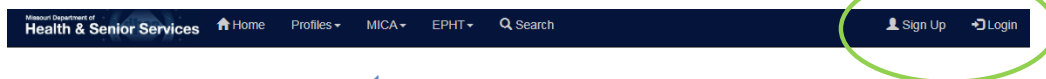


MOPHIMS: Enhanced MICA Features

MOPHIMS User Levels

While MOPHIMS has many exciting new features, the most prominent is the introduction of different user levels within the Data MICAs and EPHT. Users can now choose to sign up to become a Registered user (at no cost). As shown in the screen capture below, the orange circle in the bottom left corner on the MOPHIMS home page directs users to a link where they can access instructions on how to register. The green circle at the top of the webpage shows the location of the **Sign Up** and **Login** buttons.

Registered users will have access to enhanced features and pieces of data not available to Public users. Some of these features include the ability to create 2x2 tables, enhanced maps and charts, to examine more granular geographic death and seasonal data, and the ability to save queries.



The Missouri Public Health Information Management System (MOPHIMS) provides a common means for users to access public health related data to assist in defining the health status and needs of Missourians.



MISSOURI INFORMATION
FOR COMMUNITY ASSESSMENT

DATA PROFILES

Community Data Profiles are available on various subject areas and provide data on 15-30 indicators for each geography selected.

- Maternal, Infant and Child Health Profiles
- Chronic Disease Profiles
- Injury Profiles
- Death Profile
- Hospital and Emergency Room Visit Profiles
- Special Demographic Profiles
- County-Level Study Profiles



MISSOURI INFORMATION
FOR COMMUNITY ASSESSMENT

DATA MICAS

The Missouri Information for Community Assessment (MICA) allows users to summarize data, calculate rates, and prepare information in a graphic format.

- Maternal, Infant and Child Health MICAs
- Chronic Disease MICAs
- Injury MICA
- Death MICA
- Hospital and Emergency Room Visit MICAs
- Population MICA
- Medicaid/TANF MICAs



Environmental Public Health
Tracking Program

EPHT

The Missouri Environment Public Health Tracking (EPHT) program was developed to assist the public, communities, policymakers, and scientists, answer fundamental questions about the relationships between environmental exposures and health effects. Data on this site also include hazard and disease surveillance.

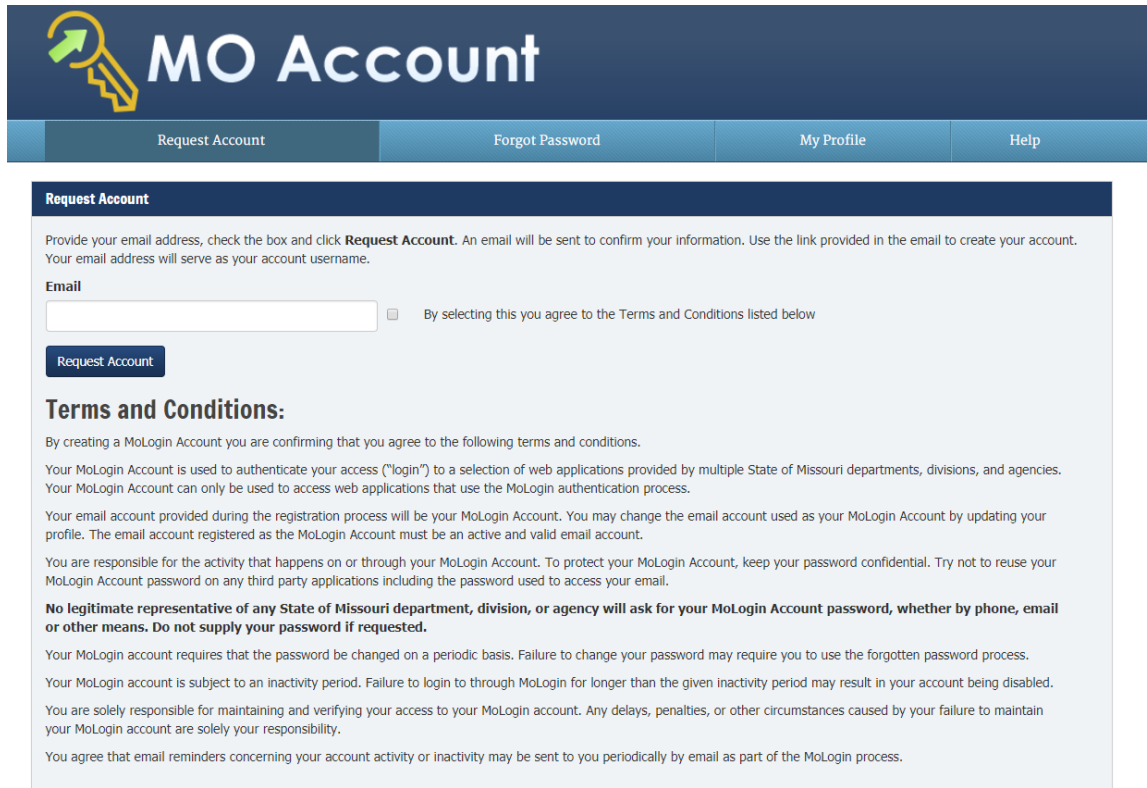
- Health Data
 - Blood Lead Levels
 - Asthma
 - Birth Defects
 - Myocardial Infarction
 - Carbon Monoxide Poisoning
- Environmental Data
 - Agriculture
 - Air Quality
 - Water Quality
- Community Data
- National Data

[Click Here](#) for sign up and login instructions.

[Click Here](#) for health data training information and opportunities.

[Click Here](#) for more information about confidentiality and suppression in MOPHIMS.

Users that have not yet taken the time to become a Registered MOPHIMS user are encouraged to do so. The MO Account and MO Login screens for signing up and logging in for MOPHIMS are shown on the following page.



The image shows the 'MO Account' registration page. At the top, there is a dark blue header with a yellow key icon and the text 'MO Account'. Below the header is a navigation bar with four buttons: 'Request Account', 'Forgot Password', 'My Profile', and 'Help'. The main content area is titled 'Request Account' and contains the following text: 'Provide your email address, check the box and click **Request Account**. An email will be sent to confirm your information. Use the link provided in the email to create your account. Your email address will serve as your account username.' There is an 'Email' input field, a checkbox, and the text 'By selecting this you agree to the Terms and Conditions listed below'. Below this is a 'Request Account' button. A section titled 'Terms and Conditions:' follows, containing several paragraphs of text regarding account creation, password confidentiality, and inactivity periods.

