

Roadmap to a Vibrant, Diverse, and Healthy Community

2013 COLUMBIA/BOONE COUNTY COMMUNITY HEALTH ASSESSMENT

Public Health

Columbia/Boone County Public Health & Human Services

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Letter from the DIRECTOR

Roadmap to a Vibrant, Diverse, and Healthy Community

This 2013 Boone County Community Health Assessment is more than charts and graphs. It is more than statistics and numbers. This assessment introduces a new approach to community health, one where programs and interventions are not based solely on "the numbers," but also on what Boone County residents feel is important as they strive to live a healthier life.

A major function of local public health agencies is to monitor the health status of their community. While we have done community health assessments for years, they were heavily focused on data and lacked the voice of the community. For this assessment, we committed to investing our time and resources in order to hear directly from Boone County residents.

To guide the process, we chose to use the Mobilizing for Action through Planning and Partnerships (MAPP) framework because of its strong emphasis on community input. MAPP is a nationally-recognized process developed by NACCHO (the National Association of County and City Health Officials) and CDC (Centers for Disease Control and Prevention) to aid public health agencies in the development of health assessments. This community-driven process would not have been possible without our local public health system partners, listed on pages 17-19.

Early in our MAPP process, community members developed a vision statement. During the remainder of the process, at every step, this vision was the guiding factor for all decisions:

A vibrant, diverse, and caring community in which all individuals can achieve their optimum physical, mental, cultural, social, spiritual, and economic health.

After the vision statement was developed, four interdependent assessments were conducted. Those assessments, when combined, provide a comprehensive snapshot of the specific health needs and opportunities in Boone County. Partners from across multiple sectors provided input and used data from the assessments to develop five strategic issues:

- Safe & Healthy Neighborhoods: How do we prevent crime and promote safe and healthy neighborhoods where people live, work, and play?
- Healthy Lifestyles: How do we create a community and environment which provides access, opportunities, and encouragement for healthy lifestyles?
- Access to Health Care: How can we increase access to and utilization of comprehensive health services?
- Disparities: How do we address the root causes of health disparities to ensure health equity?
- Behavioral Health: How do we reduce risky behaviors and the stigma associated with behavioral health?

Letter from the DIRECTOR

In the coming months, we will continue to work with our partners and stakeholders to develop a Community Health Improvement Plan that identifies goals, strategies, activities, and resources to address the five strategic issues identified in the Community Health Assessment.

With help from partners in the local public health system (see page 16), Boone County's Community Health Improvement Plan will be implemented over the next five years. Through this effort, we will evaluate our programs and measure our outcomes to improve our planning efforts. Additionally, we are committed to developing data-driven performance measures and adopting evidence-based interventions rooted in sound research and/or practice to, ultimately, make a healthier Boone County.

Most importantly, we are driven to see that this report and the subsequent work of the Community Health Improvement Plan is beneficial and accessible to all who live, learn, work, and play in Boone County. On behalf of the Columbia/Boone County Department of Public Health and Human Services, thank you for your interest in our work. A special thanks to the nearly 2,000 Boone County residents who took the time to share their views, experiences, and priorities thus far. We invite you to use this plan to help inform and enhance your knowledge of the work currently underway to improve the community's health in Boone County. We encourage you to get involved and contribute to this effort as we seek to position Boone County as a vibrant, diverse, and caring community in which all individuals can achieve their optimum physical, mental, cultural, social, spiritual, and economic health.







Sincerely,

Stephaniek Browning

Stephanie K. Browning, Director Columbia/Boone County Department of Public Health and Human Services

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Vision STATEMENT

Vision Statement

A vibrant, diverse, and caring community in which all individuals can achieve their optimum physical, mental, cultural, social, spiritual, and economic health.

