

As the saying “An ounce of prevention is worth a pound of cure” so wisely illustrates, it is better to prevent an illness before it occurs than to attempt to treat it. If we all adhered to this proverb, fewer people would get sick. We would not only save lives but as a society would have a better health-related quality of life and lower health care costs. Preventive measures range from relatively simple daily tasks such as hand washing or wearing a seat belt to common health screenings, such as occasional blood pressure checks and annual mammograms. Preventive practices are of such great importance to both personal and public health that the Patient Protection and Affordable Care Act (ACA) now mandates the following preventive measures be included in health care coverage: smoking cessation, weight management, stress management, physical fitness, nutrition, heart disease prevention, healthy life support and diabetes prevention.<sup>1</sup>

Public health practitioners need to know what types of preventive health measures are and are not being performed in order to better target interventions and health education messages. In Missouri, the MICAs and Profiles provide data on several indicators related to preventive health measures as well as risk factors that may potentially lead to preventable health conditions. These types of data are available through two surveillance systems, the Behavioral Risk Factor Surveillance System (BRFSS) and the County-level Study (CLS). Several Community Data Profiles incorporate indicators from these surveillance systems. The Profiles are available at <http://health.mo.gov/data/CommunityDataProfiles/index.html>. For example, the County-Level Study series of Profiles includes multiple indicators on smoking practices and beliefs through the Secondhand Smoke, Tobacco Cessation, and Tobacco Use Profiles. The Health and Preventive Practices Profile contains several indicators on a variety of preventive health measures ranging from physical activity to dietary practices to health screenings.

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

[County-level Study Home](#) [Select a different geographical area](#) [Main profile page](#) [Age-adjusted weighted percent](#) [Print Profile](#)

| All  | Race | Gender | Age | Income | Rural-urban           | Education Level |              | Health Insurance Status |                         |  |
|--|------|--------|-----|--------|-----------------------|-----------------|--------------|-------------------------|-------------------------|--|
| Indicator  |      |        |     |        | Number of Respondents | Prevalence (%)  | 95% CI Lower | 95% CI Upper            | Download Indicator Data |  |
| <a href="#">No leisure time physical activity</a>  |      |        |     |        | 50,569                | 23.7            | 22.9         | 24.5                    |                         |  |
| <a href="#">Use walking trails, parks, playgrounds or sports fields for physical activity</a>          |      |        |     |        | 49,875                | 44.6            | 43.6         | 45.5                    |                         |  |
| <a href="#">Have sidewalks in their neighborhood</a>   |      |        |     |        | 50,546                | 53.7            | 52.9         | 54.6                    |                         |  |
| <a href="#">Have roads and streets with shoulders or marked lanes for bicycling in their community</a> |      |        |     |        | 49,843                | 31.8            | 30.8         | 32.7                    |                         |  |
| <a href="#">Consider their neighborhood to be extremely or quite safe</a>                              |      |        |     |        | 49,952                | 80.4            | 79.7         | 81.2                    |                         |  |
| <a href="#">Strongly agree or agree that it is easy to purchase healthy food in their neighborhood</a> |      |        |     |        | 49,704                | 82.1            | 81.4         | 82.8                    |                         |  |
| <a href="#">Ate fruits and vegetables less than 5 times per day</a>                                    |      |        |     |        | 50,449                | 87.5            | 86.8         | 88.1                    |                         |  |
| <a href="#">Never had a mammogram - among women age 40 and older</a>                                   |      |        |     |        | 26,848                | 9.9             | 9.0          | 10.7                    |                         |  |
| <a href="#">No mammogram or clinical breast exam in last year among women age 40 and older</a>         |      |        |     |        | 26,319                | 30.5            | 29.2         | 31.8                    |                         |  |
| <a href="#">Never had a pap smear - among women age 18 and older</a>                                   |      |        |     |        | 31,234                | 7.5             | 6.7          | 8.3                     |                         |  |
| <a href="#">No pap smear in last 3 years - among women age 18 and older</a>                            |      |        |     |        | 30,703                | 26.4            | 25.3         | 27.5                    |                         |  |
| <a href="#">Never had a blood stool test - Among men and women age 50 and older</a>                    |      |        |     |        | 35,032                | 66.1            | 64.9         | 67.2                    |                         |  |
| <a href="#">No blood stool test in last year - among men and women age 50 and older</a>                |      |        |     |        | 34,640                | 90.4            | 89.7         | 91.1                    |                         |  |

\* = Percents are not provided for indicators with less than 50 respondents.

