

MICA Part II

Cancer Incidence MICA

The **Cancer Incidence MICA** provides cancer incidence data for Missouri residents. It operates somewhat differently from the other MICAs. Data for the **Cancer Incidence MICA** are provided by the Missouri Cancer Registry. The data submitted to DHSS each year include updated files for all previous years back to 1996. Therefore, numbers reported for prior years may change.

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

Cancer Incidence MICA

MISSOURI INFORMATION FOR COMMUNITY ASSESSMENT DATA MICAS

Choose Your Data

Year: Single Year(s) Multi-Year Groups | 2013

Geography: Statewide

Age: Single Age Basic Custom Group | All selected (12)

Sex: All selected (2)

Race: Basic Expanded | All selected (2)

Stage at Diagnosis: In Situ or Invasive Stage | All selected (2)

Site: 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.

- All
 - Bones and Joints
 - Brain and other nervous system
 - Breast
 - Digestive System
 - Endocrine system
 - Eye and orbit
 - Female genital system
 - Kaposi sarcoma
 - Leukemia
 - Lymphoma

Preview Selections

Optional Variables: None selected | Display Above


- Select all
- Grade

Reset Your Data

Some of the filters and **Optional Variables** in **Cancer Incidence MICA** are especially helpful in generating specific data queries and are highlighted here. The **Stage at Diagnosis** (in the green box above) allows users to customize their query based on whether the cancer was in situ or invasive, and if it was invasive, at which stage it was discovered.

For instance, if an analyst was interested in determining how many males and females living in the Southwest BRFSS Region were diagnosed with localized breast cancer 2009-2013 the following **Choose Your Data** and **Build Your Results** selections would be made:

Choose Your Data: Year: **Multi-Year Groups. Years Per Group: 5. Latest Year: 2013. Go.**
 Choose Your Data: Geography: **BRFSS Region>>Southwest**
 Choose Your Data: Stage at Diagnosis: **Stage. Localized**
 Choose Your Data: Site: **Breast**
 Build Your Results: Main Row: **Sex**
 Build Your Results: Main Column: **Stage at Diagnosis**
 Build Your Results: Statistics: **Counts and Rates**
 Build Your Results: Confidence Intervals: **95% Confidence Intervals** (default in Cancer Incidence MICA)
 Build Your Results: **Submit Query**

Cancer Incidence MICA 

Choose Your Data MISSOURI INFORMATION FOR COMMUNITY ASSESSMENT DATA MICAS

Build Your Results

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

Main Row: Sex Row Totals: Main Column: Stage at Diagnosis Column Totals:

Statistics: Counts and Rates Age Adjustment Options: 2000 Standard Population

Confidence Intervals: 95% Confidence Intervals

Table Results

CAUTION: Most breast cancer cases occur in females. Rates will be very different for females compared to males or the overall population.

Title: Missouri Resident Cancer Incidence				
Data selected in BRFSS Region: Southwest;				
addition to rows and Multi-Year Groups: 2009-2013;				
columns below: Site: Breast;				
Stage at Diagnosis:	Localized	Localized	Localized	Localized
Statistics:	Count	Rate	Lower 95% Conf Limit	Upper 95% Conf Limit
Sex				
Male	10	0.42	0.20	0.77
Female	1,987	67.71	64.73	70.68
Total for selection	1,997	36.11	34.53	37.70

Rate: Cancer incidence rates are annualized per 100,000 residents and are age adjusted to the U.S. 2000 standard population.

Source: DHSS - MOPHIMS - Cancer Incidence MICA

Generated On: 10/4/2017 11:53:42 AM

* Rate is unreliable; numerator less than 20

Confidence Intervals: 95% confidence intervals are displayed.

There are several important things to note when interpreting the data table generated above. First, there is a red warning that reminds users that breast cancer predominantly occurs in females, which will affect rates by sex. Notice that the female rate of 67.71 per 100,000 is much higher than the male rate of 0.42. The Total for selection, or all persons rate, uses both male and female populations in the denominator, resulting in a rate of 34.53. However, when presenting this data it might be important to decide whether to use the all persons denominator to show the broad

burden of breast cancer in the community or to focus in on the female-only rate—which is more representative of the specific condition.

