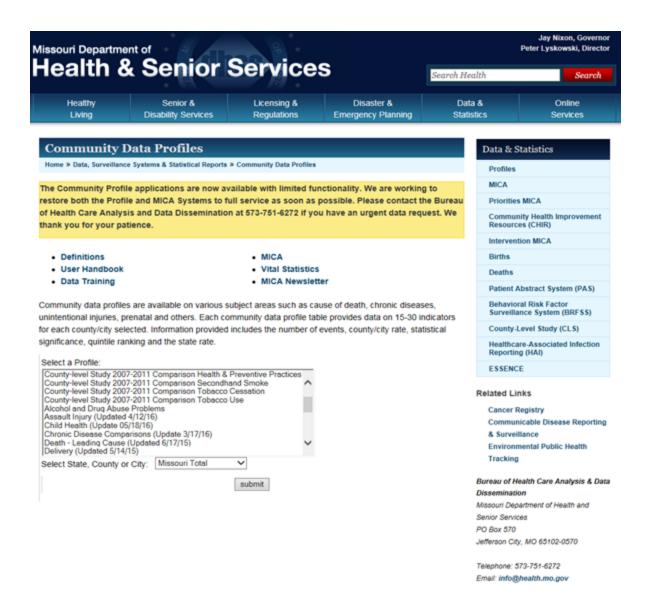
MICA User Group Newsletter

Happy New Year from your MICA team! This holiday season and the subsequent new year were typical in many ways, bringing colder weather, many family and friend gatherings, and joyful tidings. The announcement which has been much anticipated by both our MICA users and our MICA team (I assure you), is our new data system the Missouri Public Health Information Management System (MOPHIMS).

Our MICA team is working hard to make sure the new system is just so and ready to go, live on the web. So, let's talk logistics: the state of the current MICA system, where the new MOPHIMS system stands, and an anticipated date of access to all the previously available MICA information plus a little extra, just for fun.

The MICA Data & Statistics page is still accessible and functioning for a number of resources. All of the Community Data Profiles and associated data can be viewed. The Community Data Profiles can be selected from the right hand Data & Statistics box in blue. "Profiles" is the first option directly above the "MICA" link. From this link a user can scroll and view all 23 Community Data Profiles for various geographies including the state overall, all 115 counties, as well as a few other city and regional geographies.



Much of the graphing functionality inside the Community Data Profiles is not working; however, users can view the main profile data table associated with each profile and download the data into Excel. From the Excel download a 3-year rolling average can still be obtained and custom graphics can be generated from the data.

Priorities MICA is also still working. The Priorities MICA pages will appear a little different but it is calculating and functioning normally.

Additionally, all of the other helpful resources such as our Age Adjustment Worksheet, Life Expectancy Data, Years of Potential Life Lost (YPLL) Data, among numerous others, are still accessible through our webpage.

MOPHIMS (the Missouri Public Health Information Management System) is the new platform being developed to host the MICAs and Profiles. It is currently a work in progress. Below, is the future MOPHIMS homepage.

Profiles + MICA+ ■ Sign Up - Login



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.



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



DATA MICAS

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

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



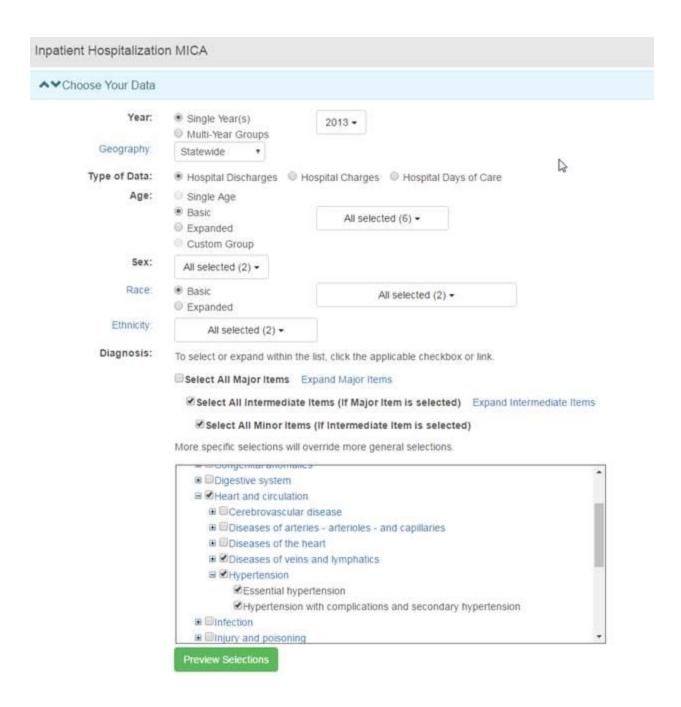
The Missouri Environment Public Health Tracking (EPHT) program was developed to assist the public, communities, policymakers, and scientists. answer fundamental questions about the relationships between environmental exposures and health effects. Data on this site also include hazard and disease surveillance