County-Level Study data are provided for all 115 Missouri counties, the overall state, Kansas City, and the seven BRFSS regions. County-Level Study Comparison Profiles are also available so that preventive measures can be compared between 2007 and 2011.

**County Level Study 2007-2011 Comparison - Health & Preventive Practices for Missouri Adults**

[County-level Study Home](#) [Select a different geographical area](#) [Main profile page](#) [Age-adjusted weighted percent](#) [Print Profile](#)

| Indicator  | 2007 Number of Respondents | 2007 Prevalence (%) | 2011 Number of Respondents | 2011 Prevalence (%) | Prevalence difference 2007-2011 (%) | Significant change 2007 to 2011 H/L/NS |
|--|----------------------------|---------------------|----------------------------|---------------------|-------------------------------------|--|
| <a href="#">Current asthma</a>   | 49,305                     | 9.5                 | 50,423                     | 10.2                | 0.7                                 | NS                                     |
| <a href="#">Ever told had diabetes</a>   | 49,477                     | 9.7                 | 50,690                     | 10.7                | 1.0                                 | H                                      |
| <a href="#">Never had mammogram - among women age 40 and older</a>                               | 23,158                     | 9.0                 | 26,848                     | 9.9                 | 0.8                                 | NS                                     |
| <a href="#">No mammogram or clinical breast exam in last year - among women age 40 and older</a> | 22,910                     | 28.9                | 26,319                     | 30.5                | 1.6                                 | NS                                     |

Both County-Level Study and BRFSS data are reported in other Profiles when relevant. For example, the Diabetes Profile includes several indicators on preventive measures taken by diabetics.

**Diabetes Profile - for Missouri Residents**

[Select a different geographical area](#) [Main profile page](#) [Print profile](#)

| All Race   |           | Data Years | Population Estimate | Weighted Percent | Significantly Different | Comparison/Bar Graphs | Download Data |
|--|-----------|------------|---------------------|------------------|-------------------------|-----------------------|---------------|
| <b>Risk factors for diabetes among adults 18 years and older</b>               |           |            |                     |                  |                         |                       |               |
| <b>Preventative care practices among adults with diabetes</b>                  |           |            |                     |                  |                         |                       |               |
| <b>BRFSS ‡</b>   |           |            |                     |                  |                         |                       |               |
| <a href="#">Teeth cleaned within past year</a>                                 | 2008&2010 | 178,736    | 51.6                |                  |                         |                       |               |
| <a href="#">Current health coverage</a>  | 2008-2010 | 359,056    | 90.4                |                  |                         |                       |               |
| <a href="#">A1C tests within the past year - 0 to 1 tests</a>                  | 2008-2010 | 71,405     | 29.5                |                  |                         |                       |               |
| <a href="#">A1C tests within the past year - 2 to 3 tests</a>                  | 2008-2010 | 89,186     | 36.9                |                  |                         |                       |               |
| <a href="#">A1C tests within the past year - 4 or more tests</a>               | 2008-2010 | 81,322     | 33.6                |                  |                         |                       |               |
| <a href="#">Annual foot exam by a health care professional</a>                 | 2008-2010 | 180,962    | 72.6                |                  |                         |                       |               |
| <a href="#">Last dilated eye exam - within the last year</a>                   | 2008-2010 | 167,941    | 66.5                |                  |                         |                       |               |
| <a href="#">Last dilated eye exam - more than 1 year but less than 2 years</a> | 2008-2010 | 29,612     | 11.7                |                  |                         |                       |               |
| <a href="#">Last dilated eye exam - 2 or more years</a>                        | 2008-2010 | 54,969     | 21.8                |                  |                         |                       |               |
| <a href="#">Daily self checks for blood glucose</a>                            | 2008-2010 | 163,703    | 64.5                |                  |                         |                       |               |
| <a href="#">Flu shot within the past year</a>                                  | 2008-2010 | 256,059    | 65.0                |                  |                         |                       |               |
| <a href="#">Pneumonia vaccination</a>  | 2008-2010 | 221,975    | 58.3                |                  |                         |                       |               |
| <a href="#">Self-management education course</a>                               | 2008-2010 | 147,420    | 57.8                |                  |                         |                       |               |

