

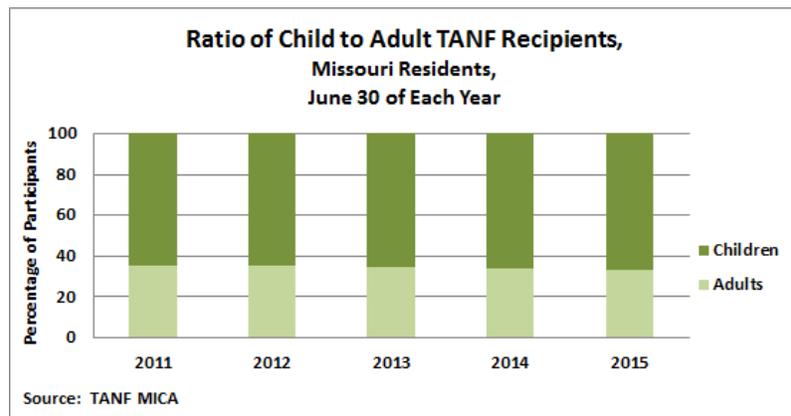
The MICA system shares public assistance program enrollment data from the Missouri Department of Social Services through two tools: the Medicaid (or MO HealthNet) MICA and the TANF (Temporary Assistance for Needy Families) MICA. The feature article in the February 2016 issue of this newsletter analyzed some of the data available from the Medicaid (or MO HealthNet) MICA. This issue’s feature article will focus on the TANF MICA.

The TANF program has four main purposes which are: “assisting needy families so that children can be cared for in their own homes; reducing the dependency of needy parents by promoting job preparation, work and marriage; preventing out-of-wedlock pregnancies; and encouraging the formation and maintenance of two-parent families.”¹

TANF, “also known as Temporary Assistance (TA), is a program designed to provide cash benefits to low-income families for the household’s children such as clothing, utilities and other services. Upon approval of TA, the recipient must participate in employment and training services through the Missouri Work Assistance (MWA) program. The MWA program helps TA recipients transition from TA to a job by helping set goals and get the skills needed to find a job and support the recipient’s family.”² TANF participants may also be subject to drug testing. As of January 1, 2016, TANF cash benefits can be received for only 45 months unless the participant meets special criteria.³

The TANF MICA provides monthly enrollment data for every year going back to 1998. The data represent a snapshot of TANF participation based on enrollment figures on the last day of a given month. Thus, there are limitations to these data. The figure for a particular month does not include participants who were enrolled in the program at the beginning of the month but terminated participation before the last day of the month. Conversely, the figure will include participants who were enrolled on the last day of the month even if they were only enrolled for that day. Because of these limitations, users of this MICA cannot obtain an unduplicated count of all persons enrolled in the program for a calendar year. However, there is still much analysis that can be conducted with the available data.

The TANF MICA allows users to create four different types of tables: adult, child, person, and family tables. The number of recipients on the adult table plus the number of recipients on the child table equals the number of recipients on the person table. As the name implies, the family table figures represent the number of families receiving benefits, regardless of the number of persons within the family. Analysis of a combination of the data found in the adult, child, and person tables reveals that the vast majority of TANF recipients in each year are children.



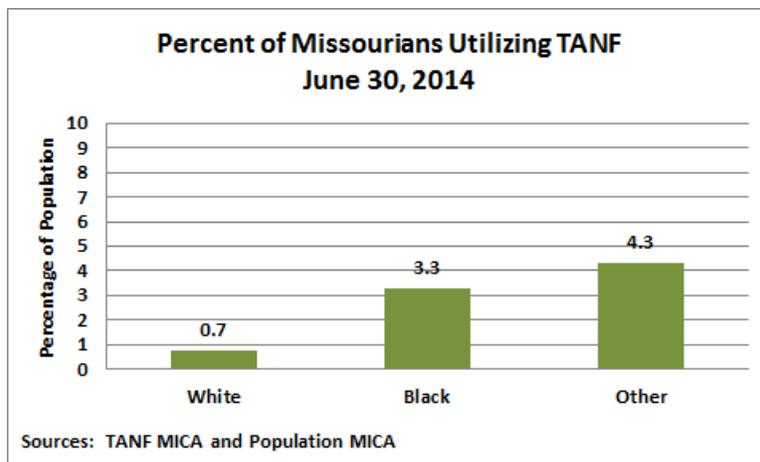
The four table options include some different variables. Step Four on the family TANF query allows an analysis of the number of children in each family. As the following table demonstrates, the majority of TANF recipients (92.8 percent) have between 1 and 3 children. The number of adults per family can also be analyzed using the family tables.