Another feature that should be considered when reporting this data is that the male rate is based on only 10 cases, rendering it unreliable. As discussed on pages 17-18, any rate based on a numerator less than 20 is not considered reliable and should be used with caution. These cases are flagged in the MOPHIMS system using an asterisk and a footnote below the data table.

Procedures MICA

The **Emergency Room** and **Inpatient Hospitalization** MICAs provide data on diagnoses but not on treatments provided. The **Procedures MICA**, on the other hand, provides information on specific procedures performed. An additional difference is that **Procedures MICA** tracks every procedure performed, instead of the primary procedure as is the case for diagnosis in the other hospital-based data MICAs.

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Procedures MICA

MISSOURI INFORMATION FOR COMMUNITY ASSESSMENT DATA MICAs

Choose Your Data

Year: Single Year(s) 2013 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)

Procedures: 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.

- All
 - Miscellaneous diagnostic and therapeutic procedures
 - Obstetrical procedures
 - Operations in the nose or mouth or pharynx
 - Operations on the cardiovascular system
 - Operations on the digestive system
 - Operations on the ear
 - Operations on the endocrine system
 - Operations on the eye
 - Operations on the female genital organs
 - Operations on the hemic and lymphatic system

Preview Selections

Optional Variables: None selected Display Above

- Select all
- Pay Source
- Setting

Reset Your Data

Build Your Results

If users are interested in how many procedures are performed on an inpatient versus an outpatient setting, the appropriate selections using the **Setting Optional Variable** will allow that type of granular analysis. For example, hip replacements are more commonly performed on an

outpatient basis for younger patients, while older patients undergo the procedure in an inpatient setting.

Procedures MICA **M I C A**
MISSOURI INFORMATION
FOR COMMUNITY ASSESSMENT
DATA MICAS

Choose Your Data

Build Your Results

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

Main Row: Age | Row Totals: | Main Column: Setting | Column Totals:

Statistics: Counts and Rates | Age Adjustment Options: 2000 Standard Population

Confidence Intervals: No Confidence Intervals

[Submit Query](#)

Table Results

[Save Table As](#) | [Send Table to Side by Side](#)

Title: Missouri Resident Procedures

Data selected in addition to rows and columns below: Single Year(s): 2013; Procedures: Operations on the musculoskeletal system: Hip replacement: total and partial;

Setting:	Inpatient	Inpatient	Outpatient	Outpatient	Unknown	Unknown	Total for selection	Total for selection
Statistics:	Count	Rate	Count	Rate	Count	Rate	Count	Rate
Age								
Under 15	3	0.03 *	5	0.04 *	0	0.00	8	0.07 *
15 - 24	37	0.44	190	2.28	0	0.00	227	2.72
25 - 44	490	3.20	336	2.20	0	0.00	826	5.40
45 - 64	4,577	28.36	192	1.19	0	0.00	4,769	29.55
65 and Over	7,933	87.41	45	0.50	0	0.00	7,978	87.91
Unknown	0	0.00	0	0.00	0	0.00	0	0.00
Total for selection	13,040	18.12	768	1.34	0	0.00	13,808	19.46

Rate: For each Age: Crude Rate per 10,000
Total for selection: Age Adjusted Rate per 10,000 using 2000 Standard Population

Source: DHSS - MOPHIMS - Procedures MICA

Generated On: 10/4/2017 1:41:49 PM

* Rate is unreliable; numerator less than 20

WIC (Women, Infants, and Children) MICAs

The **WIC MICAs** include five separate MICA data sets: WIC Child, WIC Infant, WIC Prenatal, WIC Postpartum, and WIC Linked Prenatal-Postpartum. Each data set contains maternal and child health indicators pertaining to that particular WIC population. Data in the **WIC MICAs** is available from 2009 forward. In 2009, the data system used to collect the WIC data changed dramatically, so comparisons to earlier years are not advised.

MICA

The Missouri Information for Community Assessment (MICA) is an interactive system that was developed to make health data accessible at the local level through an easy-to-use format. It allows users to summarize data, calculate rates, and prepare information in a graphic format. Data MICA users can access statistics on various health conditions and associated topics. Users can choose from among the many conditions, generate data tables by year of occurrence, age, gender, race, and county or zip code of residence, and obtain age-adjusted rates. Data MICAs also allow users to create charts and maps. All forms of output are available for download.