Although several BRFSS indicators and the BRFSS Region definitions are utilized by the Profiles and MICAs, a multitude of other BRFSS indicators, including several on preventive measures, are only available through PDF reports published at

<http://health.mo.gov/data/brfss/data.php>. Below is a partial table displaying Missouri overall and regional prevalence and age-adjusted prevalence estimates of adults who have cut down on salt to help lower or control high blood pressure. The rest of the table, which is not shown, provides estimates by gender, race, education, and income levels.

**MISSOURI BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM - 2011**

*Chapter 22 Actions to Control High Blood Pressure (HBP)*

**Table 22.2 Cutting down on salt to help lower or control HBP**

*Prevalence and Age-adjusted Prevalence with 95% Confidence Intervals (CI)*

| Demographic       | Sample Size | Prevalence |          |          | Age-adjusted Prevalence |          |          |
|-------------------|-------------|------------|----------|----------|-------------------------|----------|----------|
|                   |             | %          | Lower CI | Upper CI | %                       | Lower CI | Upper CI |
| OVERALL           | 2,336       | 75.3       | 72.6     | 78.1     | 75.5                    | 70.5     | 80.4     |
| <b>REGION</b>     |             |            |          |          |                         |          |          |
| Central           | 279         | 77.9       | 71.1     | 84.8     | 77.0                    | 65.6     | 88.3     |
| Kansas City Metro | 443         | 72.0       | 65.6     | 78.3     | 68.0                    | 55.9     | 80.1     |
| Northeast         | 260         | 74.2       | 67.7     | 80.8     | 82.1                    | 73.7     | 90.5     |
| Northwest         | 268         | 65.3       | 57.1     | 73.5     | 55.7                    | 44.8     | 66.7     |
| Southeast         | 297         | 72.6       | 65.0     | 80.2     | 70.3                    | 57.3     | 83.3     |
| Southwest         | 250         | 80.9       | 74.2     | 87.5     | 79.2                    | 67.2     | 91.2     |
| St. Louis Metro   | 539         | 75.8       | 70.3     | 81.2     | 61.7                    | 55.5     | 67.9     |

The BRFSS and the CLS provide data for adults ages 18 and older. Behavioral risk factor data for Missouri high school and middle school students are available through the Youth Risk Behavior Surveillance System (YRBS) at <http://health.mo.gov/data/yrbss/index.php> and the Youth Tobacco Survey (YTS) at <http://health.mo.gov/data/yts/index.php>. The YRBS and YTS provide state-level prevalence estimates.

When preventive health measures are not taken, resulting health conditions can often require additional treatment. The Preventable Hospitalizations MICA reports inpatient hospitalizations that may have been avoided if preventive measures had been followed or if adequate primary or outpatient care had been received. A reduction in the number of these hospitalizations could be achieved by “[improvements] in the quality of ambulatory care, in access to timely and effective treatment of certain conditions for specific populations, or in patients’ adoption of healthy behaviors.”<sup>2</sup> The table below displays frequencies and rates for all of the diagnoses available in the Preventable Hospitalizations MICA for the year 2010. (In order to display all of the categories on the same table, all of the categories in Step Six of the query screen must be selected.) The table has been sorted by descending order based on number of hospitalizations. (To sort, click once on the “Number” label.)