Request Account

Provide your email address, check the box and click **Request Account**. An email will be sent to confirm your information. Use the link provided in the email to create your account. Your email address will serve as your account username.

Email

By selecting this you agree to the Terms and Conditions listed below

Request Account

Terms and Conditions:

By creating a MoLogin Account you are confirming that you agree to the following terms and conditions.

Your MoLogin Account is used to authenticate your access ("login") to a selection of web applications provided by multiple State of Missouri departments, divisions, and agencies. Your MoLogin Account can only be used to access web applications that use the MoLogin authentication process.

Your email account provided during the registration process will be your MoLogin Account. You may change the email account used as your MoLogin Account by updating your profile. The email account registered as the MoLogin Account must be an active and valid email account.

You are responsible for the activity that happens on or through your MoLogin Account. To protect your MoLogin Account, keep your password confidential. Try not to reuse your MoLogin Account password on any third party applications including the password used to access your email.

No legitimate representative of any State of Missouri department, division, or agency will ask for your MoLogin Account password, whether by phone, email or other means. Do not supply your password if requested.

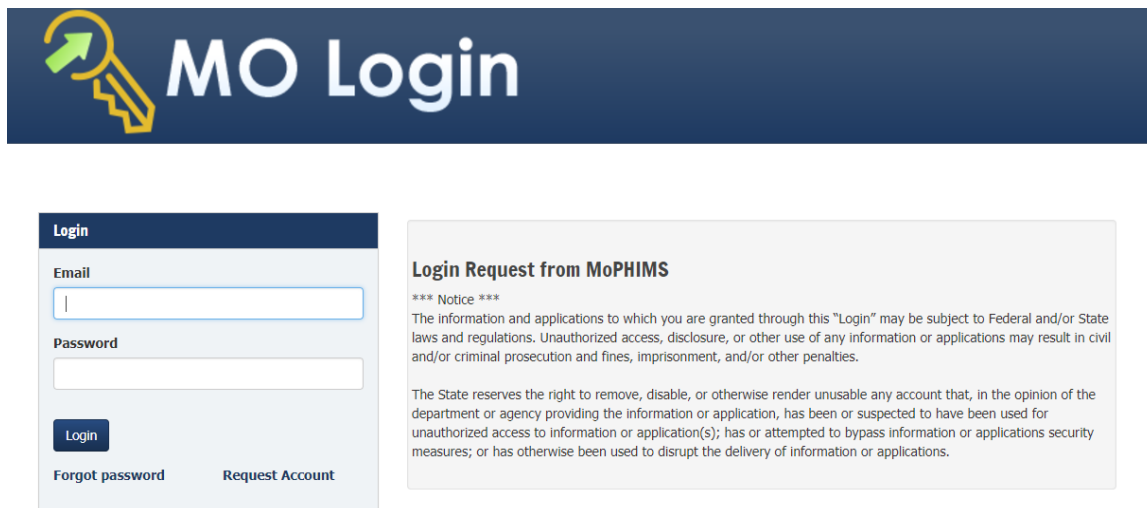
Your MoLogin account requires that the password be changed on a periodic basis. Failure to change your password may require you to use the forgotten password process.

Your MoLogin account is subject to an inactivity period. Failure to login to through MoLogin for longer than the given inactivity period may result in your account being disabled.

You are solely responsible for maintaining and verifying your access to your MoLogin account. Any delays, penalties, or other circumstances caused by your failure to maintain your MoLogin account are solely your responsibility.

You agree that email reminders concerning your account activity or inactivity may be sent to you periodically by email as part of the MoLogin process.

Or, if already registered, users can go ahead and log in.



The image shows the 'MO Login' page. At the top, there is a dark blue header with a yellow key icon and the text 'MO Login'. Below the header is a light blue box containing a login form. The form has a 'Login' title, an 'Email' input field, a 'Password' input field, and a 'Login' button. Below the button are links for 'Forgot password' and 'Request Account'. To the right of the login form is a grey box titled 'Login Request from MoPHIMS' containing a notice and a disclaimer.

MO Login

Login

Email

Password

Login

[Forgot password](#) [Request Account](#)

Login Request from MoPHIMS

*** Notice ***

The information and applications to which you are granted through this "Login" may be subject to Federal and/or State laws and regulations. Unauthorized access, disclosure, or other use of any information or applications may result in civil and/or criminal prosecution and fines, imprisonment, and/or other penalties.

The State reserves the right to remove, disable, or otherwise render unusable any account that, in the opinion of the department or agency providing the information or application, has been or suspected to have been used for unauthorized access to information or application(s); has or attempted to bypass information or applications security measures; or has otherwise been used to disrupt the delivery of information or applications.

MOPHIMS Search Function

The MOPHIMS Search Function is a result of efforts to help users find the information they are seeking more efficiently. MOPHIMS contains hundreds of different data indicators, and even our most experienced users struggle to quickly find the data they seek.



Clicking 'Search', which appears on the top banner of every MOPHIMS page, will take users to the Search Indicator page. Suppose a user was interested in researching how asthma was affecting residents in their community. When entering 'asthma' in the search box and hitting submit, the following results are displayed.

The screenshot shows the "Indicator Search" page. At the top, there is a navigation bar with "Home", "Profiles", "MICA", "EPHT", and "Search" buttons. Below the navigation bar is a "Search Criteria" section with a "Search For:" field containing "asthma" and a "Category:" dropdown menu set to "-- All --". There are "Submit" and "Clear" buttons. Below the search criteria is a "Search Results (Number of records found: 44)" section. The results are displayed in a table with four columns: "Category", "Sub-Category", "Data", and "Data Location".

Category	Sub-Category	Data	Data Location
MICA	Chronic Disease Deaths MICA	Death Chronic Cause : Asthma : Asthma	Click To View
MICA	Chronic Disease Deaths MICA	Death Chronic Cause : Chronic Obstructive Pulmonary Disease (COPD) excluding Asthma : Bronchitis: chronic and unspecified	Click To View
MICA	Chronic Disease Deaths MICA	Death Chronic Cause : Chronic Obstructive Pulmonary Disease (COPD) excluding Asthma : Emphysema	Click To View
MICA	Chronic Disease Deaths MICA	Death Chronic Cause : Chronic Obstructive Pulmonary Disease (COPD) excluding Asthma : Other chronic lower resp diseases	Click To View
MICA	Chronic Disease Emergency Room MICA	Diagnosis : Asthma : Asthma : Asthma	Click To View
MICA	Chronic Disease Inpatient Hospitalization MICA	Diagnosis : Asthma : Asthma : Asthma	Click To View

Users will see a table that lists all available asthma-related data in the MOPHIMS system. In order to narrow the results, users can choose which category, or data system, to parse the data (Profiles, MICA, or EPHT) and then which specific sub-category to search. Making the following selections will drill down to Profiles which contain asthma indicators, then specifically the Child Health Profile.