Maternal, Infant and Child Health MICAs

- Birth
- Fertility and Pregnancy Rate
- Pregnancy
- WIC Child
- WIC Infant
- WIC Prenatal
- WIC Postpartum
- WIC Linked Prenatal-Postpartum



Chronic Disease MICAs

- Cancer Incidence
- Chronic Disease Death
- Chronic Disease Emergency Room
- Chronic Disease Inpatient Hospitalization



Injury MICA

- Injury



Death MICA

- Death



Hospital and Emergency Room Visit MICAs

- Emergency Room
- Inpatient Hospitalizations
- Preventable Hospitalizations
- Procedures



Population MICA

- Population




Medicaid/TANF MICAs

- Mo Healthnet (Medicaid) MICA
- Temporary Assistance for Needy Families (TANF) MICA

The WIC query pages themselves most closely resemble the **Birth MICA**. As discussed in a previous section of this handbook, **WIC** and **Birth MICAs** use internal denominators, based on known status, so instead of having **Optional Variables** to be used as filters like in the other MICAs, these systems have both **Indicators** and **Optional Variables**.

Many new indicators have been added to the **WIC MICAs**. In the **WIC Child MICA**, users can now gather data related to food and drink consumption and screen time, as well as more traditional indicators like birth weight, immunization compliance, and household smoking practices. Some of this new data is available only for more recent years- selecting older years will result in the following error message.

WIC Child MICA


3 Messages

Daily fruit consumption data are not available for years prior to 2014

Daily vegetable consumption data are not available for years prior to 2014

Daily sweetened beverage consumption data are not available for years prior to 2014

Choose Your Data

Year: Single Year(s) 2 selected Multi-Year Groups

Geography: County **Show State Totals:**

County: 4 selected

Age: Single Age Basic All selected (4) Custom Group

Sex: All selected (2)

Race: Basic All selected (2) Expanded

Ethnicity: All selected (2)

Select: Indicator Optional Variables

Indicator: 3 selected

- Receiving Food Stamps
- Receiving Medicaid
- Receiving TANF
- Smoking in household
- Daily fruit consumption – less than two times
- Daily vegetable consumption - less than two times
- Daily sweetened beverage consumption – two or more times
- Daily diet soda/coffee/tea consumption – one or more times
- Daily screen time exceeds recommendation for age
- Daily active play/exercise – less than 60 minutes

Reset Your Data

Build Your Results

Build a Table Make a Map

Main Row: Year

Statistics: Daily fruit consumption – less than two times

Confidence Intervals: Daily diet soda/coffee/tea consumption – one or more times

Table Results


To retrieve Table Results: Choose a Main Row and Main Column from the dropdowns above.

Main Column: Year **Column Totals:**

Submit Query

Submit Query button above.

Though only two data years are currently available, a four county region in Central Missouri (including Boone, Callaway, Cole, and Moniteau Counties) seems to have stable rates of less than ideal fruit, vegetable, and sweetened beverage consumption, though the rate of sweetened beverage consumption seems to have decreased slightly.

WIC Child MICA  MISSOURI INFORMATION FOR COMMUNITY ASSESSMENT DATA MICAS

Choose Your Data

Build Your Results

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

Main Row: Indicator Row Totals: Main Column: Year Column Totals:

Statistics: Counts and Rates

Confidence Intervals: No Confidence Intervals

[Submit Query](#)

Table Results

[Save Table As](#) [Send Table to Side by Side](#)

Title: Missouri Resident WIC Child Participants

Data selected in addition to rows and columns below:
County: Boone, Callaway, Cole, Moniteau;

Year:	2014	2014	2015	2015	Total for selection	Total for selection
Statistics:	Count	Rate	Count	Rate	Count	Rate
Indicator						
Daily fruit consumption – less than two times	566	15.74	464	15.83	1,030	15.78
Daily vegetable consumption - less than two times	760	21.13	625	21.32	1,385	21.22
Daily sweetened beverage consumption – two or more times	1,695	47.12	1,358	46.33	3,053	46.77