Community Values

- Access Our residents will have equal access to the opportunities which support their achievement of optimum health.
- **Caring** Our community will value respect, diversity, and service to others.
- **Excellence** Our residents will strive for individual excellence in a community that maximizes resources and provides opportunities to succeed.
- **Knowledge-Sharing** Our residents will be equipped with the knowledge, education, and means to change their behaviors, adopt healthy lifestyles, and maintain optimum health.
- **Preparedness** Our community will be prepared to address health challenges due to unexpected events.
- Shared Responsibility Our residents will take responsibility for their physical, mental, cultural, social, spiritual and economic health in a community which works together to provide and maintain a support system.
- **Wellness** Our community will promote healthy behaviors which will reduce and prevent disease and improve the overall health of our residents.









Strategic ISSUES

Five Strategic Issues

Strategic issues are critical challenges to be addressed, as well as significant opportunities to be leveraged, in order for a community to achieve its vision. Data from all four MAPP assessments were used to develop the strategic issues for Boone County. Five strategic issues were identified by the Community Health Assessment and Mobilization Partners (CHAMP) group, which represents different sectors of the local public health system. Those five issues are:

.....

- How do we prevent crime and promote safe and healthy neighborhoods where people live, work, and play?
- 2. How do we create a community and environment which provides access, opportunities, and encouragement for healthy lifestyles?
- 3. How can we increase access to and utilization of comprehensive health services?
- 4. How do we address the root causes of health disparities to ensure health equity?
- 5. How do we reduce risky behaviors and the stigma associated with behavioral health?



| PHASE ONE | ORGANIZE FOR SUCCESS AND PARTNERSHIP DEVELOPMENT |
|-------------|--|
| | Columbia/Boone County Department of Public Health and Human Services (PHHS) partnered with members of the local public health system to form the organizational structure for the MAPP process. This structure includes the MAPP Core Team, CHAMP, and Steering Committee. |
| PHASE TWO | CREATE A VISION |
| | Picturing Our Future community visioning sessions provided the platform for community members to share their views on the health of Boone County. This input was used in the development of our community vision: "A vibrant, diverse, and caring community in which all individuals can achieve their optimum physical, mental, cultural, social, spiritual, and economic health." |
| PHASE THREE | THE FOUR ASSESSMENTS |
| | Members of the MAPP Core Team, CHAMP, and Steering Committee collected and reviewed the results of the four community assessments: Forces of Change Assessment, Local Public Health System Assessment, Community Health Status Assessment, and Community Themes and Strengths Assessment. |

ASSESSMENT 1

FORCES OF CHANGE

The Forces of Change Assessment identified the trends, factors, and events that were likely to influence community health and quality of life, or impact the work of the local public health system. The CHAMP team members worked together to complete the Forces of Change Assessment. CHAMP used a Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis to develop a more comprehensive picture of Boone County in addition to identifying the forces of change.

The assessment was designed with a Forces of Change brainstorming session followed by the SWOT exercise. The Forces of Change brainstorming session focused on the following questions:

- What has occurred recently that may affect our local public health system or the health of our community?
- Are there trends occurring that will have an impact? Describe.
- What forces are occurring locally? Regionally? Nationally? Globally?
- What may occur in the foreseeable future that may affect our public health system or the health of our community?

CHAMP members were placed in six groups and discussed the above questions. Answers were gathered, recorded within each group, and then categorized into opportunities or threats. The strengths and weaknesses were identified using a large group process. The following prompts were provided:

- What does our public health system do well that helps us to positively influence the health of our community?
- Where must our public health system improve in order to more positively influence the health of our community?



ASSESSMENT 1

RESULTS

These forces were mentioned many times from different groups throughout the assessment:

- Affordable Care Act
- Crime and safety
- Disparities in achievement, earnings, and health
- Drug use and disposal
- Extensive health care services
- Funding
- Housing availability and development
- Increase in aging population and new retirees
- Medicaid expansion
- Rising number of students
- Social Media
- Transportation

ASSESSMENT 2

LOCAL PUBLIC HEALTH SYSTEM

The Local Public Health System Assessment (LPHSA) helped to answer questions such as: "What are the components, activities, competencies, and capacities of our public health system?" and "How well are the 10 Essential Public Health Services being provided in our system?"

