be used for commercial purposes and shall not be used to engage in any method, act, or practice to conduct the solicitation or advertisement of goods, services, or real estate to Michigan consumers.
- MiTracking cannot guarantee the completeness of the information contained in these datasets and expressly disclaims liability for errors and omissions in their content.

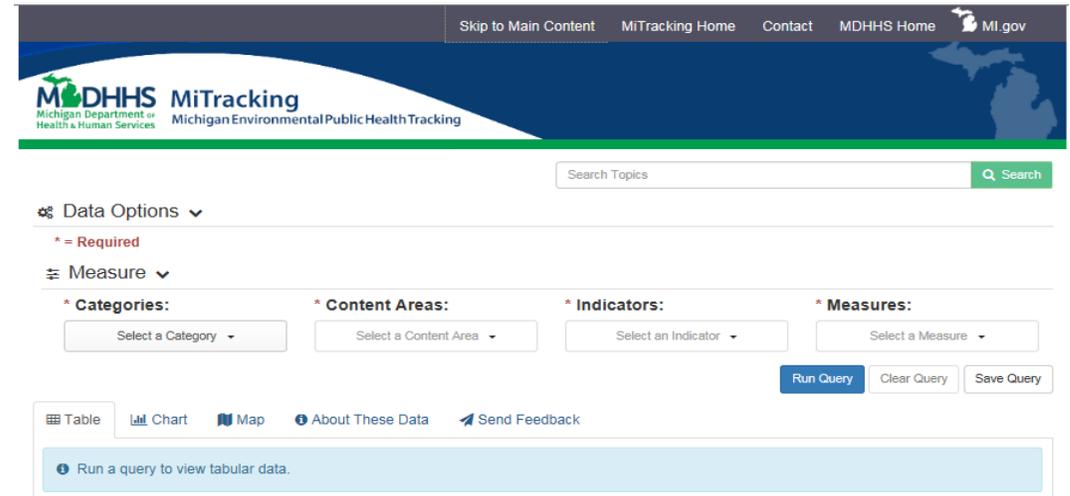
Failure to comply with these Terms of Use may result in legal penalties.

Agree Decline

Starting a Query

From the data portal main page I need to select a **Category**, **Content Area**, **Indicator**, and **Measure**.

These selections are “dynamic,” meaning the options will change based on what you’ve chosen in the previous drop-down.



The screenshot shows the MiTracking Data Portal interface. At the top, there is a navigation bar with links for "Skip to Main Content", "MiTracking Home", "Contact", "MDHHS Home", and "MI.gov". Below this is the MDHHS logo and the text "MiTracking Michigan Environmental Public Health Tracking". A search bar labeled "Search Topics" is located on the right. The main content area is titled "Data Options" and includes a "Measure" dropdown menu. Below this, there are four required dropdown menus: "Categories", "Content Areas", "Indicators", and "Measures". Each dropdown menu has a "Select a..." label and a downward arrow. To the right of these dropdowns are three buttons: "Run Query", "Clear Query", and "Save Query". Below the dropdowns, there are links for "Table", "Chart", "Map", "About These Data", and "Send Feedback". A light blue box at the bottom of the main content area contains the text "Run a query to view tabular data."

Selecting Data

For this example, I'll start by selecting **Health, Asthma, Hospitalizations, and Age-Adjusted Rate of Hospitalization for Asthma.**

After I have made these four selections, more options will appear. The selections I make for **Geography & Time Periods** and **Other Filters** will determine whether my results can be mapped.

The screenshot displays the MiTracking Data Portal interface. At the top, there is a navigation bar with links for 'MiTracking Home', 'Contact', 'MDHHS Home', and 'MI.gov'. The main header features the MDHHS logo and the text 'MiTracking Michigan Environmental Public Health Tracking'. A search bar is located in the top right corner.