**Missouri TANF Recipients
June 30, 2015**

| Number of Children per Family | Number of Families | Percentage of TANF Families |
|-------------------------------|--------------------|-----------------------------|
| None | 394 | 1.4 |
| One | 13,940 | 51.1 |
| Two or Three | 11,376 | 41.7 |
| Four or Five | 1,432 | 5.2 |
| Six or More | 147 | 0.5 |
| Total | 27,289 | 100.0 |

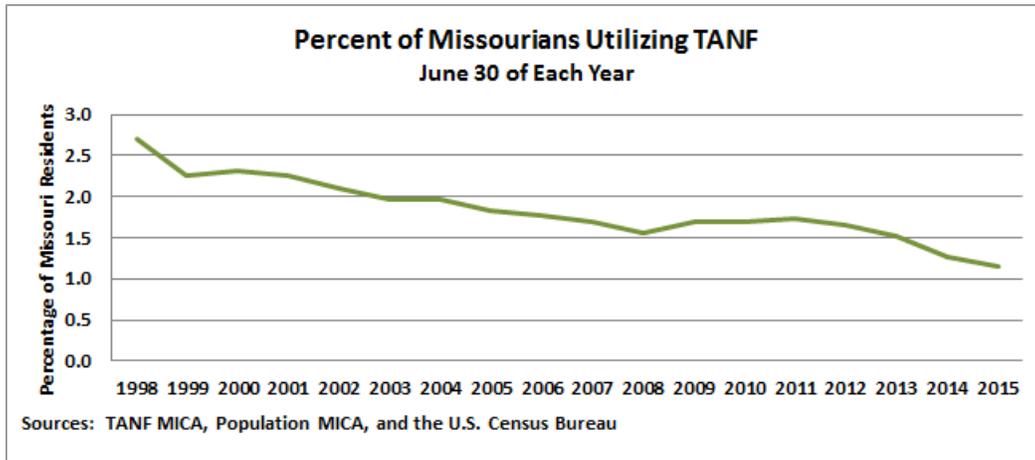
Source: TANF MICA

The adult, child, and person tables provide a few variables that allow the demographics of TANF participants to be analyzed. These variables include race, sex, and age. Education level is also available on the adult tables. The number of TANF participants in a particular demographic group can be obtained from the TANF MICA and then divided by the number of Missouri residents in that demographic group, which is available from the Population MICA, to determine the TANF participation percentage. For example, percentages in the bar graph below were calculated by dividing the number of TANF participants in each race group by the number of Missouri residents in each race group.



The same type of calculation can be performed to determine changes in the rate of TANF participation among Missouri residents over time. (The 2015 population estimate was obtained from the U.S. Census Bureau.)⁴ TANF enrollment has declined fairly steadily from a high of 2.7 percent of Missouri residents in June 1998 to a low of 1.2 percent of Missouri residents in June

2015, a decrease of more than 57 percent. Over this time period, changes to the TANF program reduced the amount of time that participants could continue to receive benefits.



References

¹Missouri Department of Social Services (August 2015). Overview of Temporary Assistance for Needy Families. Accessed April 20, 2016, from <http://dss.mo.gov/fsd/pdf/temporary-assistance-overview.pdf>.

² Missouri Department of Social Services. (August 30, 2015). Temporary Assistance. Accessed April 20, 2016, from <http://dss.mo.gov/fsd/temporary-assistance.htm>.

³ Missouri Department of Social Services (August 2015). Overview of Temporary Assistance for Needy Families. Accessed April 20, 2016, from <http://dss.mo.gov/fsd/pdf/temporary-assistance-overview.pdf>.

⁴ U.S. Census Bureau, Population Division. (December 2015). Estimates of the Components of Resident Population Change: April 1, 2010 to July 1, 2015. Accessed April 20, 2016, from American Factfinder at <http://www.census.gov>.