- Health Data
 - · Blood Lead Levels
 - « Asthma
 - . Birth Defects
 - . Myocardial Infarction
- Carbon Monoxide Poisoning Environmental Data
 - Agriculture

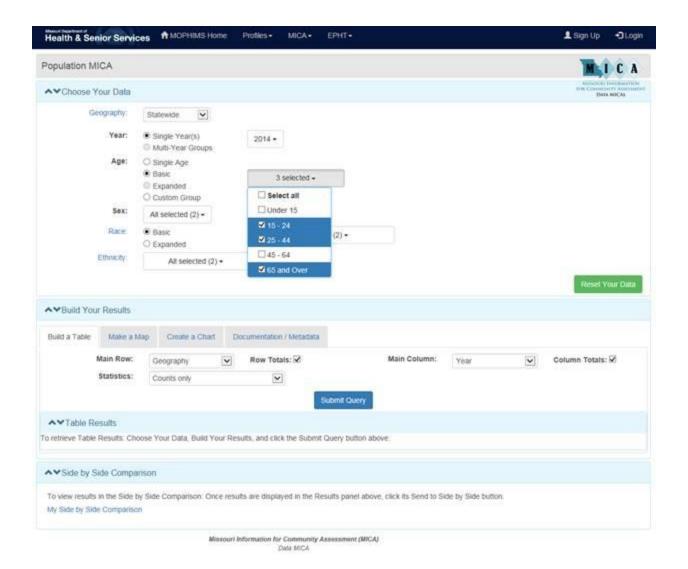
 - . Ar Quality
 - . Water Quality
- Community Data National Data

Users will also note the Environmental Public Health Tracking (EPHT) data is also included in MOPHIMS. The EPHT data tools are located on the right side of the page. This suite of tools is truly a one stop shop for the statistical shopper.

We are hoping to marry all of the old query benefits, with increased functionality, and an updated look. Ideally the new MICA system will be a little easier to navigate for the user. In the old MICA, in order to "drill down" for a more specific diagnosis, first an initial table had to be generated. In the new MICA, the user will be able to view the more specific options from the initial query page and select a preferred diagnosis or indicator from a branching option display, as show in the following screen shot. This will allow the user to select for a more specific indicator or variable, prior to submitting the query.



Below is a screen view of the new Population MICA in the MOPHIMS system. Under the "Age" category, various groupings of age ranges can be selected, and to the right of that, the branching options for the specific grouping selected can be chosen.



Additionally, MOPHIMS will have new graphing features. This should provide the user with a quicker way to visually summarize data in a more customized fashion. MOPHIMS will also have new download options, which will allow the user to access data in the desired format. We hope to have many of the MICAs available and online early in 2017.

The MICA Team will be sure to send an update when MOPHIMS goes live. We will definitely be looking forward to your comments and feedback. Thank you all for your patience during this transitional period.

Heart Disease and Stroke: How MOPHIMS can help the Million Hearts Campaign

The Million Hearts Campaign is a national movement to prevent "1 million heart attacks and strokes" in the United States by 2017. Each state is responsible for 20,000 hearts during a six-year time period and Missouri is actively working on the ABCS (Aspirin, Blood pressure, Cholesterol and Smoking

^[1] Missouri American Heart Association. (2015). *Million Hearts: A Statewide Approach*. Retrieved from http://www.heart.org/idc/groups/heart-public/@wcm/@adv/documents/downloadable/ucm_479856.pdf

Cessation) to increase awareness and encourage prevention of heart disease and stroke. [2] So how can health data, specifically MICA, help meet these ambitious health goals for Missouri?