Indicator Search Print Search Results

Search Criteria

Search For: asthma

Category: Profiles

Sub-Category: Child Health

Submit Clear

Search Results (Number of records found: 44)

Category	Sub-Category	Data	Data Location
MICA	Chronic Disease Deaths MICA	Death Chronic Cause : Asthma	Click To View
MICA	Chronic Disease Deaths MICA	Death Chronic Cause : Chron Bronchitis: chronic and unsp	Click To View
MICA	Chronic Disease Deaths MICA	Death Chronic Cause : Chron Emphysema	Click To View
MICA	Chronic Disease Deaths MICA	Death Chronic Cause : Chron Other chronic lower resp dise	Click To View
MICA	Chronic Disease Emergency Room Hospitalization MICA	Diagnosis : Asthma : Asthma	Click To View
MICA	Chronic Disease Inpatient Hospitalization MICA	Diagnosis : Asthma : Asthma	Click To View
MICA	Death MICA	Cause : Chronic lower respiratory diseases# : Asthma	Click To View
MICA	Emergency Room MICA	Diagnosis : Respiratory (throat and lung) : Asthma : Asthma	Click To View
MICA	Inpatient Hospitalizations MICA	Diagnosis : Respiratory (throat and lung) : Asthma : Asthma	Click To View

The two resulting entries, Under Age 18: Asthma ER Visits and Asthma Hospitalizations can be viewed on the Child Health Profile simply by clicking the ‘Click to View’ hyperlink in the rightmost column of the search table.

Indicator Search Print Search Results

Search Criteria

Search For: asthma

Category: Profiles

Sub-Category: Child Health

Submit Clear

Search Results (Number of records found: 2)

Category	Sub-Category	Data	Data Location
Profiles	Child Health	Child Health : Selected Indicators Under Age 18 : Under Age 18: Asthma ER Visits	Click To View
Profiles	Child Health	Child Health : Selected Indicators Under Age 18 : Under Age 18: Asthma Hospitalizations	Click To View

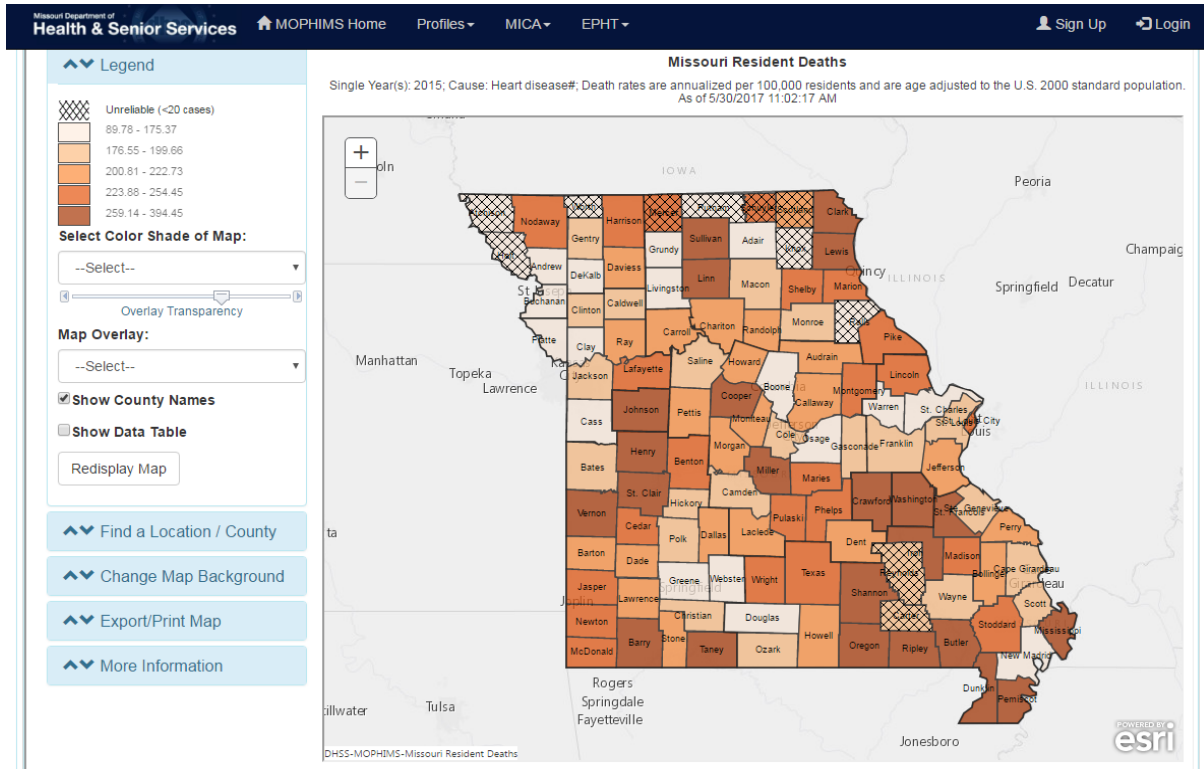
Mapping/Charting

The new MICA system provides enhanced mapping features and introduces charting options for the first time. The **Build Your Results** section defaults to a tab for creation of a data table, but users may also choose to **Make a Map** or **Create a Chart**. Users should make selections for querying in the **Choose Your Data** section of the page and then select the mapping or charting tab in the **Build Your Results** section.

Mapping

Three types of maps are available: quartile maps, quintile maps, and statistical significance maps (Higher/Lower than State). Quartile and quintile maps can be used to compare either rates or counts, while statistical significance maps show rates only.

The quintile map below, created in **Death MICA**, shows Missouri resident deaths in 2015 due to heart disease. Higher rates are represented by darker colors. Users can see a cluster of counties in the Southeast Region of the state with rates that are in the highest quintile. Users may also notice that some Northern counties are overlaid with a crosshatch. This means that the rates are unreliable (based on counts of less than 20). The map can be exported as either a PDF or JPG by clicking the **Export/Print Map** button on the left side of the map.