| <b>Preventable Hospitalizations: <a href="#">Residents</a> of Missouri</b> |                          |              |
|--|--------------------------|--------------|
|  | <b>Year</b>              |              |
|  | <b>2010</b>              |              |
| <b>Diagnosis</b>   | <b>Number</b>            | <b>Rate</b>  |
| Dehydration - volume depletion   | 17,273                   | 31.2         |
| Bacterial pneumonia  | 9,901                    | 17.8         |
| Cellulitis   | 7,509                    | 14.2         |
| Chronic obstructive pulmonary  | 7,330                    | 12.0         |
| Asthma   | 6,662                    | 13.0         |
| Diabetes   | 6,062                    | 11.4         |
| Congestive heart failure   | 5,674                    | 9.2          |
| Kidney/Urinary infection   | 4,419                    | 8.2          |
| Epilepsy   | 3,365                    | 6.5          |
| Gastroenteritis  | 2,186                    | 4.1          |
| Nutritional deficiencies   | 1,673                    | 2.9          |
| Convulsions  | 1,587                    | 3.1          |
| Hypertension   | 1,564                    | 2.8          |
| Severe ENT infections  | 830                      | 1.7          |
| Dental conditions  | 566                      | 1.1          |
| Pelvic inflammatory disease  | 489                      | 1.0          |
| Angina   | 367                      | 0.6          |
| Failure to thrive  | 166                      | 0.3          |
| Hypoglycemia   | 77                       | 0.1          |
| Immunization preventable   | 50                       | 0.1          |
| Tuberculosis   | 46                       | 0.1          |
| Congenital syphilis  | 4                        | 0.0 @        |
| <b>Total for Selection</b>   | <b>77,800</b>            | <b>141.3</b> |
| <b>All diagnoses</b>   | <b>77,800</b>            | <b>141.3</b> |
| <b>Rates Per 10,000</b>  |                          |              |
| <b>Age Adjustment Uses Year 2000 Standard Population</b>                   |                          |              |
| <b>@ Rate considered unreliable, numerator less than 20</b>                |                          |              |
| <a href="#">Rotate</a>   | <a href="#">Download</a> |              |

Mapping options (not shown) are also available for the Preventable Hospitalizations MICA. MICA maps allow users to view the spatial distribution of either frequencies or rates by county.

References:

1. U.S. Government Printing Office. Patient Protection and Affordable Care Act, Public Law No: 111-148: H.R. 3590. (March 23, 2010). Retrieved February 3, 2014, from <http://www.gpo.gov/fdsys/pkg/PLAW-111publ148/pdf/PLAW-111publ148.pdf>.
2. Torio, C. M., Elixhauser, A., & Andrews, R. M. (March 2013). Trends in Potentially Preventable Admissions Among Adults and Children, 2005–2010. *HCUP Statistical Brief #151*. Rockville, MD: Agency for Healthcare Research and Quality. Retrieved February 3, 2014, from <http://www.hcup-us.ahrq.gov/reports/statbriefs/sb151.pdf>.

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## Clarification from MICA User Group Newsletter Issue #8

The feature article in the last edition of this newsletter covered the 100th anniversary of Vital Statistics in Missouri and reviewed historical death rates from heart disease and tuberculosis. These were the two leading causes of death 100 years ago. While heart disease remains the #1 leading cause of death in Missouri, tuberculosis death rates have dropped dramatically. The article mentioned the use of a tuberculosis vaccine. One of our readers who has worked in that field clarified that while the vaccine improved death rates in other parts of the world, it was not used in Missouri. Rather, the tuberculosis death rate reduction in Missouri occurred due to antibiotics, screening, diagnostics, and prevention, or, as our reader put it, “Good old-fashioned public health!” Thank you to Lynelle Phillips from the University of Missouri – Columbia for clarifying that point for us and our readers.