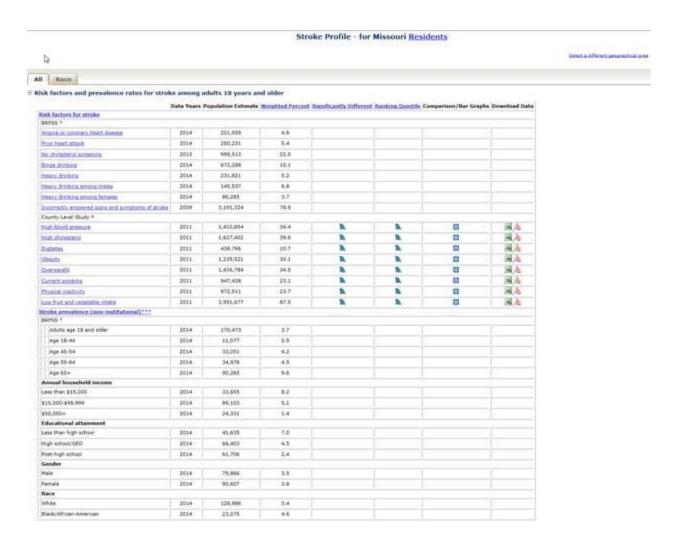
Like many other health campaigns in Missouri, the Missouri Million Hearts Campaign first needed a baseline to measure future progress. There are a number of MICA tools that can assist in collecting data to determine where the current bar is, help establish what goals should be set, and evaluate whether those goals are being met. In 2011, Missouri Million Hearts found heart disease claimed 13,746 lives and stroke claimed 3,010. [3] This baseline for heart disease and stroke was determined using the Death MICA. The data tables generated by the MICAs can be useful for measuring progress when making year to year comparisons. For instance, when users place "Year" and "Cause" on the row and column respectively, each indicator can be viewed independent of the other to track trends over time.

For a regional and county level assessment of these two diseases, additional information can be found on the Data and Statistics Profile page. Amongst other Missouri Profiles, the Heart Disease Profile and the Stroke Profile both have region based risk factor data collected by Behavioral Risk Factor Surveillance System (BRFSS) as well as county specific risk factor data collected by County-Level Study (CLS). [4][5] The screenshot below shows the Heart Disease Profile data table for Missouri.

[2] Missouri American Heart Association (2015). Million Hearts: A Statewide Approach.

^[3] MODHSS (Missouri Department of Health and Senior Services). *MICA*. In Death MICA. Retrieved August 12, 2016, from http://health.mo.gov/data/mica/deathmica/.

^[4] MODHSS (Missouri Department of Health and Senior Services). (2016). *Community Data Profiles*. In Heart Disease Profile. Retrieved from http://health.mo.gov/data/mica/ASPsHeartDisease/header.php?cnty=929. [5] MODHSS (Missouri Department of Health and Senior Services). (2016). *Community Data Profiles*. In Stroke Profile. Retrieved August 12, 2016, from http://health.mo.gov/data/mica/ASPsStroke/header.php?cnty=929.



These Profiles contain estimates of the Missouri population that are afflicted with heart disease and stroke, as well as estimates of individuals who have risk factors associated with these conditions.

The following MICAs and Profiles provide additional information on heart disease and stroke as well as the contributing risk factors that are associated with these diseases: Hospital Charges and Days of Care, Chronic Disease, Emergency Room, Health and Preventative Practices, Hospital Discharges, Inpatient Hospitalization, Minority Health, Tobacco Use, and Women's Health. These Profiles examine problems through a variety of lenses based on race, gender, and geography, which allows for the identification of sub-populations and places at greater risk for heart disease and stroke. A table by race can be viewed by selecting the race tab at the top of the Stroke Profile page. Below is an example of the Heart Disease Profile broken down by race. [6]

^[6] MODHSS (2016). Community Data Profiles. In Heart Disease Profile.