Crude Rate per 100
 Numerator: Daily fruit consumption – less than two times
 Denominator: Known fruit consumption
 Rate: Numerator: Daily vegetable consumption - less than two times
 Denominator: Known vegetable consumption
 Numerator: Daily sweetened beverage consumption – two or more times
 Denominator: Known sweetened beverage consumption

Source: DHSS - MOPHIMS - WIC Child MICA

Generated On: 10/4/2017 2:41:39 PM

TANF (Temporary Assistance for Needy Families) MICA

The **TANF MICA** contains data about the number of Missouri residents receiving welfare assistance. Tables are available for four types of residents: families, adults, children, and persons. **TANF MICA** appears to have the distinction of featuring the smallest **Choose Your Data** section of all the MICAs, but the selection of different **Relationship** choices will display additional data filters, depending on the **Relationship** selected.

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Temporary Assistance for Needy Families (TANF) MICA

Choose Your Data

Year: Single Year(s) 2012 Multi-Year Groups

Geography: Statewide

Relationship: Family Adult Child Person

Month: January

Optional Variables: None selected

Display Above

Reset Your Data

For instance, **Month** is the only filter available for the Family **Relationship**, but **Age, Sex, Race, Month**, and two **Optional Variables** (Education and Time on TANF) are available for the Adult **Relationship**. **Month** will always be a filter variable because TANF data are calculated based on participation on the last day of each month. If a user selects more than one **Month** of data and then neglects to put that variable on either the **Main Row** or the **Main Column** in the **Build Your Results** section, the following error message will display. This is because it is not appropriate to aggregate months of data to generate, say, an annual total. Because participation frequencies are generated monthly, it's extremely likely that participants would be counted multiple times in annual totals, once for each month that they participated in the program.

Temporary Assistance for Needy Families (TANF) MICA

1 Message
Either select just one Month or put Month on the Row or Column

Choose Your Data

Build Your Results

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

Main Row: Geography Row Totals:

Main Column: Time on TANF Column Totals:

Statistics: Counts and Percents of Column Total

Submit Query

TANF Region is a geography that is available only for the **TANF MICA**. Different Service Areas, based on total population, are composed of various groups of Missouri counties. To determine which Service Area your county belongs, click on the **Documentation/Metadata** tab in the **Build Your Results** section of the query page.

Temporary Assistance for Needy Families (TANF) MICA **MICA**
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DATA MICAS

Choose Your Data

Build Your Results

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

Main Row: Geography | Row Totals: | Main Column: Year | Column Totals:

Statistics: Counts and Percents of Column Total

Submit Query

Table Results

Save Table As | Send Table to Side by Side

Title: Missouri Resident Families/Cases on TANF

Data selected in addition to rows Relationship: Adult; and columns Month: January; below:

Year:	2012	2012
Statistics:	Count	Percent of Column Total
TANF Region		
Service Area 1	4,334	11.82
Service Area 2	5,024	13.70
Service Area 3	5,198	14.18
Service Area 4	7,366	20.09
Service Area 5	5,227	14.26
Service Area 6	4,970	13.56
Service Area 7	4,545	12.40
Total for selection	36,664	100.00
Missouri	36,664	100.00

Source: DHSS - MOPHIMS - Temporary Assistance for Needy Families (TANF) MICA

Generated On: 10/4/2017 3:06:43 PM

Month: Monthly counts reflect a snapshot of participants on the last day of the month.

Citations

Whenever data are presented in a table, on a chart, or in narrative, the source must be cited. These citations are necessary for several reasons. First of all, citations can be extremely useful to the author of a report or presentation. They allow the author to document exactly when and where a source was accessed so that he or she can check for updates to the data at a later time. Furthermore, community health assessments and grants tend to be long-term projects. If the main author must be out of the office or moves on to a different position, citations can guide other staff members to appropriate source material.

Citations are also useful to readers. They allow readers to verify data that they may doubt. For instance, a concerned citizen may question the agency about a statistic that does not appear to match data from another source. With a citation, that reader and/or the author can locate the original source material to research possible differences in the collection, analysis, or interpretation of the data and determine the differences between the two sources. Thus, the use of citations can enhance readers' perceptions of the validity and reliability of a report. Citations can also lead readers to more in-depth information on specific topics that may interest them. For example, readers of this handbook can refer to the footnotes and the References section if interested in a particular topic covered in this course.