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## Health in Rural Missouri Released

The State Office of Primary Care and Rural Health (OPCRH) recently released the 2012-2013 biennial report on *Health in Rural Missouri*. The Bureau of Health Care Analysis and Data Dissemination collaborated with the OPCRH by providing information from the Section for Epidemiology in Public Health Practice on topics such as demographics, socioeconomic factors, life expectancy, deaths, hospitalizations, maternal and child health indicators, and health behaviors and risk factors. The report is available online at <http://health.mo.gov/living/families/ruralhealth/pdf/biennial2013.pdf>.

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## Public Health Spotlight



Praveena Ambati fills dual roles at the Missouri Department of Health and Senior Services by serving as both the Injury and Violence Prevention (IVP) Program Manager and the Missouri Safe Kids Coordinator. The IVP program, of which Missouri Safe Kids is a part, provides targeted unintentional injury prevention services to children ages 0 to 19. Praveena has been with DHSS in these same roles for three years. Originally from India, Praveena earned a medical degree from Rajiv Gandhi Medical University, but after settling in the United States, she received a Graduate Certificate in Public Health from the University of Missouri-Columbia. Previous work and personal experiences are cited by Praveena as the reason for the change in her career interests, and her interest in employment at DHSS. She wanted to gain

an understanding of another facet of the medical field and felt that working in public health, “for the people,” would be a valuable experience. Praveena is currently pursuing a Master’s Degree

in Public Health (MPH) from the University of Missouri – Columbia and hopes to complete that degree program this year. She adds that applying knowledge gained from her Master’s coursework to her job at DHSS is very rewarding.

Praveena says that she does not have a favorite project at DHSS. On all projects, whether small or big, she just hopes for a positive outcome. Data, according to Praveena, is one of the key factors related to gaining those positive project outcomes. “Data is a huge resource for new program or intervention success,” she says. Based upon data found in MICA or through other resources, evidence-based action plans can be developed and used to create successful interventions and track the levels of success. As an example, Praveena is currently waiting to receive data that tracks the success of a car seat safety program run by local Safe Kids coalitions. Previous years of data have shown improvements in safety procedures, and Praveena hopes that the current incoming data will further validate the success of this program.

Praveena stays busy outside of work as well. She and her husband are always on the go, running after and engaging their daughters, ages 8 and 3. Between her work and family responsibilities and the time spent completing her graduate work, she does not have a lot of free time. Praveena chuckled when asked about her favorite place to visit. “Home,” she replied. However, the self-proclaimed homebody did mention that a family trip to Greece is in the early planning stages, spurred by her older daughter’s interests in architecture and history. When Praveena does get a few moments of free time, one of her interests is Indian classical dance. In India, dance is considered an art and there are many different genres. A dedicated artist, Praveena studied and performed the classical genre of dance for 6-7 years as a teenager.

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### **MICA Training Overview Webinar**

Each summer, we receive many phone calls and e-mails from public health professionals who have heard of the MICA trainings but want more information about the content of the sessions. In order to better answer these types of questions, the MICA training team will host an informational webinar on Tuesday, April 22 at 10:00 AM. This webinar will describe the types of trainings that will be offered throughout the state during summer 2014. We will introduce our three newest trainers, who will each briefly answer one common data question. Participants will then have a chance to ask questions about the summer trainings. If you have always wondered if the MICA trainings would be beneficial for you or your staff, please consider joining us. The registration form for this event is located at <https://www.surveymonkey.com/s/FRNVT6K>. We anticipate that the webinar will last approximately 30-45 minutes depending upon the number of audience questions.