		White		African-Ame	rican	White	African-American	2		
	Data Years	Number of Events	Rate	Number of Ever	nts Rate	State Rate	State Rate	Trend Lines	Advanced Graphics	
Mortality							- Administration		710	
Heart disease	2003-2013	142,931	212.7	15,027	264.6	212.7	264.6	8	×	
Acute myocardial infarction (MI)	2003-2013	43,080	64.5	3.819	68.4	64.5	68.4		×	
Congestive heart failure	2003-2013	15,641	22.8	1,064	20.1	22.8	20.1		×	
Hospitalizations					39 71					
Heart disease	2009-2013	354,024	115.3	55,891	180.8	115.3	180.8		×	
Concestive heart failure	2009-2013	80,169	25.5	18,434	61.0	25.5	61.0		×	
Acute myocardial infarction	2009-2013	56,401	18.2	5,972	19.6	18.2	19.6		×	
ST elevation MI (STEMI)	2009-2013	16,198	5.3	1,230	3.8	5.3	3.8		×	
Non-ST elevation MI (NSTEMI)	2009-2013	37,155	11.9	4,393	14.6	11.9	14.6		×	
Emergency room visits	100000000000000000000000000000000000000	The second secon		1,000	1,000,00	7017	1017,500			
Heart disease	2009-2013	352,412	13.1	85,437	24.7	13.1	24.7		×	
Congestive heart failure	2009-2013	16,381	0.5	2,855	0.9	0.5	0.9	8	×	
Acute myocardial infarction	2009-2013	8.431	0.3	528	0.2	0.3	0.2		×	
ST elevation MI (STEMI)	2009-2013	1,944	0.1	85	0.0	0.1	0.0		×	
Non-ST elevation MI (NSTEMI)	2009-2013	2,120	0.1	172	0.1	0.1	0.1		×	

As the first and fifth leading causes of death in the United States, as well as Missouri, heart disease and stroke are diseases which attract a great deal of time and resources from public health.^[7] One of the tasks for the Million Hearts program was to design a plan of action to address these diseases.

Developing a plan of action for a community or the state, can often be a daunting task, especially when dealing with a slew of community health related problems. Priorities MICA is a Missouri-specific tool that can assist communities focus their energies. This is a flexible tool that allows users to develop a rank order for diseases or risk factors based on user selected inputs. The tool is customizable and allows users to filter by geography, gender, age, or race. This tool can be used from the initial jumping off point of a community campaign or in the middle of one to further narrow the scope for action.

Missouri Million Hearts developed their own strategy by first pulling together a statewide collaborative consisting of: American Heart Association, Missouri State Medical Association, Primaris (a non-profit quality improvement company), Missouri Primary Care Association, Missouri Pharmacy Association, and the Missouri Department of Health and Senior Services. ^[8] By building a team of healthcare professionals from various healthcare related arenas the campaign was able to draw a wide scope of knowledge and opinions in order to identify the best way to approach initiating awareness of the diseases and implementing preventative practices.

Missouri Million Hearts identified groups at high risk of heart disease and stroke by examining differences by gender, age, geographic, and race. Another Missouri-specific tool that has been helpful in determining groups at risk is the County-Level Study (CLS). The CLS provides county level estimates for both risk factors and prevalence rates for many chronic diseases including heart disease and stroke. The CLS 2011--Health and Preventative Practices for Missouri Adults Profile is shown below. [9]

[8] Missouri Million Hearts Collaborative (2013). *Missouri Million Hearts Strategic Doing Action Plan: Preventing* 20,000 Heart Attacks and Strokes. Alpha Plan Version 1.3.

^[7] MODHSS (2016). Community Data Profiles. In Death Profile.

^[9] MODHSS (Missouri Department of Health and Senior Services) (2016). *Community Data Profiles*. In County Level Study 2011 Health & Preventive Practices for Missouri Adults. Retrieved from http://health.mo.gov/data/mica/County_Level_Study_12/header.php?cnty=929&profile_type=1&chkBox=C

County Level Study 2011 - Health & Preventive Practices for Missouri Adults

County-level Study Hump Select a different geographical area. Main profile page: Age-adjusted weighted percent. Print Profile.