To complete this assessment, a subcommittee of representatives from the local public health system identified key people to include in the assessment process based on their knowledge of the system. The subcommittee assigned CHAMP members, staff from PHHS, and community members to each of the 10 Essential Public Health Services groups. The subcommittee chose to combine similar essential services and their respective participants. Therefore, each group of participants would contribute by answering questions regarding the standards of one or two of the 10 Essential Services.

To complete the 10 sections of the assessment, meetings were held on two consecutive days. Each day, participants initially met as a large group, then broke into separate small groups to address two Essential Services per group. The subcommittee chose not to combine Essential Services 7 and 10 with other groups due to the types of questions asked in each service, as well as the need for specific participants to answer the questions.

Sectors represented at the LPHSA:

- The local city/county public health agency
- The local governing entity
- Other governmental entities
- Neighborhood organizations
- Educational institutions
- Public safety and emergency response organizations
- Hospitals
- Primary care clinics and physicians
- Home health care
- Environmental and occupational organizations

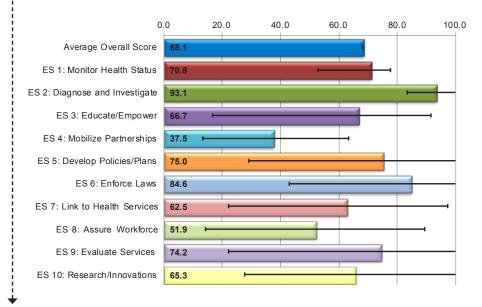
ASSESSMENT 2

RESULTS

Participants evaluated the local public health system's performance for model standards of each Essential Service. Scores can range from a minimum value of 0% (no activity compared to the standard) to a maximum value of 100% (all activity performed compared to the standard). The chart below gives further descriptions of the assessment response options. Based upon the responses provided in the assessment, an average score was calculated for each Essential Service. The bar graph below demonstrates the local public health system's average and range of scores for each of the 10 Essential Services.

| A summary of assessment response options: | | |
|---|---|--|
| Optimal Activity (76-100%) | Greater than 75% of the activity described within the question is met | |
| Significant Activity (51-75%) | Greater than 50%, but no more than 75% of the activity described within the question is met | |
| Moderate Activity (26-50%) | Greater than 25%, but no more than 50% of the activity described within the question is met | |
| Minimal Activity (1-25%) | Greater than zero, but no more than 25% of the active described within the question is met | |
| No Activity (o%) | o% or absolutely no activity | |

Summary of Average and Range of Essential Service Performance Scores



ASSESSMENT 3

COMMUNITY HEALTH STATUS

The Community Health Status Assessment provided quantitative information on the community's health and answers questions such as: "How healthy are our residents?" and "What does the health status of our community look like?" To complete this assessment, a subcommittee was formed to focus on identifying and analyzing key issues from a broad set of core indicators.

RESULTS

Overall, Boone County is a healthy community with many health and community resources, well-educated residents, and a stable economy. The 2013 County Health Rankings and Roadmaps ranked Boone County sixth out of 115 counties in Missouri for overall health outcomes (County Health Rankings and Roadmaps, 2013).

Although good health outcomes and behaviors are prominent in Boone County, there are still gaps to be addressed. Disparities were identified between racial and socioeconomic groups in terms of income, education, birth outcomes, sexually transmitted diseases, chronic disease, and health outcomes. For some of these issues, the gap is markedly wide. With other indicators including obesity, child obesity, drug abuse, and mental health, limited information is available at the local level.

ASSESSMENT 4

COMMUNITY THEMES AND STRENGTHS

The Community Themes and Strengths Assessment focused on gathering the thoughts, opinions, and perceptions of community members in order to understand which issues are important to the community. This assessment helped to answer questions such as, "What are our community issues?", "What are our community strengths?", and "What needs to happen to help us reach our community vision?" A subcommittee was formed from the CHAMP group to gather community input. Two methods of data collection were utilized: a community survey and focus groups.