The main content area is titled 'Data Options' and contains several sections for selecting data parameters:

- Measure:** This section includes four dropdown menus: 'Categories' (set to 'Health'), 'Content Areas' (set to 'Asthma'), 'Indicators' (set to 'Hospitalizations'), and 'Measures' (set to 'Age-Adjusted Rate of Hospitalization for Asthma per 10,000 Population').
- Geography & Time Periods:** This section includes three dropdown menus: 'Geographic Level' (set to 'Select Geographic Level'), 'Geographic Area' (set to 'Select Geographic Area'), and 'Year(s)' (set to 'Select Year(s)').
- Other Filters:** This section includes a dropdown menu for 'Gender(s)' (set to 'All Genders').

At the bottom of the selection area, there are three buttons: 'Run Query', 'Clear Query', and 'Save Query'. Below these buttons, there are links for 'Table', 'Chart', 'Map', 'About These Data', and 'Send Feedback'. A message box at the bottom of the selection area states: 'Run a query to view tabular data.'

The footer of the page contains the text: 'MiTracking Data Portal - Version 1.1.2 - PROD', 'MI.gov | MiTracking Home | Contact | Policies', and 'Copyright 2017 State of Michigan'.

Geographic Areas

For this measure, I can choose either **State and/or County** or **Local Health Departments** for my Geographic Level, so I'll choose **State and/or County**.

To produce a map, I must select one, some, or all **Counties** as my geographic area. I want to know the age-adjusted rate of asthma hospitalizations for all the counties in Michigan, so I will choose **Select All**.

The screenshot displays the MiTracking web application interface. At the top, there is a navigation bar with links for "MiTracking Home", "Contact", "MDHHS Home", and "MI.gov". The main header features the "MDHHS Michigan Department of Health & Human Services" logo and the "MiTracking Michigan Environmental Public Health Tracking" title. Below the header is a search bar labeled "Search Topics" with a "Search" button.

The main content area is organized into several sections:

- Data Options**: A dropdown menu.
- Measure**: A dropdown menu.
- Categories**: A dropdown menu set to "Health".
- Content Areas**: A dropdown menu set to "Asthma".
- Indicators**: A dropdown menu set to "Hospitalizations".
- Measures**: A dropdown menu set to "Age-Adjusted Rate of Hospitalization for Asthma per 10,000 Population".
- Geography & Time Periods**: A dropdown menu.
- Geographic Level**: A dropdown menu set to "State and/or County".
- Geographic Area(s)**: A dropdown menu set to "Statewide Only, Alcona, ... (84)".
- Year(s)**: A dropdown menu set to "Select Year(s)".
- Other Filters**: A dropdown menu.
- Gender(s)**: A dropdown menu set to "All Genders".

At the bottom of the configuration area, there are three buttons: "Run Query", "Clear Query", and "Save Query".

A modal window is open over the "Geographic Area(s)" dropdown, titled "Filter Selections Below". It contains a "Select All" button and a "Deselect All" button. Below these are checkboxes for various Michigan counties, all of which are checked:

- Statewide Only
- Alcona
- Alger
- Allegan
- Alpena
- Antrim
- Arenac
- Baraga
- Barry

At the bottom of the page, there is a footer with the text "1.1.2 - PROD" and "Copyright 2017 State of Michigan".

Statewide Only

For the **Geographic Area** selection, I may see the option to select **Statewide Only**.

Statewide Only will give me one result for the State of Michigan. I may want to include this option to compare individual county rates to the State of Michigan total rate.

For some measures, data may only be available at the state level.

The screenshot displays the MiTracking web application interface. At the top, there is a navigation bar with links for 'MiTracking Home', 'Contact', 'MDHHS Home', and 'MI.gov'. The main header features the 'MDHHS Michigan Department of Health & Human Services' logo and the 'MiTracking Michigan Environmental Public Health Tracking' title. Below the header is a search bar labeled 'Search Topics' with a 'Search' button. The main content area is organized into sections: 'Data Options', 'Measure', 'Geography & Time Periods', and 'Other Filters'. The 'Measure' section includes dropdowns for 'Categories' (Health), 'Content Areas' (Asthma), 'Indicators' (Hospitalizations), and 'Measures' (Age-Adjusted Rate of Hospitalization for Asthma per 10,000 Population). The 'Geography & Time Periods' section includes 'Geographic Level' (State and/or County), 'Geographic Area(s)' (Statewide Only), and 'Year(s)' (Select Year(s)). The 'Other Filters' section includes 'Gender(s)' (All Genders). A dropdown menu for 'Geographic Area(s)' is open, showing a list of Michigan counties and 'Statewide Only' selected. At the bottom right, there are buttons for 'Run Query', 'Clear Query', and 'Save Query'. The footer contains version information '1.1.2 - PROD' and copyright information 'Copyright 2017 State of Michigan'.