2014-2015 Health in Rural Missouri Biennial Report Posted

The Office of Primary Care and Rural Health (OPCRH), with assistance from the Bureau of Health Care Analysis and Data Dissemination, recently published the *2014-2015 Health in Rural Missouri Biennial Report*. This report includes an analysis of the health of rural Missourians in order to contextualize the activities and recommendations of the OPCRH. The report utilizes a dichotomy between rural and urban counties to highlight and promote understanding of health issues in rural Missouri. It also presents compelling evidence that geographic location within the state has a significant bearing on health. The report covers five specific areas: Demographic and Socioeconomic Indicators; Health Status; Maternal, Infant and Child Health; Health Behaviors/Risk Factors; and Health Care Resources. The full report is available on the OPCRH website at <http://health.mo.gov/living/families/ruralhealth/publications.php>.

New Data Tables Posted on the MoCHAPS Website

The Office of Epidemiology recently posted several new data tables on the MoCHAPS website. MoCHAPS, or the Missouri Child Assessment Program Survey, provides statewide estimates of important health indicators for mothers and their two-year-old children. MoCHAPS collects data through a survey mailed to mothers who responded to the Pregnancy Risk Assessment Monitoring System (PRAMS) survey two years earlier. The information collected from MoCHAPS is used to help understand current issues of maternal and child health and identify new areas that need attention. MoCHAPS data also help doctors and nurses improve care and help make better use of health resources. The new data tables cover Child Activities; Child Safety/Injury; Child Nutrition; Food Insecurity; and Vitamin Use. These data tables and other information about MoCHAPS are available at <http://health.mo.gov/data/mochaps/>.

Public Health Spotlight



The Data Dissemination Unit is excited to present two new analysts who will be serving as MICA trainers this summer!

Kristina Johnson (left) and Cassie Pritchett (right) both wore what is apparently the official uniform of new MICA training employees for their interview photo.

Cassie Pritchett holds a unique position at the Department of Health and Senior Services (DHSS); she works in two Bureaus – the Bureau of Vital Statistics (BVS) and the Bureau of Health Care Analysis and Data Dissemination (BHCADD). This means that she has to learn about many different projects and datasets. Since joining the teams in February, she has worked with data related to such varied topics as teen pregnancy, infant mortality, agricultural injuries, and oral health. Cassie came to DHSS from the Missouri Department of Economic Development, where she worked for a year and a half as a research analyst. When asked about her transition to public health, Cassie remarked that she was intrigued by the challenge of working with all of these different types of data because “health is very different from the business world.”

Cassie earned a Marketing degree from Missouri State University in Springfield and also completed some coursework in education. Before working in state government, she taught junior high and high school classes in Lebanon and other locations. Though she is no longer in school, Cassie enjoys attending lectures on a variety of topics and hopes to one day tackle a postgraduate degree. In the meantime, as part of her introduction to DHSS, she has been taking several classes and orientations related to public health. These included recent sessions of the first two MICA training courses, *Introduction to Profiles and MICA* and *Health Data Analysis*. Cassie said that she enjoyed the trainings but was surprised by their informal nature, as she was expecting a more traditional lecture setting. She found the relaxed approach a welcome surprise that “took down barriers. It made it easy to ask questions and be involved.” One of the job duties she is most excited about is getting back into the teaching groove as a MICA trainer this summer. “It’s neat to see eyes light up when people really get something,” she says.

Outside of the office, Cassie enjoys a variety of both indoor and outdoor hobbies. When the weather keeps her inside, she enjoys drawing and participating in the occasional trivia contest. However, when the weather cooperates, she prefers to enjoy the sunshine by walking trails and biking; she’s anxious to get some new equipment so she can traverse the Katy Trail. Cassie also hopes to travel the state this summer and is looking forward to visiting the St. Louis Zoo for the first time ever.

Kristina Johnson is the newest member of the BHCADD team, and she has started off running during our busy season of training preparations, presentations, and exhibits. Fortunately, as the youngest of six kids she is used to chaos! She’s also used to handling varied tasks. After finishing her bachelor’s degree in political science from the University of Missouri – Columbia, Kristina went back and earned another degree, this time in chemistry with an emphasis in biology. Both of these fields will prove useful in her current role as a Research Analyst I, where she will not only be working with a wide variety of data sets and organizing large data files but also interpreting the data in writing and through presentations, exhibits, and trainings. If you happen to catch one of this summer’s classes in St. Louis, Kansas City, or Jefferson City, you will have the opportunity to meet her as she first takes the courses herself and then steps into the trainer role. Kristina candidly says that she “still has a lot to learn” but is looking forward to the process.