Users also have the ability to show the data table used to generate maps. By simply checking the box next to **Show Data Table** on the left side of the map, the information will display below the map. Included in this data table are the FIPS codes for each county, the county’s rank statewide (out of 115 counties), the mapped value (in this case the rate), and the count.

The data table can be exported as a CSV file for use in Excel or GIS mapping software.

Geography ↑	FIPS Code	Rank	Mapped Value	Count
Adair	001	112	143.13	42
Andrew	003	99	163.14	38
Atchison	005	114	107.22 *	11
Audrain	007	56	212.05	77
Bary	009	21	265.91	138
Barton	011	67	201.20	37
Bates	013	86	181.39	46
Benton	015	42	226.67	77
Bollinger	017	62	205.22	32
Boone	019	107	154.22	243

Trend Lines/Line Charts

The ability to create charts and graphs is now available through MICA. Users can now create and export line, bar and pie charts. This section of the handbook will focus on how to generate graphics in MOPHIMS. A later section will more broadly address best practices when visually displaying data.

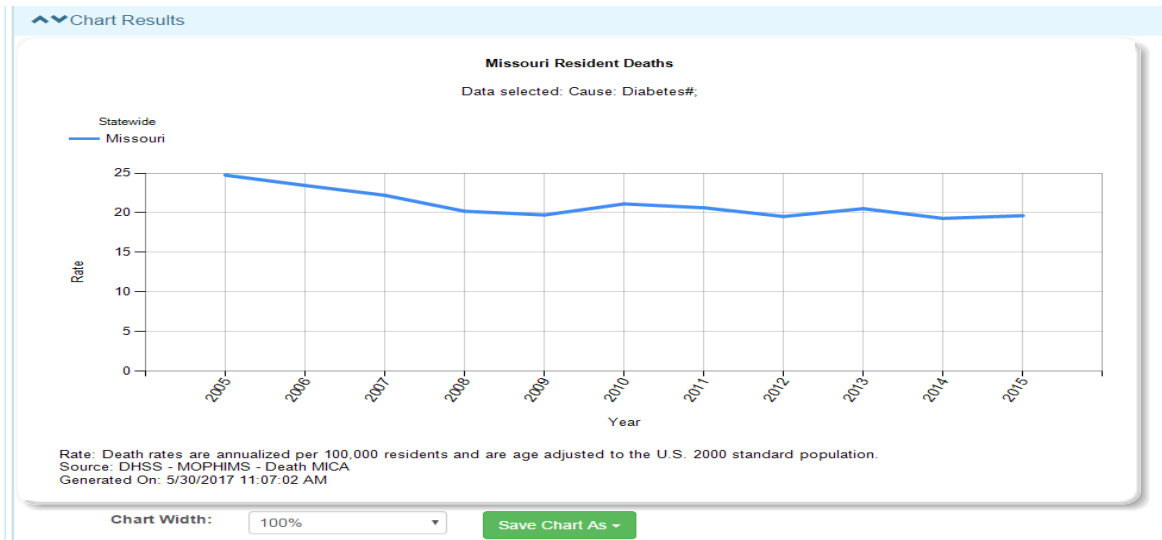
Suppose a user was interested in comparing death rates due to diabetes over time. The user would need to select the appropriate data in the **Choose Your Data** section and then click on the **Create a Chart** tab under **Build Your Data**, as shown on page 36. Next they would select Trend Line as the **Type of Chart**. Other available chart types include Vertical Bar, Horizontal Bar, and Pie charts. Finally, users should select **Year** on the variable axis to custom-create a chart showing the data of interest.

The screenshot shows the 'Build Your Results' section of the MICA application. It features a navigation bar with 'Build a Table', 'Make a Map', 'Create a Chart', and 'Documentation / Metadata'. The 'Create a Chart' tab is active. Below the navigation bar, there are several configuration options:

- Type of Chart:** Trend Line
- Variable Axis:** Year
- Value Axis:** Geography
- Statistics:** Rates
- Age Adjustment Options:** 2000 Standard Population
- Data Label:** Disabled
- Note Docking:** Bottom
- Note Alignment:** Near
- Legend Docking:** Top
- Legend Alignment:** Near

A 'Create Chart' button is located at the bottom of the configuration area.

Other selections related to the formatting of the graphic may also be selected in the **Create a Chart** tab. Users may experiment with the docking, alignment and data label options to create a chart that is visually appealing or simply easy to read.



Much like maps, both the underlying data table and the chart itself can be exported and saved to external sources. Charts can be saved as PDF, JPEG, or PNG images.

Bar Charts

For the next example, suppose that an analyst wanted to create a bar chart with the five leading causes of death for the most recent data year. Prior research indicates those categories are: Cancer, Heart Disease, Chronic Lower Respiratory Diseases, Accidents, and Stroke. From the **Choose Your Data** screen, the analyst would need to select those five categories.

Missouri Department of Health & Senior Services | MOPHIMS Home | Profiles | MICA | EPHT | Sign Up | Login

Death MICA

Choose Your Data

Year: Single Year(s) 2015
 Multi-Year Groups

Geography: Statewide

Age: Single Age
 Basic All selected (6)
 Expanded
 Custom Group

Sex: All selected (2)

Race: Basic All selected (2)
 Expanded

Ethnicity: All selected (2)

Cause: To select or expand within the list, click the applicable checkbox or link.
 Select All Major Items Expand Major Items
 Select All Intermediate Items (if Major Item is selected)

More specific selections will override more general selections.
 A pound sign (#) marks causes designated by the CDC/NCHS as **rankable** in choosing leading causes of death.

- Parkinson's disease#
- Alzheimer's disease#
- Heart disease#
- Essential hypertension#
- Stroke (cerebrovascular diseases)#
- Aortic aneurysm & dissection#
- Other major cardiovascular diseases
- Influenza and pneumonia#
- Chronic lower respiratory diseases#
- Pneumonitis due to solids and liquids#
- Other respiratory diseases

Preview Selections

After making those selections, the analyst will scroll down to the **Build Your Results** portion of the page and select Vertical Bar as the type of chart. Likewise, users could select the Horizontal Bar Chart if there are a large number of variables or the label names are particularly long.