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## Upcoming MICA Trainings

The following MICA training sessions have been scheduled for this summer. The MICA training registration form is available at <http://health.mo.gov/data/mica/MICA/healthdatatraining.html#register>. Draft agendas and other details are also posted on this website.

| <b>Location:</b>   | <b>Course 1:<br/>Introduction to<br/>Profiles/MICA</b> | <b>Course 2:<br/>Health Data<br/>Analysis</b> | <b>Course 3:<br/>Health Data<br/>Workshop</b> |
|--|--|---|---|
| <b>Missouri Southern State University</b><br>Robert W. Plaster Free Enterprise Center (Plaster Hall)<br>3950 Newman Road<br>Room 107<br>Joplin, MO 64801 | May 13<br>Deadline: May 5                              | May 14<br>Deadline: May 5                     | N/A   |
| <b>Poplar Bluff Public Schools Administration Building</b><br>Media Center<br>1110 North Westwood Blvd<br>Poplar Bluff, MO 63901                         | June 18<br>Deadline: June 6                            | June 19<br>Deadline: June 6                   | N/A   |
| <b>Missouri Western State University</b><br>108 Remington Hall<br>4525 Downs Drive<br>St. Joseph, MO 64507   | June 24<br>Deadline: June 9                            | June 25<br>Deadline: June 9                   | N/A   |
| <b>University of Missouri – Columbia*</b><br>Address TBD<br>Columbia, MO 65211   | July 8<br>Deadline: June 25                            | July 9<br>Deadline: June 25                   | July 10<br>Deadline: June 25                  |
| <b>Kansas City Health Department*</b><br>2400 Troost Avenue<br>3 <sup>rd</sup> Floor Training Room<br>Kansas City, MO 64108                              | July 22<br>Deadline: July 11                           | July 23<br>Deadline: July 11                  | July 24<br>Deadline: July 11                  |
| <b>BJC @ The Commons</b><br>4249 Clayton Avenue<br>St. Louis, MO 63110   | August 5<br>Deadline: July 23                          | August 6<br>Deadline: July 23                 | August 7<br>Deadline: July 23                 |

\*Unconfirmed – subject to change

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## Data Updates

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

Birth MICA – through 2011

Medicaid Records MICA – through December 2013

TANF (Temporary Assistance for Needy Families) MICA – through December 2013

Assault Injury Profile – through 2011  
Hospitalization – Inpatient Profile – through 2011  
Minority Health Profile – through 2011 (for death, hospital, and ER data)  
Self-Inflicted Injury Profile – through 2011  
Unintentional Injury Profile – through 2011  
Women’s Health Profile – through 2011 (for death, hospital, and ER data)  
The Preconception/Family Planning Profile has been renamed the Women’s Reproductive Health Profile.

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## **Recent/Upcoming Events**

In spite of snowstorms and arctic temperatures, the Data Dissemination team has been very busy this winter. The Missouri Health Equity Collaborative (MoHEC) invited the BHCADD to speak at the *Health Equity for All Missourians: Put Data into Action* event in Kansas City on December 4. This event centered around the Health Equity Series of Reports on African American and Hispanic health disparities published by the Missouri Foundation for Health (MFH). The BHCADD worked with the Foundation to provide data, narrative, and graphics for these reports. Ryan Barker from the MFH spoke on the statewide implications of the reports, while Dr. Rex Archer of the Kansas City Health Department illustrated the use of disparities data at the local level. Andy and Becca provided an overview of the use of the Community Data Profiles and MICA in gathering disparities data for the reports. Kris Kummerfeld (DHSS), Natalie Hampton (University of Missouri – Columbia), and Sarah Worthington (Kansas City Health Department) spoke of their use of disparities data in planning, implementing, and evaluating the SKIP the Salt, Help the Heart intervention. PowerPoint slides from this event are available at <http://www.mohec.org/2013/11/15/health-equity-for-all-missourians-put-data-into-action/>. The MFH Health Equity Series reports are available at <http://www.mffh.org/mm/files/13AfrAmDisparities.pdf> and <http://www.mffh.org/mm/files/13HispanicDisparities.pdf>.

Just two days later, Becca and Whitney braved the snow to exhibit at the Missouri Coordinated School Health Coalition Conference at the Lodge of the Four Seasons. They had the opportunity to speak to many school nurses and demonstrate the use of the Community Data Profiles and MICA for gathering data on school-aged children.