When asked what drew her to the field of public health, Kristina replied that she’s “...always had it in mind.” Throughout both of her degree programs and during her previous positions as a pharmacy technician, the idea that she’d one day break into this profession was always in the back of her mind. It’s not a leap to see how each of her fields of study connect with population health; her background in biology gives her a better understanding of many of the indicators she will be analyzing, while many of the social, economic, and accessibility issues that relate to public health also tie into political science. Some of the data she has already provided to organizations around Missouri will be used for resource allocation or epidemiology at the neighborhood level.

Outside of work, Kristina is enjoying the transition into spring because she loves planting and gardening. Her living room is currently packed with plants, many of which she is starting to move outdoors. Her delight in nature was readily apparent as she spoke of the smells and textures of dirt and her realization that if you really pay attention to plants, you can discern growing habits and peculiarities over time. When she's not employing her very green thumb, Kristina can be found exploring the outdoors, hiking, and swimming.

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### Upcoming MICA Trainings

MICA trainings have been scheduled in three locations this summer. The summer schedule is provided below. Additional information is available from our training website at <http://health.mo.gov/data/mica/MICA/healthdatatraining.html>.

All of our training courses are currently full. However, if you are interested in taking the courses, please register to be placed on the waitlist. We often receive many cancellations as the summer progresses and contact waitlisted registrants as spots become available. We can also use the waitlist to determine if we need to offer additional sessions in a particular location.

| <b>Location:</b>                                                                                                    | <b>Course 1:<br/>Introduction to Profiles/MICA</b> | <b>Course 2:<br/>Health Data Analysis</b> | <b>Course 3:<br/>Health Data Workshop</b> |
|---------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|-------------------------------------------|-------------------------------------------|
| <b>BJC @ The Commons</b><br>Room 113<br>4249 Clayton Avenue<br>St. Louis, MO 63110                                  | June 14<br>Deadline: June 1                        | June 15<br>Deadline: June 1               | N/A                                       |
| <b>Kansas City Health Department</b><br>IT Training Room 2<br>2400 Troost Avenue<br>Kansas City, MO 64108           | July 6<br>Deadline: June 23                        | July 7<br>Deadline: June 23               | N/A                                       |
| <b>MOTEC (Missouri Technical Training and Education Center)</b><br>1738 East Elm Street<br>Jefferson City, MO 65101 | August 2<br>Deadline: July 12                      | August 3<br>Deadline: July 12             | August 4<br>Deadline: July 12             |

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Evidence-Based Decision Making Training

The Missouri Department of Health and Senior Services and the Prevention Research Center in St. Louis will be holding the next Evidence-Based Decision Making course August 23-25, 2016, at the Saint Louis University Salus Center. The course is designed to increase participants' understanding of evidence-based principles and to increase the utilization of systematic approaches in day-to-day public health practice. The material covered in the course applies to all public health and senior services practitioners seeking to use resources effectively and efficiently. The course begins at 8:00 a.m. on Tuesday, August 23 and ends at 12:30 p.m. on Thursday, August 25. There is no registration fee, but participants must cover their own travel expenses (hotel rooms are available at a fixed rate if desired). For more information, please

contact Linda Dix, Evidence-Based Public Health Course Coordinator, at 314-935-0121 or ldix@wustl.edu.

Course is limited to 25 participants. You will receive a confirmation email for the course.

To register for the course please go to:

http://sswwustl.az1.qualtrics.com/SE/?SID=SV_e2uVGUpciWgCoVT

Data Updates

Several of the Profiles and Data MICAs have been updated since the publication of the last newsletter. They include:

Birth MICA – through 2014 (April 12)
Death MICA – through 2014 (March 16)
Medicaid Records MICA – through February 2016
TANF (Temporary Assistance for Needy Families) MICA – through February 2016

Assault Injury Profile – through 2013 (April 12)
Chronic Disease Comparisons Profile – through 2013 (March 17)
Emergency Room Profile – through 2013 (March 9)
Hospitalization – Inpatient Profile – through 2013 (March 17)
Self-Inflicted Injury Profile – through 2013 (April 12)
Unintentional Injury Profile – through 2013 (April 12)

Recent/Upcoming Events

An objective for one of the Data Dissemination Unit's grants is that the team will provide at least three customized presentations for public health audiences during the grant year. We managed to exceed that goal between the months of January and April by providing ... nine presentations! Andy and Becca started in January by providing a webinar on substance abuse and violence data available in the MICA system for ACT Missouri, which promotes drug and alcohol awareness through community groups. In February, they gave an overview of the MICA system to a capstone course in the Master of Public Health program at the University of Missouri – Columbia.