Statewide Only

If I make **Statewide Only** my only selection for **Geographic Area**, my query results will produce a table and chart, but not a map. Instead, the map tab will result in an error message.

If I'm unsure about which selections will produce a map, I can hover over the help icon to remind me.

The screenshot displays the MiTracking web application interface. At the top, there is a navigation bar with links for "MiTracking Home", "Contact", "MDHHS Home", and "MI.gov". The main header features the "MDHHS Michigan Department of Health & Human Services" logo and the "MiTracking Michigan Environmental Public Health Tracking" title. A search bar is located on the right side of the header.

The main content area is titled "Data Options" and includes several sections for configuring a query:

- Measure:** Includes "Categories" (Health), "Content Areas" (Asthma), "Indicators" (Hospitalizations), and "Measures" (Age-Adjusted Rate of Hospitalization for Asthma per 10,000 Population).
- Geography & Time Periods:** Includes "Geographic Level" (State and/or County) and "Year(s)" (2013).
- Other Filters:** Includes "Gender(s)" (All Genders).

A help tooltip is visible, pointing to a question mark icon. The tooltip text reads: "This data set only has data available by state and county. Please select one or many options. Note: If you choose only 'Statewide Only,' a map will not display. You must choose one or more counties to get a map." Below the tooltip is a dropdown menu for "Filter Selections Below" with options: "Select All", "Deselect All", "Statewide Only" (checked), "Alcona", "Alger", "Allegan", "Alpena", "Antrim", "Arenac", "Baraga", and "Barry".

At the bottom of the interface, there are buttons for "Run Query", "Clear Query", and "Save Query". A yellow warning banner at the bottom left states: "Maps are unavailable for the following reasons: Maps are not available for this geographic area." The footer of the page indicates "MiTracking Data Portal - Version 1.1.2 - PROD".

Time Periods

Only ONE selection for time period can be mapped for each query. Depending on the measure, the time period could be **5-year aggregates, single-years, or quarters.**

For this query, **single-years** are available and I'll select the year **2013.**

The screenshot displays the MiTracking Data Portal interface. At the top, there is a navigation bar with links for "MiTracking Home", "Contact", "MDHHS Home", and "MI.gov". Below this is the MDHHS logo and the text "MiTracking Michigan Environmental Public Health Tracking". A search bar labeled "Search Topics" is located on the right side of the header.

The main content area is divided into several sections for query configuration:

- Data Options**: A dropdown menu.
- Measure**: A dropdown menu.
- Categories**: A dropdown menu set to "Health".
- Content Areas**: A dropdown menu set to "Asthma".
- Indicators**: A dropdown menu set to "Hospitalizations".
- Measures**: A dropdown menu set to "Age-Adjusted Rate of Hospitalization for Asthma per 10,000 Population".
- Geography & Time Periods**: A dropdown menu.
- Geographic Level**: A dropdown menu set to "State and/or County".
- Geographic Area(s)**: A dropdown menu set to "Statewide Only, Alcona, ... (84)".
- Year(s)**: A dropdown menu set to "2013".
- Other Filters**: A dropdown menu.
- Gender(s)**: A dropdown menu set to "All Genders".

At the bottom right of the configuration area, there are three buttons: "Run Query", "Clear Query", and "Save Query".

Below the configuration area, there are navigation options: "Table", "Chart", "Map", "About These Data", and "Send Feedback".

A light blue box at the bottom of the configuration area contains the text: "Run a query to view maps".

The footer of the page contains the following text: "MiTracking Data Portal - Version 1.1.2 - PROD", "MI.gov | MiTracking Home | Contact | Policies", and "Copyright 2017 State of Michigan".

Other Filters

Only ONE selection for each of the **Other Filters** can be mapped per query.

Gender is the only **Other Filter** available for this measure, but other measures may have additional filters.