On January 27, Andy and Becca provided an online lecture to over 40 students enrolled in the MPH capstone course, Applied Epidemiology, at the University of Missouri – Columbia. They used a series of PowerPoint slides to simulate access to the Profiles and MICA and were even able to give actual pop quizzes at various points during the demonstration. As part of the course, students will use the tools to prepare community health assessments in coordination with several local public health agencies. (We would like our readers to know that all MPH students at MU are required to complete an internship. If there are organizations that would have a need for extra assistance this spring or summer, please consider contacting the MPH program at MU.)

In addition, the BHCADD offered three sessions of the *Introduction to Profiles and MICA* and *Health Data Analysis* courses during the months of January and February. The first session, on

January 15-16, was held at the Department of Health and Senior Services (DHSS) campus in Jefferson City and was primarily attended by DHSS staff from a variety of programs. These courses marked the debut of new trainers Whitney and Evan, who each presented a few sections of material and had the chance to interact with course participants.

The second session was hosted by the Institute of Public Policy at the University of Missouri – Columbia on consecutive (and extremely cold!) Mondays, February 3 and February 10. Attendees included MU faculty, staff, and students, as well as several representatives from the Columbia/Boone County Department of Public Health and Human Services. Thank you to the Institute of Public Policy not only for hosting us but also for providing lunch!

For the third session, the Data Dissemination team was again able to stay at the DHSS campus. Staff from several DHSS programs attended, as well as three employees of the Cole County Health Department and a Master of Public Health student from Saint Louis University.

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## Q&A

*I work in a Missouri county that borders Kansas. I know that the County Health Rankings report data for every county in the nation. Can I use the County Health Rankings to compare my county to my neighbor county in Kansas?*

That is a complicated question. You cannot compare your county's overall health ranking with that of a county in another state. Each county is ranked within its own state in two categories (Health Outcomes and Health Factors). For example, under Health Outcomes, your county might be ranked #15 out of 115 Missouri counties, while your Kansas neighbor might be ranked #12 out of the 112 ranked counties in Kansas. There is no ranking that compares all of the counties in the U.S.

Although you cannot compare the rankings themselves, you may be able to make comparisons between some of the indicators that are used to generate the rankings. A table provided at <http://www.countyhealthrankings.org/sites/default/files/resources/CHR%202013%20Data%20Comparability%20Across%20States.pdf> explains which indicators are comparable across state lines and which are not. All of the Health Outcomes indicators are comparable across states. However, some of the indicators used for the Health Factors rankings are unique to each state.<sup>1</sup> For example, as shown in the screenshot below, it is possible to compare adult smoking and adult obesity across state lines, because those data are gathered from the same source and measured in the same way. On the other hand, STD rates should not be compared across state lines because of differences in screening procedures.

## HEALTH FACTORS

|                         |                          |                                 | Comparable | Comparable,<br>with caution | NOT<br>comparable | Notes                                                                                                      |
|-------------------------|--------------------------|---------------------------------|------------|-----------------------------|-------------------|------------------------------------------------------------------------------------------------------------|
| <b>Health Behaviors</b> | <i>Tobacco use</i>       | Adult smoking                   | ✓          |                             |                   |                                                                                                            |
|                         | <i>Diet and exercise</i> | Adult obesity                   | ✓          |                             |                   |                                                                                                            |
|                         |                          | Physical inactivity             | ✓          |                             |                   |                                                                                                            |
|                         | <i>Alcohol use</i>       | Excessive drinking              | ✓          |                             |                   |                                                                                                            |
|                         |                          | Motor vehicle crash death rate  | ✓          |                             |                   |                                                                                                            |
|                         | <i>Sexual activity</i>   | Sexually transmitted infections |            |                             |                   | ✖                                                                                                          |
| Teen birth rate         |                          |                                 | ✓          |                             |                   | States do not use the same birth certificate revision, but measure is reported the same on both revisions. |