On March 2, Andy and Becca had the opportunity to share some test screens for the next version of MICA with several local health department staff at the DHSS/LPHA (Local Public Health Agency) Conference in Columbia. The LPHA staff provided valuable input that continues to be used as we work to develop the new tools. On the second day of the conference, Andy presented data related to Missouri opioid and heroin deaths, emergency room visits, and hospitalizations as part of a panel presentation on issues related to the use of these substances.

Andy and Whitney have been working on a long-term linkage project between hospital data and the state's sickle cell registry to determine whether participation in certain treatment programs decreases the need for hospital admissions. (We are aware of only a small number of other states that have conducted a similar study.) They were able to provide the results of this study to the Sickle Cell Advisory Committee on March 10. Committee members were able to provide some additional insights that will be used to modify the study going forward.

On April 15, Becca and Whitney again presented data on teen pregnancy and birth outcomes at the Teen Pregnancy and Prevention Partnership (TPPP) Conference in St. Louis. Last year, they presented on data for several counties in the St. Louis area. This year, they shared rates for four different levels of population density that were used to represent a continuum of rural to urban counties in Missouri. They also exhibited at the conference by providing demonstrations of the MICA tools and displaying a poster that highlighted some of the teen pregnancy data available in the tools.

On Wednesday of the following week, Andy and Becca shared the highlights of the MICA system with new LPHA administrators during their orientation at the Department. That afternoon, they left for the Missouri Health Information Management Association (MoHIMA) Annual Meeting in Blue Springs.

They were invited to this meeting to explain how data from patient records get into state and national databases and to share some examples of how these data are then used for public health purposes. Andy and Becca gave the same presentation twice, to HIM students on Thursday and to HIM faculty and other professionals on Friday. While attending the conference, they also had the opportunity to learn a bit more about ICD-10 and other data projects that are currently underway in the state.



But ... that's not all! In between all these presentations, the team also managed to squeeze in an exhibit at the Missouri Oral Health Conference on March 10-11 and offer MICA trainings in Jefferson City on March 22-23. Whitney also made it to Atlanta to attend the *Applying the 2016 Changes to Accurately Report HAIs* training course offered by the National Healthcare Safety Network (NHSN) on February 29 – March 4. (At that point in time, we had team members at three different events in three different states – Whitney in Georgia, Andy and Becca at the DHSS/LPHA Conference here in Missouri, and Cassie at SAS training in Des Moines, Iowa.)

Is it time for summer vacation yet? Oh, wait ... around here summertime means ... MICA training season! (Dates and locations are available in the Upcoming MICA Trainings section above.)

Q&A

I provide data support to several different programs and frequently use Patient Abstract System (PAS) data on emergency room visits and inpatient hospitalizations. I have looked at your MICA tools and also read the PAS documentation posted on your website. That information was very helpful. However, some of the fields that we would like to analyze do not seem to be available. Could you please add those fields to your data files? Thank you!

This type of question/request is frequently asked of BHCADD staff at MICA trainings and also through data requests, so we thought this would be an excellent topic to address in the Q&A section of the newsletter. As this reader indicates, documentation of the Patient Abstract System (PAS) is available on the Department of Health and Senior Services (DHSS) website at <http://health.mo.gov/data/patientabstractsystem/index.php>. This documentation discusses the development of the PAS and also provides a link to a list of all of the data elements that may be requested from the PAS. (Similar information is provided for the Vital Statistics datasets at <http://health.mo.gov/data/vitalstatistics/index.php> after a specific type of vital statistic – deaths, fetal deaths, live births, or marriages – is selected.)

The data elements currently included on the PAS list are those that have been specified for collection through Missouri statutes and administrative rules. Section 192.667 of the Missouri statute authorizes the DHSS to collect patient abstract data, while administrative rule 19 CSR 10-33.010 provides a detailed file layout of the fields that are to be reported to the Department. The existing rule is available at <http://s1.sos.mo.gov/cmsimages/adrules/csr/current/19csr/19c10-33.pdf> and provides a link to the current file layout. This administrative rule would have to be changed to specify any new fields that would be reported to the Department.