I can select **All Genders**, or I could select just **Females**, or just **Males**. I will select **All Genders**.

The screenshot displays the MiTracking web application interface. At the top, there is a navigation bar with links for "MiTracking Home", "Contact", "MDHHS Home", and "MI.gov". Below this is the MDHHS logo and the text "MiTracking Michigan Environmental Public Health Tracking". A search bar labeled "Search Topics" is located on the right side of the header.

The main content area is divided into several sections:

- Data Options**: A section with a gear icon and a dropdown arrow.
- Measure**: A section with a list icon and a dropdown arrow. It contains four filter groups:
 - Categories**: A dropdown menu set to "Health".
 - Content Areas**: A dropdown menu set to "Asthma".
 - Indicators**: A dropdown menu set to "Hospitalizations".
 - Measures**: A dropdown menu set to "Age-Adjusted Rate of Hospitalization for Asthma per 10,000 Population".
- Geography & Time Periods**: A section with a gear icon and a dropdown arrow. It contains three filter groups:
 - Geographic Level**: A dropdown menu set to "State and/or County".
 - Geographic Area(s)**: A dropdown menu set to "Statewide Only, Alcona, ... (84)".
 - Year(s)**: A dropdown menu set to "2013".
- Other Filters**: A section with a dropdown arrow. It contains one filter group:
 - Gender(s)**: A dropdown menu set to "All Genders". A dropdown menu is open below it, showing "All Genders" (checked), "Female", and "Male".

At the bottom right of the filter section, there are three buttons: "Run Query", "Clear Query", and "Save Query". Below these buttons, there are links for "These Data" and "Send Feedback".

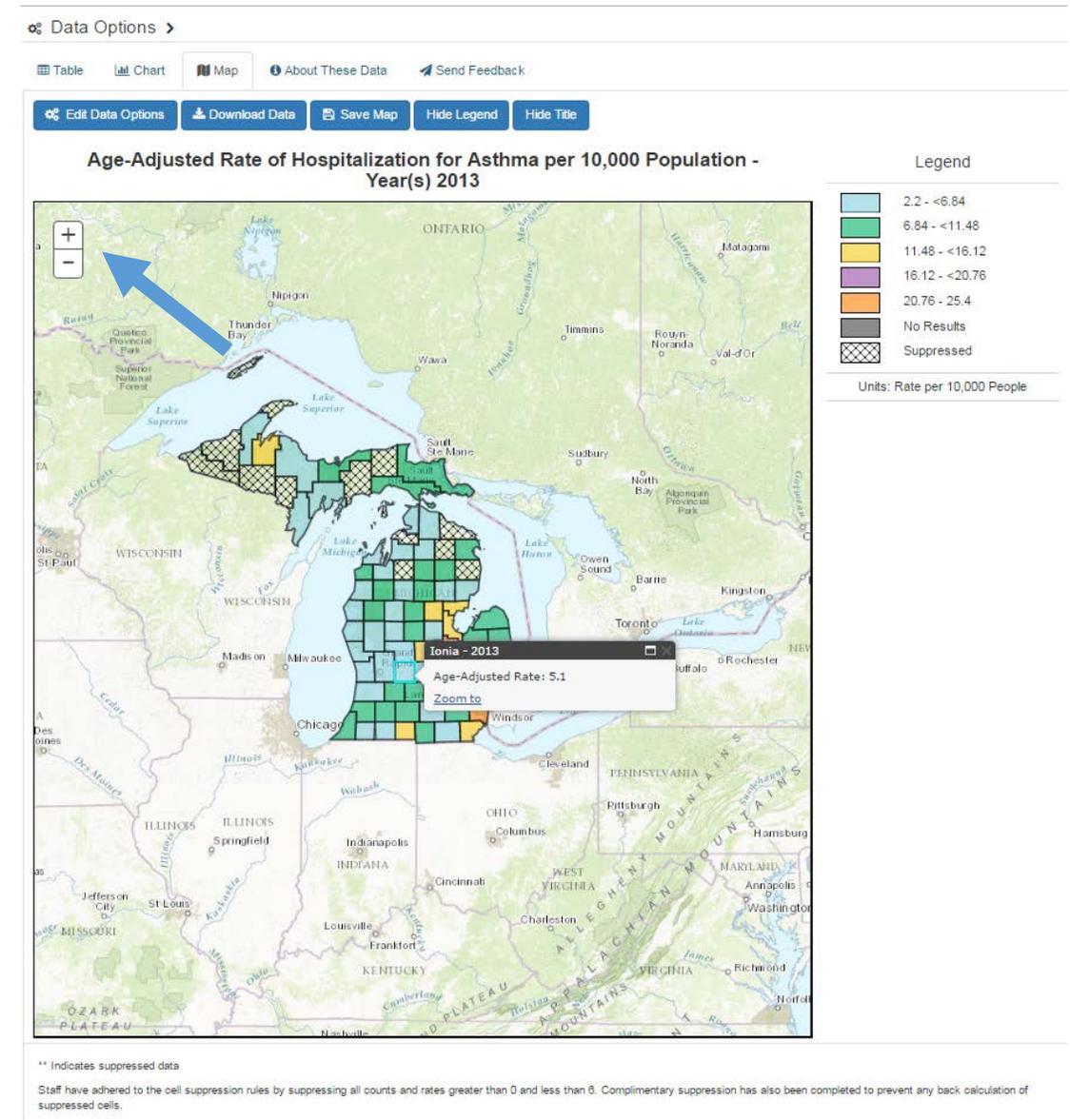
The footer of the page contains the text: "MiTracking Data Portal - Version 1.1.2 - PROD", "MI.gov | MiTracking Home | Contact | Policies", and "Copyright 2017 State of Michigan".