Source: County Health Rankings, 2013 Data Comparability Across States

In other cases, data may be comparable across states but may not be reported by all geographies. For example, daily fine particulate matter can be compared across state lines, but not all counties report those rates so comparison data may not be available.

|                             |                              |                                   |   |  |  |                            |
|-----------------------------|------------------------------|-----------------------------------|---|--|--|----------------------------|
| <b>Physical Environment</b> | <i>Environmental quality</i> | Daily fine particulate matter     | ✓ |  |  | Comparable where reported. |
|                             |                              | Drinking water safety             | ✓ |  |  |                            |
|                             | <i>Built environment</i>     | Limited access to healthy foods   | ✓ |  |  |                            |
|                             |                              | Fast food restaurants             | ✓ |  |  |                            |
|                             |                              | Access to recreational facilities | ✓ |  |  |                            |

Source: County Health Rankings, 2013 Data Comparability Across States

The County Health Rankings can be a great resource for comparing counties in different states as long as caution is used. Even if you are not able to directly compare counties on a particular indicator, the County Health Rankings website provides data sources. By using the “Data Sources and Measures” information located at <http://www.countyhealthrankings.org/ranking-methods/data-sources-and-measures>, you may find additional resources that will be helpful in conducting health assessment or in completing other public health activities.

### References:

- <sup>1</sup> County Health Rankings. (2013). *Frequently Asked Questions*. Retrieved January 23, 2014, from <http://www.countyhealthrankings.org/faq-page#t83n12088>.

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**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 an employee of the Bates County Health Department, you are interested in changes in preventive health behaviors during recent years. You decide to use the 2007-2011 County-Level Study (CLS) Comparison Profiles to analyze changes among Bates County residents.

1. What is the 2011 estimated prevalence for no leisure-time physical activity? \_\_\_\_\_  
What was the change in prevalence for no leisure-time physical activity between 2007 and 2011? \_\_\_\_\_  
Was this change in prevalence statistically significant? \_\_\_\_\_

2. What is the 2007 estimated prevalence for consumption of fruits and vegetables less than five times per day? \_\_\_\_\_  
What is the 2011 estimated prevalence? \_\_\_\_\_  
What was the percentage change between these two years? \_\_\_\_\_  
You decide to compare the change in Bates County to the change in Missouri. How did the state prevalence for this indicator change between 2007 and 2011?  
\_\_\_\_\_

You decide to compare the change in Bates County to the change in the Kansas City Metro Region (which includes Bates County). How did the regional prevalence for this indicator change between 2007 and 2011?  
\_\_\_\_\_

3. What is the Bates County 2011 estimated prevalence for smoking not allowed in the home? \_\_\_\_\_  
What was the change in prevalence for smoking not allowed in the home between 2007 and 2011? \_\_\_\_\_  
Was this change in prevalence statistically significant? \_\_\_\_\_  
In which Profile did you find this information? \_\_\_\_\_

4. Your supervisor asks you to briefly summarize the 2007-2011 changes in the Bates County prevalence estimates for “Current cigarette smokers who made a quit attempt in past year” and “Current smokers who intend to quit in next 6 months.”  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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

**Final Thoughts**

During the month of December, the Division of Community and Public Health (DCPH) sponsored a holiday decorating competition. The BHCADD entry, Santa's Statistics Workshop, won Most Creative Unit Holiday Display!

**Bureau of Holiday Cheer Assessment and December Decorations (BHCADD)**  
**Santa's Statistics Workshop**



Congratulations to all of the winners in the many categories!

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## **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](mailto:Andrew.Hunter@health.mo.gov) or [Becca.Mickels@health.mo.gov](mailto: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:**

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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 [Andrew.Hunter@health.mo.gov](mailto:Andrew.Hunter@health.mo.gov) or [Becca.Mickels@health.mo.gov](mailto: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](mailto: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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