Once Vertical Bar is selected, the page will refresh to give users customized options for this particular type of chart. At this point, the analyst should select Cause from the list of **Variable Axis** options. Since the analyst is only looking at one year of data, the default **Value Axis** may remain Year. If a multi-year graph was being developed (which would likely be necessary at the county level for deaths), users would want to change the **Value Axis** to Statistic for this example.

Build Your Results

Build a Table | Make a Map | **Create a Chart** | Documentation / Metadata

Type of Chart: Vertical Bar

Variable Axis: Cause

Statistics: Rates

Data Label: Disabled

Note Docking: Bottom

Legend Docking: Top

Value Axis: Year

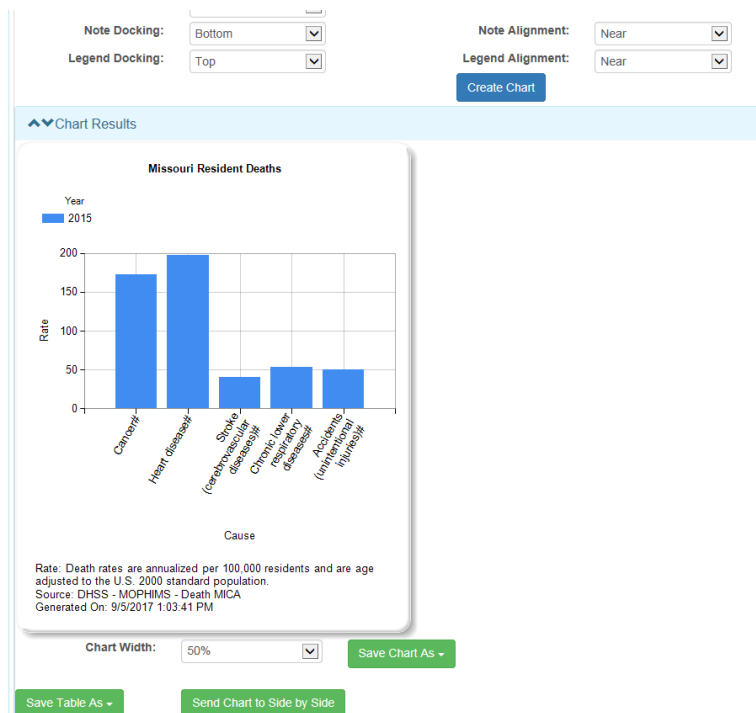
Age Adjustment Options: 2000 Standard Population

Note Alignment: Near

Legend Alignment: Near

Create Chart

The analyst should now select the ‘Create Chart’ option at the bottom of this portion of the page to view their new bar graph. The resulting chart is displayed next.



Additional features on the **Chart Results** page allow users to adjust the chart width for easier viewing, save the chart as an image or save the data table that the chart is based upon.

Pie Charts

Users also have the option of creating pie charts. However, this option is not appropriate for all types of data. *Pie charts only graph based on the count and never the rate.* As a general guide, pie charts should only be used when 100% of the total possible events are included in the pie chart. However, the query tool cannot always tell when a graphic is appropriate or not, so the user must use discretion on whether a graphic appropriately reflects the data.

The following example shows a pie chart generated in **Birth MICA**. Here an analyst selected from the list of **Optional Variables** the Prenatal Care Trimester. Then under the **Create a Chart** tab they selected Pie as the **Type of Chart** and Prenatal Care Trimester as the **Variable Axis**. All other defaults were left unchanged.