Results

After clicking the **Run Query** button, I'm ready to see my results! To view the map, I will select the **Map** tab.

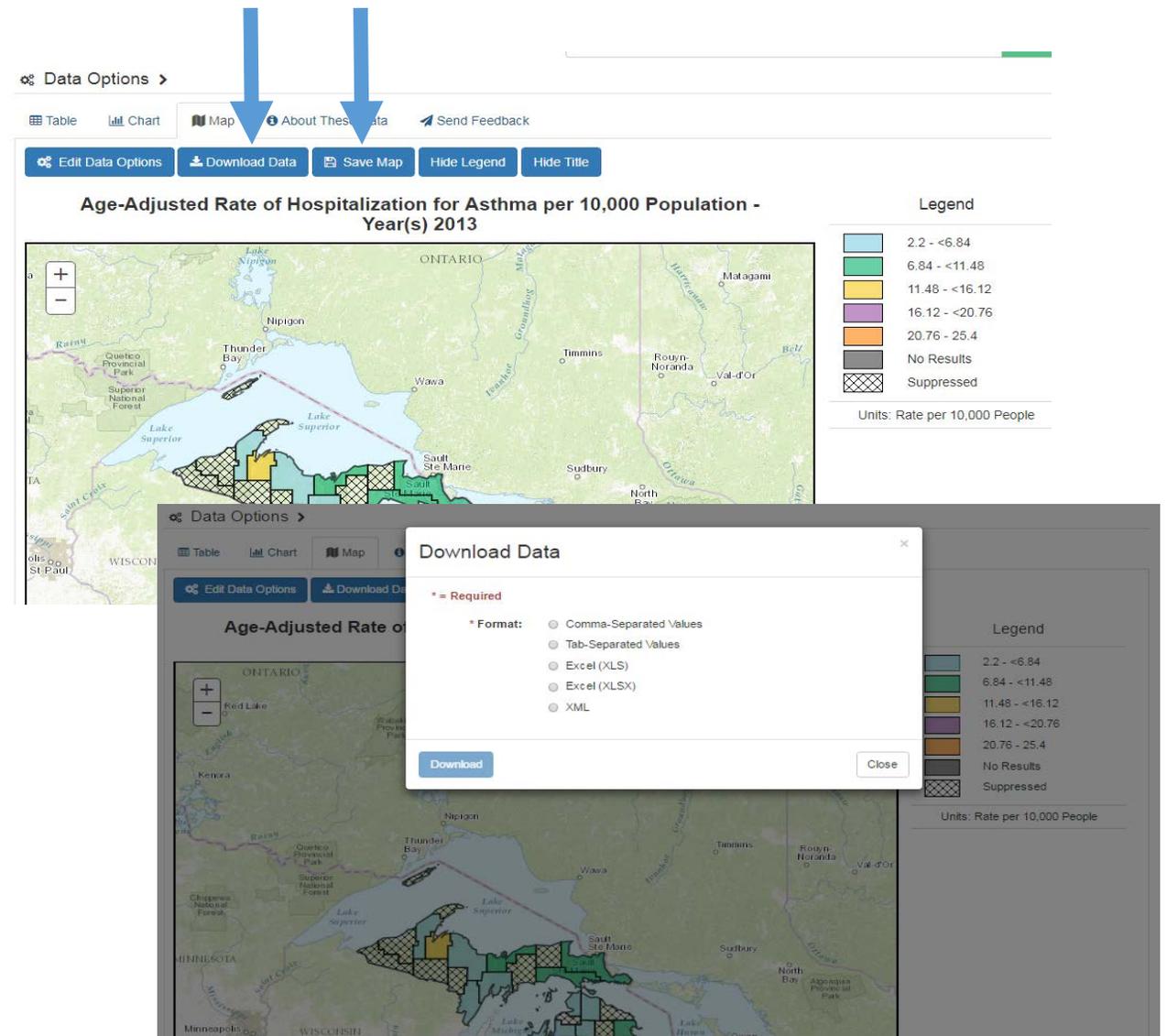
I can interact with my map by using the zoom buttons in the top left corner of the map, or by clicking on a county to see the specific rate.