It is possible to make changes to administrative rules through the process described on the Missouri Secretary of State website at <http://www.sos.mo.gov/adrules/>. This is a lengthy process that requires the DHSS to seek input from stakeholders. The DHSS must also provide estimates of the financial impact, as changes to the PAS rule can be expensive to implement. For example, if the DHSS requires that additional fields be reported by hospitals and ambulatory surgical centers (ASCs), each Missouri facility would potentially have to modify existing electronic and/or paper systems in order to capture this new field. Systems with the DHSS would have to be altered as well. Therefore, changes are typically only made if there are major changes required. For instance, the last PAS rule change took effect on September 30, 2015. This change reflected the federal requirement that facilities begin reporting data using ICD-10 (International Classification of Diseases, Tenth Revision) codes on October 1, 2015. The previous version of the Missouri PAS rule specified that facilities must report using ICD-9 codes. Without the rule change, facilities would have been required to report ICD-10 codes to the federal government and ICD-9 codes to the state.

Therefore, it is possible to change the fields collected for emergency room visits and inpatient hospitalizations. However, these are not changes that can be determined by individual DHSS staff.

Practice Exercise

Many of you have asked for additional exercises such as the one below so that you can practice the skills you learned at the MICA trainings. If you would like to check your work, a link to the answer key is provided at the bottom of this section.

As a coach at a local high school, you are concerned about the risk of dehydration for your athletes. You wonder how commonly dehydration occurs in Missouri and decide to use the MICAs and Profiles to research this condition.

1. You start by reviewing the Emergency Room Profile. What is the most recent Missouri emergency room (ER) visit rate for fluid and electrolyte disorders (dehydration)?

2. You create a significance map to see which areas of the state are more impacted by dehydration. You are surprised to learn that many of the counties in the northern part of the state have significantly high rates. Which county has the highest rate? _____
3. You notice that the Missouri Emergency Profile has a Race tab at the top. You click on it to view the data by race. Which race group has the higher dehydration ER visit rate?

4. You decide to check the Inpatient Hospitalization Profile to see if data would be available on more serious cases of dehydration. How many Missouri residents were hospitalized for fluid and electrolyte disorders (dehydration) in the most recent year? _____
5. You wonder about the financial impact of dehydration on Missouri. After some searching, you find fluid and electrolyte disorders under the Nutritional – metabolic – immunity grouping in the Hospital Discharges, Charges and Days of Care MICA. You create a table showing the hospital charges for the most recent year. What was the initial amount charged for Missouri residents with a primary diagnosis of fluid and electrolyte disorders? _____
6. According to the Hospital Discharges, Charges and Days of Care MICA, how many inpatient hospitalizations (i.e., hospital discharges) of Missouri residents were due to fluid and electrolyte disorders? _____ Does this figure match the answer to #4 above? _____
7. What is the average initial hospitalization charge per patient for Missouri residents with a primary diagnosis of fluid and electrolyte disorders? (HINT: Divide the #5 answer by the #4 answer.) _____

Visit <http://health.mo.gov/data/mica/MICA/solutions.html> to check the solution.

The Luckiest Person Ever to Attend MICA Training

Erin Meyers, a policy analyst for the Institute of Public Policy at the University of Missouri – Columbia, is arguably the luckiest person ever to attend MICA training. On March 22 (now a historic date), Erin became the first MICA training participant throughout our seven years of offering these courses to guess the EXACT number of jelly beans in the jar. Within the hour, she then became the first MICA training participant to ever flip 10 heads from the coin toss. The next day, another participant pulled her name from the bowl to allow her to compete in the *Health Data Analysis* game. Sadly, her luck must have run out at that point, because she did not walk away with the grand prize – or maybe that just goes to show that sometimes probability trumps even luck. Erin left the courses with more health data knowledge and several recommendations to purchase a bunch of lottery tickets on the way home.



(All of the games mentioned above are regular features of the MICA trainings. If you would like the chance to test your luck against statistics, information about this summer's trainings is available in the Upcoming MICA Trainings section of this newsletter.)

Final Thoughts

Sometimes it's the little things that can brighten an entire day ... like the variety of ribbons available to decorate the name badges at the MoHIMA Annual Meeting which Andy and Becca attended on April 21-22 (see the Recent/Upcoming Events section). When she found these, Becca exclaimed, "Well, they knew we were coming!" (Information on health data rock stars is available in the 13th issue of this newsletter, which was published in September 2015.)



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 Becca.Mickels@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, Becca Mickels, Whitney Coffey, David Kelly, and Cassie Pritchett

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 Andrew.Hunter@health.mo.gov or Becca.Mickels@health.mo.gov 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 Becca.Mickels@health.mo.gov. 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.

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