Select: Indicator Optional Variables

Prenatal Care Trimester: All selected (4)
 Remove

Optional Variables: None selected
 Display Above

Reset Your Data

Build Your Results

Build a Table | Make a Map | Create a Chart | Documentation / Metadata

Type of Chart: Pie

Variable Axis: Prenatal Care Trimester

Statistics: Rates

Data Label: Disabled

Note Docking: Bottom

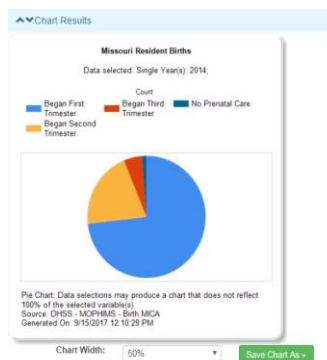
Legend Docking: Top

Note Alignment: Near

Legend Alignment: Near

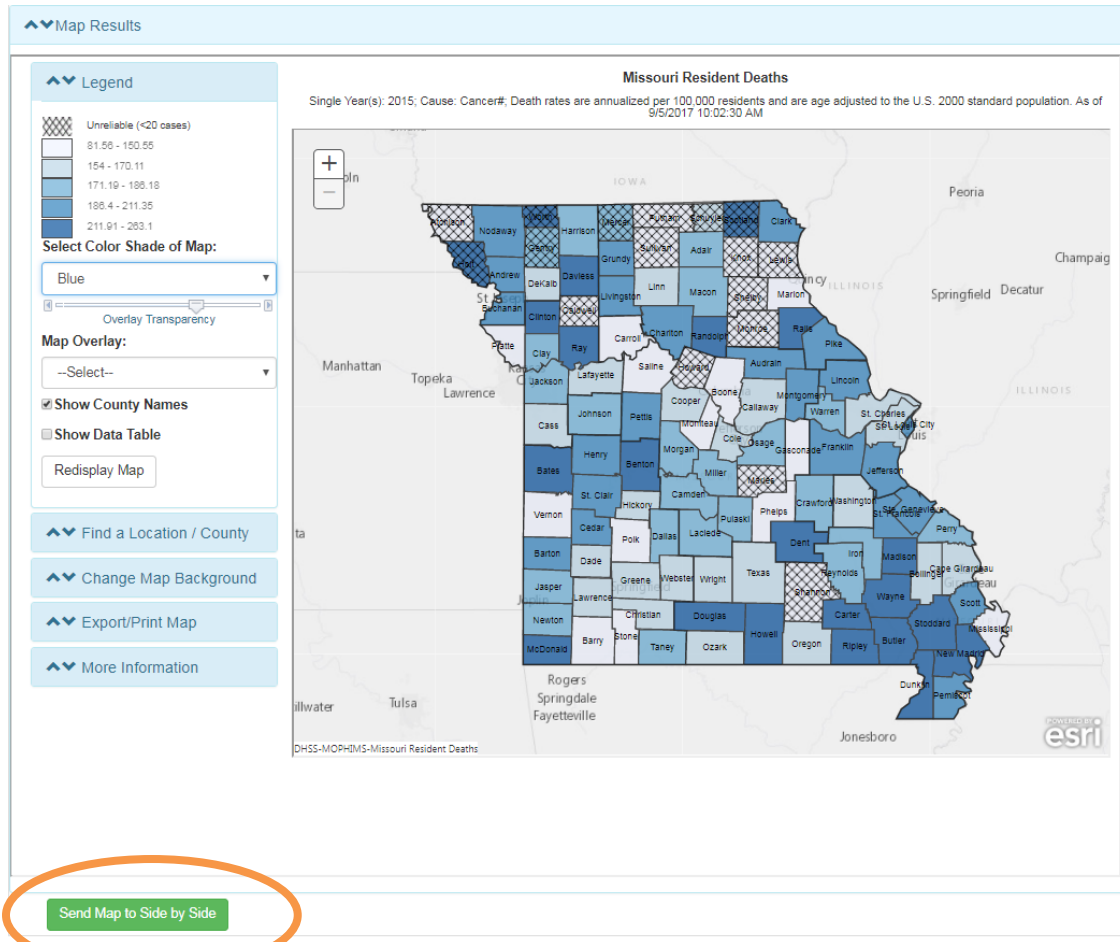
Create Chart

After clicking on the ‘Create Chart’ button, the following graphic is displayed. Users can see that not quite 3 in 4 women statewide receive prenatal care beginning in the first trimester. An additional 20% receive care beginning in the second trimester, with the remaining women either getting care starting in the third trimester or receiving no prenatal care at all.

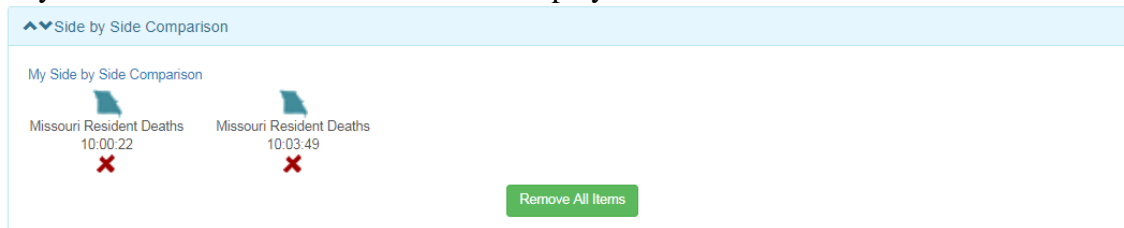


Side-by-Side

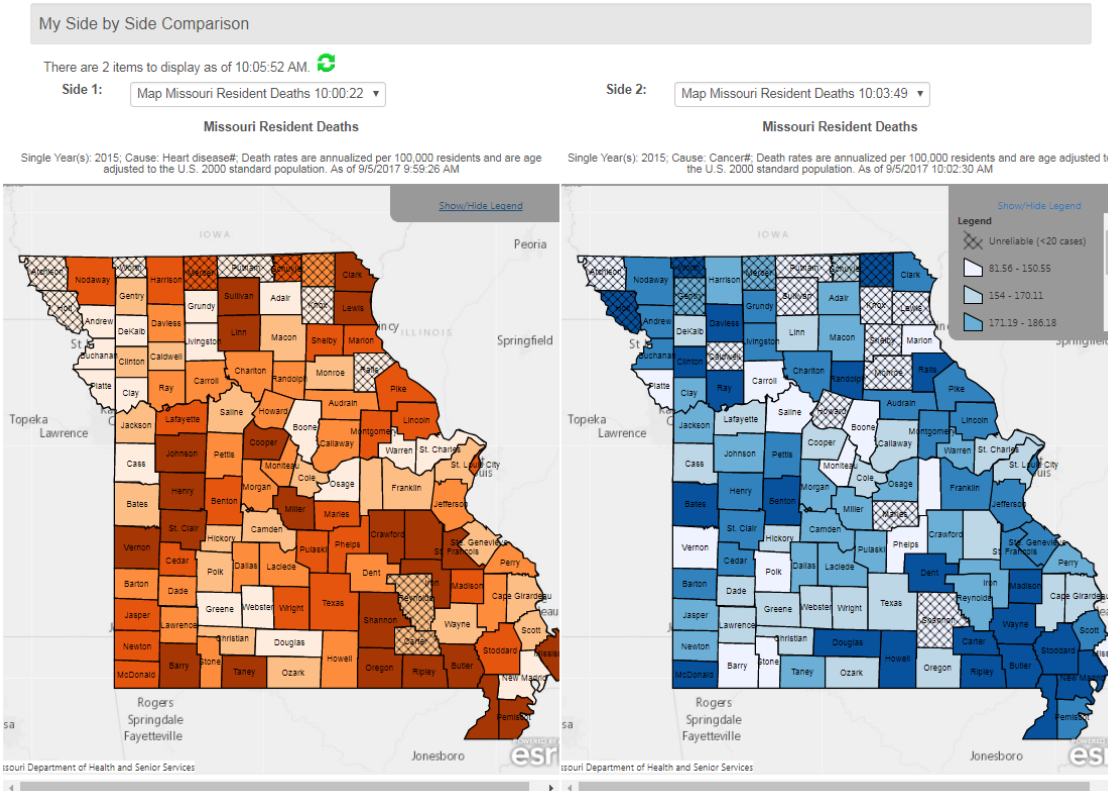
The new Side-by-Side feature allows users to compare any of the tables, charts, or graphs created in MICA on a single screen. For example this feature could be used if an analyst wanted to compare the heart disease death quintile map shown on page 34 to a quintile map showing deaths due to cancer. The user would create both maps and then click ‘Send Map to Side by Side’.



Both maps then show up in the Side by Side Comparison tray at the very bottom of the webpage. Clicking the ‘My Side by Side Comparison’ hyperlink will take users to a new webpage where they can choose which visualizations to display.



Right now the tray has only two items, so choosing which to display is simple. Each table or graphic is timestamped when it was created in MOPHIMS.



The legend for each map can be expanded or collapsed depending on user preference. Other customizations, including map colors, county labels, etc. must be made on the previous **Map Results** section of MICA.

With a few clicks, users can easily make visual comparisons using the MOPHIMS tool. For instance, Wayne and Madison Counties (in Southwest Missouri) might be interested in doing research geared to forming a cancer screening coalition, as they have some of the highest cancer death rates in the state. Neighboring counties Butler, Ripley, Oregon, and Shannon, however, might consider partnering to do outreach related to heart disease prevention, to address the high rates of heart disease deaths in their counties. While those coalitions might pool resources for other endeavors, a simple comparison map shows that their areas of focus (between heart disease and cancer) might differ slightly.