Results for some counties may be too small to provide based on reliability and confidentiality. The data for these counties are suppressed and are shown in hashmarks.



Results

I can also download the data or save my map as a picture using the **Download Data** and **Save Map** buttons.



Saving the Query

I can save my results by opening the **Data Options** dropdown, clicking on the **Save Query** button, and copying the link. This is a convenient way to share or save my query.

The screenshot displays the MiTracking website interface. At the top, there is a navigation bar with links for 'MiTracking Home', 'Contact', 'MDHHS Home', and 'MI.gov'. Below this is the MDHHS logo and the text 'MiTracking Michigan Environmental Public Health Tracking'. A search bar is located in the top right corner.

The main content area features a 'Data Options' dropdown menu. Underneath, there is a section for 'Measure' with four required fields: 'Categories' (set to 'Health'), 'Content Areas' (set to 'Asthma'), 'Indicators' (set to 'Hospitalizations'), and 'Measures' (set to 'Age-Adjusted Rate of Hospitalization for Asthma per 10,000 Population').

Below the 'Measure' section is a 'Geography & Time Periods' dropdown menu. It contains three required fields: 'Geographic Level' (set to 'State and/or County'), 'Geographic Area(s)' (set to 'Statewide Only, Alcona, ... (84)'), and 'Year(s)' (set to '2013').

At the bottom of the 'Data Options' section is an 'Other Filters' dropdown menu with a 'Gender(s)' field set to 'All Genders'.

At the bottom right of the page, there are three buttons: 'Run Query', 'Clear Query', and 'Save Query'. A tooltip is visible over the 'Save Query' button, containing the text 'To share your query results use this link:' and a 'Copy' button next to the URL 'https://mitracking.state.mi.us/?bookmark'. A 'close' link is also present in the tooltip.

At the bottom of the page, there are links for 'Table', 'Chart', 'Map', 'About These Data', and 'Send Feedback'.

That's it!

I just created a map on the MiTracking portal. Now I can include it in my next presentation. I can also find more information about asthma on the [MiTracking website](#).

Not every measure on the MiTracking portal is available for mapping at this time, but we continue to add data and features to the portal. Contact us if you want to be added to our mailing list, and we can send you updates.

If you have questions, call the Michigan Environmental Public Health Tracking Program at 800-648-6942 or email us at mdhhs-mitracking@michigan.gov. Thank you for taking the time to watch this tutorial. Check out our other tutorials, too!

Thank You!



Find MiTracking at www.michigan.gov/mitracking

Email: mdhhs-mitracking@michigan.gov

Phone: 800-648-6942