Indicator	Number of Respondents	Prevalence (%)	95% CI Lower	95% CI Upper	Download Indicator Data	
Fair or poor general health status	50,529	20.1	19.4	20.8	36	AL
Activity limitation	50,491	24.1	23.3	24.9	- 14	A. B.
io health-care coverage - Ages 18-64	30,643	23.7	22.7	24.6	×	A
Could not get needed medical care in past 12 months	50,630	9.0	8.5	9.6	14	AM
Did not get medical care because of cost or no insurance - among those who needed medical care but could not get it in the past 12 months	3,431	71.7	68.8	74.6		A
Did not get medical care because of lack of transportation - among those who needed medical care but could not get it in the past 12 months	3,431	2.5	1,7	3,3	26	上
Did not get medical care because of other reasons - among those who needed medical care but could not get it in the past 12 months	3,431	25.8	22.9	28.7	36	上
ever been told had High Blood Pressure	50,506	34.4	33.5	35.2	×	AN
Ever had blood cholesterol checked - among age 35 and older	44,409	89.5	88.8	90.2	16	A
Ever been told had high cholesterol - among age 35 and older who have had cholesterol checked	40,010	44.8	43.7	46.0	×	4
Current authma	50,423	10.2	9.6	10.7	×	A
Ever been told had Cancer	50,658	9.4	8.9	9.9	×	A
Ever been told had COPD, emphysema or chronic bronchitis	50,484	8.0	7.6	8.5	×	A
Ever been told had Arthritis	50,568	29.4	28.6	30.2	34	AN
ever been told had a depressive disorder	50,549	20.7	19.9	21.4	×	AN
ever been told had kidney disease	50,581	2.5	2.3	2.8	×	A
iver been told have vision impairment	50,291	18.5	17.8	19.2	×	A
ver been told had diabetes	50,690	10.7	10.2	11.2	×	A
Overweight (25.0-29.9 BMI)	48,145	34.5	33.6	35.4	14	AN
Obese (>=30 BMI)	48,145	30.1	29.2	31,0	- X	AN

Note: the tabs at the top (Race, Gender, Rural-urban, etc.) show different categories by which each indicator can be broken down and viewed.

Educating public health stakeholders and the general public about high risk populations for heart disease, stroke, and contributing risk factors is a secondary goal for fulfilling Missouri Million Hearts 20,000 hearts mission. The "ABCS" strategy was a motto initiated to help individuals remember key factors to help reduce risk by taking Aspirin, checking Blood pressure, monitoring Cholesterol, and advocating for Smoking cessation. The ABCS have become a hallmark of the Missouri Million Hearts Campaign and is one of a number of ways in which the campaign has attempted to educate the public on preventative measures. Material for the public has been disseminated through pamphlets, posters, fliers, videos on You Tube, and through community outreach programs; these all have been used to help drive home the importance of preventative care. Trainings for the public program have been designed to teach individuals how to monitor their blood pressure. Additionally, the campaign has also placed standardized blood pressure monitoring machines at various locations around Missouri to help encourage regular blood pressure checks and ease access by which individuals may perform them. Warren Hays, a Program Evaluator with Missouri Actions to Prevent Chronic Disease says, "the Missouri Million Hearts Campaign is now focused on building awareness especially about the ABCS

^[10] Kummerfield, Kris (2015). *The Missouri Million Hearts Initiative*. [7-9]. Retrieved from https://webcache.googleusercontent.com/search?q=cache:QdNMyXQkis8J:https://www.heart.org/idc/groups/heart-public/%40wcm/%40mwa/documents/downloadable/ucm_461146.ppt+&cd=1&hl=en&ct=clnk&gl=us [11] K. Kummerfield (2015). *The Missouri Million Hearts Initiative*. [7-9]. Retrieved from https://webcache.googleusercontent.com/search?q=cache:QdNMyXQkis8J:https://www.heart.org/idc/groups/heart-public/%40wcm/%40mwa/documents/downloadable/ucm_461146.ppt+&cd=1&hl=en&ct=clnk&gl=us

among healthcare providers, that have direct contact with patients, whose heart health can be improved."^[12] Nurses, pharmacists, and physicians, have been instrumental in building interpersonal relationships with patients in order to encourage individuals to make better heart healthy choices in their everyday lives. These interactions help drive community change, especially in areas with low health literacy.