Save Query

Registered users now have the option to save queries for future use. This feature is extremely useful when a user will be running similar queries, but frequently need to change just a few variables. For example, many local public health departments create an annual Community Needs Assessment, which will require similar statistics to be updated annually. Instead of starting from scratch, those creating these reports will be able to easily access the query saved

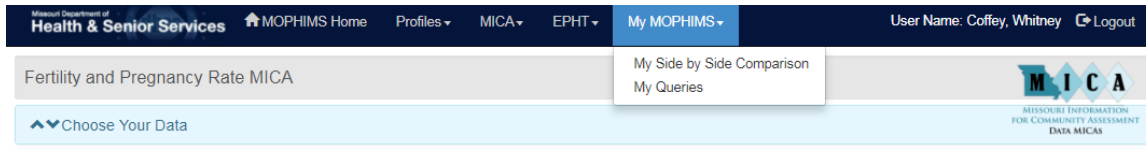
the previous year, adjust the **Year** inputs, and output the same results while using the older query as a template.

Say, for example, an analyst in Eastern Jackson County needed to know the annual pregnancy rate by age for their geography. They would simply set up the query in **Fertility and Pregnancy Rate MICA**.

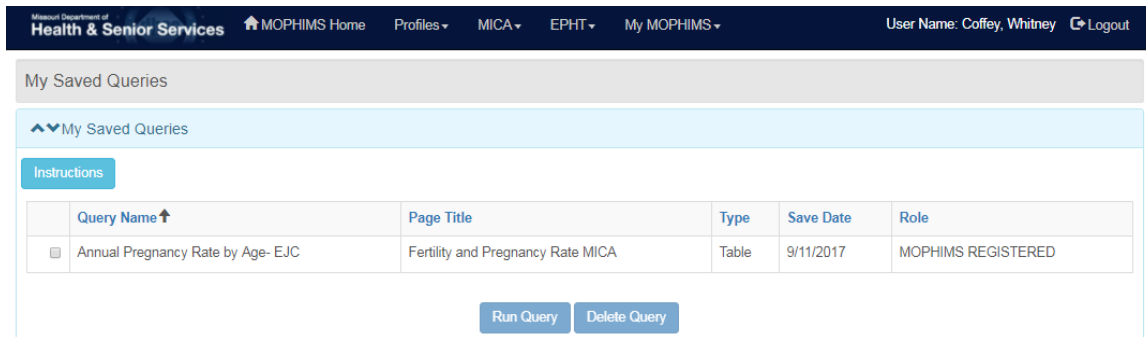
After submitting the query and generating a data table, the analyst would then click ‘Save Query’, name it appropriately, and click ‘Save’.

Indicator	Pregnancy Rate	Pregnancy Rate	Pregnancy Rate	Pregnancy Rate
	Count	Rate	Lower 95% Conf Limit	Upper 95% Conf Limit
Age				
10 - 14	4	0.41 *	0.11	1.05
15 - 19	226	27.66	24.17	31.51
20 - 34	2,967	117.52	113.29	121.75
35 - 44	492	26.65	24.35	29.11
45 - 64	4	0.11 *	0.03	0.28
Total for selection	3,693	71.19	68.89	73.49

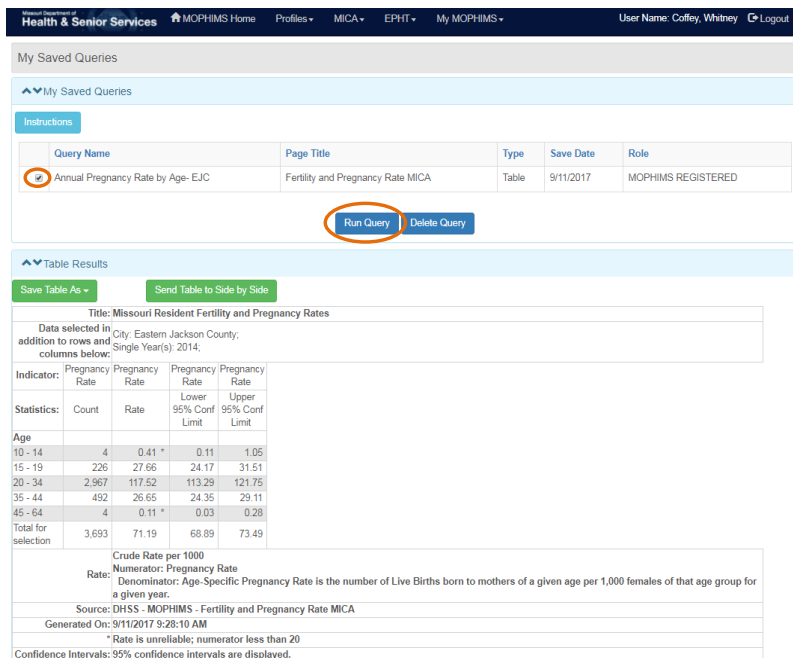
To view saved queries, users can click on the ‘My MOPHIMS’ dropdown in the header and choose ‘My Queries’.



As in the screen capture that follows, the user will see the named query, the MICA in which the query was generated, the type of output (table, map, chart), and the date on which the query was saved. If the user has more than one user level, that will also be displayed.



In order to re-generate the results from the saved query, users simply check the box beside the query and click ‘Run Query’ (shown below). Users can save up to 20 queries. Deleting queries follows a similar procedure. Just click the box and choose ‘Delete Query’.



At this time, users cannot change input selections inside the **My MOPHIMS** or **My Saved Queries** tool. For instance, if a user interested in Eastern Jackson County user wanted to run the Annual Pregnancy Rate by Age query using 2015 data when it became available, the user would have to go back to the **Fertility and Pregnancy MICA** to do so. However, this tool is a great way to ensure that the same query, using the same inputs, is being run each time a user needs to update data.

2 x 2 Tables

For Registered users, several additional enhancements are available. In the past, one of the most frequently requested features was the ability to create 2x2 tables. In MOPHIMS, the new 2x2 feature allows users to choose up to four variables to view in a data table.