Perhaps most importantly, citations can help writers avoid charges of plagiarism. Plagiarism is “the uncredited use (both intentional and unintentional) of somebody else’s words or ideas. . . . A charge of plagiarism can have severe consequences, including . . . loss of a job, not to mention a writer’s loss of credibility and professional standing.”¹ A citation is necessary if another person’s idea is used, even if it is restated and not directly quoted.

Several different style sheets exist, but BHCADD analysts use the American Medical Association (AMA) style to cite works published by our unit. Major peer reviewed public health journals require this style be used when submitting abstracts for potential publication. The AMA publishes manuals explaining AMA style and offers free brief tutorials and quizzes on its website, located at <http://www.amamanualofstyle.com/>.

¹ Stolley K, Brizee A, Paiz JM. Overview and contradictions. Purdue University Online Writing Lab (OWL). <http://owl.english.purdue.edu/owl/resource/589/01/> Updated June 7, 2013. Accessed April 10, 2014.

BHCADD recommends that in-text citations of the Profiles and MICAs list the specific MICA or Profile as the specific item cited, followed by MOHIMS as the name of the website.

Bibliography entries should include the tool used as the specific item cited, MOPHIMS as the website used, the appropriate URL, and the date accessed.

Profile in-text citation:

A total of 95,514 Missouri children under the age of 6 were tested for lead poisoning in 2010.¹

1. DHSS, Child Health Profile.

Profile bibliography entry:

Missouri Department of Health and Senior Services (DHSS). Child Health Profile. MOPHIMS (Missouri Public Health Information Management System).

<https://webapp01.dhss.mo.gov/MOPHIMS/ProfileBuilder?pc=1>. Accessed October 11, 2017.

MICA in-text citation:

The death rate for Barry County residents decreased from 992.7 (per 100,000 residents) in 2008 to 800.1 in 2009.²

2. DHSS, Death MICA.

MICA bibliography entry:

Missouri Department of Health and Senior Services (DHSS). Death MICA. MOPHIMS (Missouri Public Health Information Management System).

<https://webapp01.dhss.mo.gov/MOPHIMS/QueryBuilder?qbc=DM&q=1&m=1>. Accessed October 11, 2017.

References

- AMA Manual of Style Committee. AMA Manual of Style: A Guide for Authors and Editors. AMA Style Guide. <http://www.amamanualofstyle.com/> Accessed October 12, 2017.
- Austin DF, Werner SB. *Epidemiology for the health sciences: A primer on epidemiologic concepts and their uses*. Springfield, IL: Charles C. Thomas; 1974.
- Ballard J. *Basic concepts of data analysis for community health assessment: Presenting public health data*. Northwest Center for Public Health Practice; 2009.
http://phlearnlink.nwphp.org/kc/login/login.asp?kc_ident=kc0001&strUrl=http://phlearnlink.nwphp.org/Default.asp Accessed September 24, 2009.
- CDC. Suppression of Rates and Counts. United States Cancer Statistics
https://www.cdc.gov/cancer/npcr/uscs/technical_notes/stat_methods/suppression.htm
Accessed June 30, 2017.
- Curtin LR.& Klein, RJ. *Direct standardization (age-adjusted death rates)*. Healthy People 2000 Statistical Notes (No. 6 – Revised).. Hyattsville, MD: National Center for Health Statistics. DHHS Publication No. PHS 95-1237. Published March 1995.
- Florida Department of Health. *FloridaCHARTS user's guide: Empowering communities with health information*. Florida CHARTS.
http://www.flhealthcharts.com/Charts/documents/CHARTS_USER_GUIDE_8_2012.pdf
Accessed April 10, 2014.
- Redelings MD, Sorvillo, F, Smith LV, Greenland S. Why confidence intervals should be used in reporting studies of complete populations. *The Open Public Health Journal* 2012;5, 52-54. <http://benthamsience.com/open/tophj/articles/V005/52TOPHJ.pdf> Accessed April 10, 2014.
- Stolley K, Brizee A, Paiz JM. Overview and contradictions. Purdue University Online Writing Lab (OWL). <http://owl.english.purdue.edu/owl/resource/589/01/> Updated June 7, 2013. Accessed April 10, 2014.