The Missouri Million Hearts Campaign is working on collecting quarterly qualitative data from teams to determine measures indicating progress on both common knowledge and prevention with patients. While the MICA system does not have a way to view "real time" quantitative measures, many of the queries can be made to show confidence intervals, which can be used to gauge overall progress from one year to the next. This method of evaluating results for campaigns, grants, or community initiatives, is especially useful when these programs span a series of years.

Currently in year five, Missouri Million Hearts has one additional year to spread the word on prevention and save lives. Kris Kummerfield a Missouri Health Department Planner and Missouri Million Hearts Coordinator says, "Public health has a vital role in the transformation of the health care system in the United States by facilitating stakeholder engagement, developing/maintaining surveillance systems and spearheading evidence-based interventions such as Million Hearts to enhance quality and address disparities in care." By utilizing the Missouri MICA tools to gather data and to make analytical assessments, campaigns in Missouri can cultivate plans of action and hopefully see measurable progress for state health initiatives.

Special thanks to Kris Kummerfield, keep up the good work for Missouri hearts!

A New Grant for BHCADD

Early this fall, the unit received word that Missouri was one of 12 states that had successfully applied for a grant through CDC for enhanced state surveillance of opioid related morbidity and mortality. The grant has 3 overarching strategies: 1) increase the timeliness of aggregate level Emergency Room visit data related to opioid and heroin 2) increase the timeliness of fatal opioid overdoses and associated risk factor reporting and 3) disseminate surveillance findings to key stakeholders working to prevent or respond to opioid overdoses. The grant offers the chance to partner with the Missouri Hospital Association, Medical Examiner and County Coroner offices throughout the state and many of the organizations and agencies that are working to mitigate the ongoing opioid epidemic that has seen death rates skyrocket both in the state and nationally in the past decade. Several presentations on this topic have already been given during the fall and winter of 2016. If you are interested in any of the preliminary findings or need additional data, please contact either Andy or Whitney for more information.

Upcoming Events and News

^[12] W. Hays, personal communication, July 14, 2016.

^[13] K. Kummerfield, personal communication, June 1, 2016.

BHCADD is working on the 2017 training schedule. These trainings will be based on the new MOPHIMS system. If you feel there is a need for these trainings in your area please contact Andy or Whitney.

In addition, BHCADD has several speaking engagements lined up related to the opioid grant discussed above as well as some demonstrations related to MOPHIMS. BHCADD is currently scheduled to speak on both topics at the DHSS/LPHA Conference scheduled for March 21-23 in Jefferson City. We hope to see some of you there.

Transitions/Final Thoughts

The BHCADD team has undergone a significant change during the past couple of months. There was both pleasure and regret in learning the news that Becca had accepted a promotion in the Department and would be leaving the unit in mid-September. Then in mid-November, the good news was announced that Whitney had accepted a promotion and would be taking over the lead position in the Data Dissemination team. Whitney has worked the past 3 years in BHCADD on a large variety of projects. Many of you have met her through the MICA training team. She has also worked to develop population estimates and projections, on hospital associated infections and in developing the annual hospital and emergency room data files. She has also been very involved with the development of the new MOPHIMS system that will be unveiled in 2017.

BHCADD asked Becca to pen a final Final Thoughts to close this edition of the Newsletter.

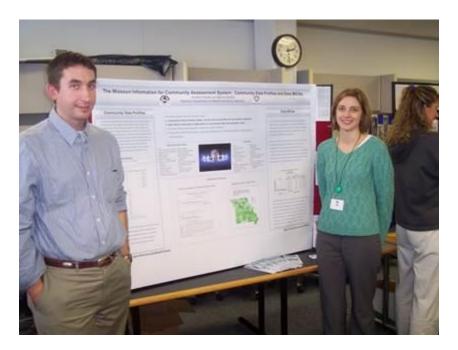
From Becca:

I think I have written almost every Final Thoughts piece since we started this newsletter. Sadly, this will be the last one because we have to say goodbye to ... me! Effective September 8, 2016, I accepted the position of Bureau Chief in the Bureau of Reportable Disease Informatics (BRDI) within the Section for Disease Prevention (SDP) here at the Department. BRDI is somewhat similar to BHCADD in that we work to gather, analyze, and report data; however, we are more specialized, focusing on communicable (infectious) diseases, sexually transmitted infections, and zoonotic diseases. Our two major data systems are WebSurv and ESSENCE (Missouri Electronic Surveillance System for Early Notification of Community-Based Epidemics). While I will miss working with MICA and the BHCADD team, I like to learn new things so trying to understand all of the information in BRDI is an exciting challenge for me. And I am not that far away from my old team. BHCADD and BRDI are collaborating on several projects, and I actually attended a meeting with Andy and Whitney this morning. It will be fun to see what the future will hold for the MICA team and all of the new ideas that new staff will surely bring.

One of my favorite tasks over the years was developing the MICA newsletter, and I appreciate the opportunity to write one more time to say thank you to everyone at the Department, the LPHAs, and all the other organizations and individuals around the state who supported not only me but our entire team over the last nearly eight years that I was part of first the Bureau of Health Informatics (BHI) and then BHCADD. During my interview for my first position at DHSS, I recall Andy asking a question along the lines of, "We're trying to start up some trainings to help people better understand the data we provide. What would you think about helping with trainings?" I am pretty sure my response was something like, "Giving trainings would be awesome!" I vividly remember figuring out how MICA worked for one of my first assignments, which was to write a training manual on how MICA

worked. Back then, Andy and I would frequently say to each other that different goals for the MICA trainings were "beyond our wildest dreams" – for example, that we would actually fill a training site, have enough interest to offer the course for a second year, etc. The fact that the courses have not only continued for eight years, with two additional courses developed, nearly 800 people trained, and almost 5,000 people on the MICA contact list, but that we would be able to expand the training team as well as be invited to speak to national audiences twice would truly have been beyond our wildest dreams back then. None of that would have been possible if not for those of you who sponsored us or even just took a chance on listening to us drone on about health statistics for an entire day and then passed the word along that it was not only useful but actually "kind of fun."

Here is a photo from the early days (circa 2009) of the Data Dissemination Team when we were a team of two.



About the MICA User Group Newsletter

The MICA User Group Newsletter was created in response to user requests for communication on updates to the MICA system, descriptions of new features, additional practice exercises, announcements of training opportunities, and any other new information about data that might help them perform their jobs more efficiently.

Newsletters will be published on a quarterly basis. If you have ideas for content, please send them to Andrew.Hunter@health.mo.gov or Whitney.Coffey@health.mo.gov. We would especially like to feature stories describing your success at completing projects or obtaining grants using the MICA tools as well as interviews with public health professionals about your duties and how you use MICA to accomplish them.

Past issues are available at http://health.mo.gov/data/mica/MICA/newsletters.html.

Contributors:
Andy Hunter, Kristina Johnson, Whitney Coffey, and Becca Mickels
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# **How to Sign Up or Opt Out**

If you have enjoyed this newsletter, please feel free to share it with your colleagues and community partners. We encourage them to sign up for the MICA User Group by sending an e-mail to <a href="mailto:Andrew.Hunter@health.mo.gov">Andrew.Hunter@health.mo.gov</a> or <a href="https://www.Whitney.Coffey@health.mo.gov">Whitney.Coffey@health.mo.gov</a> with the subject line "MICA User Group". This will let us know to send newsletters to them directly so they do not miss any information. Also, we may occasionally distribute time-sensitive information on topics such as training opportunities via e-mail if the newsletter is not scheduled for publication prior to a registration deadline. Finally, the MICA User Group list helps us track the types of organizations using the tools, which is one of our performance measures.

If you would like to opt out of the MICA User Group, please send an e-mail with "Unsubscribe" in the subject line to <a href="https://www.coffey@health.mo.gov">whitney.coffey@health.mo.gov</a>. PLEASE NOTE: Depending on your position title, you may still receive other types of e-mail messages from us. For example, we are requested to send training information to all LPHA Administrators, even if they have unsubscribed from the MICA User Group.

#### **Contact Information**

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