For this example, an analyst uses **Emergency Room MICA** to look at ER visits for Jackson County and St. Louis County by race and sex for the years 2004 and 2014. In the past, this kind of complex table could only be generated by creating multiple MICA tables and then exporting them into Excel and merging the tables manually. In the new MICA, all the information can be generated in one table!

For the most part, the query screen for Registered users looks the same as for Basic users. One significant exception is found in the **Build Your Results** section of the page. An extra row is added with the label 'If 2x2 Group Rows by' and 'Group columns by'. These are optional selections and the table will still generate if these are left blank.

The screenshot shows the 'Build Your Results' section of the MOPHIMS interface. At the top, there is a list of medical categories with checkboxes, including 'Blood and blood forming', 'Bone- connective tissue- muscle', 'Brain - spinal cord - eyes - ears', 'Congenital anomalies', 'Digestive system', 'Heart and circulation', 'Infection', 'Injury and poisoning', 'Kidneys - bladder - genitalia', and 'Mental disorders'. Below this list is a 'Preview Selections' button. Underneath, there is an 'Optional Variables' dropdown menu currently set to 'None selected', a 'Display Above' button, and a 'Reset Your Data' button.

The 'Build Your Results' section is divided into tabs: 'Build a Table', 'Make a Map', 'Create a Chart', and 'Documentation / Metadata'. The 'Build a Table' tab is active. The main configuration area includes:

- Main Row:** Geography (dropdown)
- Row Totals:**
- Main Column:** Year (dropdown)
- Column Totals:**
- If 2x2, Group Rows By:** (empty dropdown)
- Group Columns By:** (empty dropdown)
- Statistics:** Counts and Rates (dropdown)
- Age Adjustment Options:** 2000 Standard Population (dropdown)
- Confidence Intervals:** No Confidence Intervals (dropdown)

A red oval highlights the 'If 2x2, Group Rows By' and 'Group Columns By' fields. At the bottom of the section is a 'Submit Query' button.

However, in this case, the analyst wants to make selections to generate a complex table by geography/year/race/sex. For most MICA query selections, these variables can be selected in any combination and will not greatly impact the results. The order selection in these cases is more about what the user wishes to emphasize and the focus of the table; the output

numbers/rates will be the same, just placed in different cells in the table. In most situations, having the variable of most interest as the **Main Row** and/or **Main Column** will make for the best selection.

In this example, the analyst can leave Geography and Year as the **Main Row/Column** and then add Race/Sex as the **2x2 Secondary Row/Column** as shown below.

The screenshot shows the 'Emergency Room MICA' interface. Under 'Build Your Results', the 'Build a Table' tab is active. The configuration is as follows:

- Main Row:** Geography
- Main Column:** Year
- If 2x2, Group Rows By:** Race
- Group Columns By:** Sex
- Statistics:** Counts and Rates
- Age Adjustment Options:** 2000 Standard Population
- Confidence Intervals:** No Confidence Intervals
- Row Totals:**
- Column Totals:**

 A blue 'Submit Query' button is located at the bottom right of the configuration area.

After clicking the blue 'Submit Query' box at the bottom of the window, the following table is generated. While the table can seem overwhelming at first, upon further analysis the table becomes easier to read as comparisons may be made across various demographic groups. With a bit of study, users can see that ER visits for Black Females increased the most during the past 10 years for both Jackson County and St. Louis County. Likewise, Black Males and White Females saw very large increases. However, White Males in both geographies (and in the state overall) actually saw declines.

Title: Missouri Resident Emergency Room Visits													
Data selected in addition to rows and columns below: None													
	Year:	2004	2004	2004	2004	2014	2014	2014	2014	Total for selection	Total for selection	Total for selection	Total for selection
	Sex:	Male	Male	Female	Female	Male	Male	Female	Female	Male	Male	Female	Female
	Statistics:	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate
County	Race												
Jackson	White	66,045	282.74	82,450	341.59	66,503	278.68	91,526	374.30	132,548	280.96	173,976	357.63
Jackson	Black or African-American	39,059	520.85	50,470	571.54	53,713	677.61	77,060	846.29	92,772	601.72	127,530	709.63
St. Louis County	White	65,212	185.03	75,440	196.46	56,900	169.98	73,975	205.14	122,112	178.09	149,415	200.51
St. Louis County	Black or African-American	42,722	421.47	61,073	505.01	61,180	545.10	92,186	681.30	103,902	486.56	153,259	597.16
Total for selection	White	131,257	224.14	157,890	253.88	123,403	215.82	165,501	276.13	254,660	220.29	323,391	264.40
Total for selection	Black or African-American	81,781	464.40	111,543	531.80	114,893	601.13	169,246	746.10	196,674	535.68	280,789	642.06
Missouri	White	695,520	291.97	867,867	352.62	696,359	282.26	929,762	369.55	1,391,879	287.34	1,797,629	361.01
Missouri	Black or African-American	152,350	456.15	202,109	549.09	202,674	551.75	280,317	705.06	355,024	506.90	482,426	629.95

Rate: Emergency room visit rates are annualized per 1,000 residents and are age adjusted to the U.S. 2000 standard population.
 Source: DHSS - MOPHIMS - Emergency Room MICA
 Generated On: 9/5/2017 4:52:38 PM

MOPHIMS: Enhanced MICA Features Exercises

1. The Farmers' Almanac is predicting yet another steamy summer. As an administrator at the Greene County Health Department, you want to publish informational pamphlets for your community. You decide to dig through **Injury MICA** for statistics pertaining to overexertion (Hint 1: It is a category under Mechanism). You also want to look at 5 years of aggregated data (2010-2014) to see what age and gender groups have experienced the highest rates of discharge for residents of Greene County. (Hint 2: Set up a 2x1 table using Age and Sex as your **Main Row/Column** and Patient Type as your secondary variable.

a) Regardless of sex, what age group visited the emergency room the most in Greene County? _____

b) What was the count and rate for females aged 25-44 in Green County who visited the ER? _____

c) Write a statement describing the differences between ER and Inpatient data for overexertion injuries for all Greene County residents regardless of age or sex:

2. As a concerned citizen who lives along a winding highway in rural Missouri, you are curious how deaths due to motor vehicle accidents have changed over the last ten years. You decide to use **Death MICA** to compare rates for the 2005-2015 time period.

a) Generate a statistical significance map for deaths due to motor vehicle accidents for 2005-2015. Please describe the patterns you find.

b) Create a trend line chart using Year as the **Variable Axis**. What year had the highest rate? _____ The lowest rate? _____

c) How would you describe the chart trend?