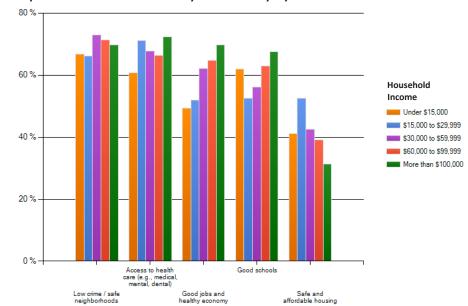
RESULTS

Mental health, crime and safety, obesity, substance use, and health care access were common issues from both the survey and focus groups. Our community strengths include our infrastructure, community gardens, and vast health care system. A strong community and prosperous economy are needed to reach our community vision. Focus group responses focused on community assets and prevention. Survey responses emphasized the concerns our community members have about individual health, such as mental health, obesity, and substance use.

ASSESSMENT 4

RESULTS

A community survey was completed by 1,653 Boone County residents in June 2013. The answers to the first question, which asked about the five most important factors for a healthy community, were consistent among all household income levels. This is demonstrated in the bar graph below. The top five responses to the three survey questions are listed in the table below.



Top Five Factors for a Healthy Community by Household Income

Top Five Responses from Community Survey

| What do you think are the five most important factors for a "Healthy Community?" | Among adults, which five health conditions or behaviors have the greatest impact on overall community health? | Among youth (age o-18), which five health conditions or behaviors have the greatest impact on overall community health? |
|--|---|---|
| Low crime/safe neighborhoods 70.5% | Obesity 43.6% | Drug abuse 39.6% |
| Access to health care 66.7% | Drug abuse 42.4% | Bullying 36.3% |
| Good schools 60.3% | Mental health 42.4% | Dropping out of high school 35.0% |
| Good jobs/healthy economy 60.3% | Alcohol abuse 36.1% | Obesity 35.0% |
| Safe and affordable housing 39-9% | Poor eating habits/choices 29.6% | Mental health 34·4% |

ASSESSMENT 4

Eight community focus groups were held in June 2013, in which a total of 72 Boone County residents participated. The tables below list the top responses to the three focus group questions as well as the comments specific to each geographic area.

| Question 1: When thinking about health, what are the greatest strengths in our community? | Question 2: What are the most important health related issues in our community? | Question 3: What would help us achieve optimum physical, mental, cultural, social, spiritual, and economic health? |
|---|--|---|
| Health Care: many medical providers, hospitals, clinics, options for uninsured; Community: people care for one another, friendly, involved; Food & Nutrition: community gardens, farmers markets, "Buddy Packs"; Infrastructure: walkable/ bikeable community | Public Safety: bicyclist safety, increasing violence, gun violence, unsafe driving habits; Substance Use: excessive alcohol consumption, youth drug use; Vulnerable Populations: aging population, homeless, veterans, disabled; Economy: increasing unemployment for minorities, high cost of living, "fast cash" stores, growing poverty, reduction in funding for programs | Community: more engaged community, community- based events, get to know your neighbor, revitalize neighborhood associations; Economy: more economic opportunities, living wage jobs, funding to address issues, financial education |

| Each focus group had comments specific to their geographic area: | | |
|--|---|--|
| Ward 1 | fewer "fast cash" and liquor stores, better food from supplemental programs | |
| Ward 2 | jobs that don't require advanced degree, nutrition information in restaurants | |
| Ward 3 | a sidewalk for wheelchairs, a neighborhood park | |
| Ward 4 | policies to influence health and healthy behavior, focus efforts on young children | |
| Ward 5 | healthy and local food mobiles, funding distribution tied to best practices/research | |
| Ward 6 | changes to policy and the built environment, more tax initiatives for vulnerable populations/services | |
| Northern Boone | storm shelter in Harrisburg, improved GPS for ambulance response | |
| Southern Boone | a recreation center in Ashland, a method for sharing community information | |

PHASE FOUR

IDENTIFY STRATEGIC ISSUES

Strategic issues are critical challenges to be addressed, as well as significant opportunities to be leveraged, in order for a community to achieve its vision. Phase Four was conducted between August and November 2013, during which the Steering Committee met on five occasions to review data and identify overarching strategic issues. Steering Committee members presented the final five strategic issues to CHAMP in November 2013.

PHASE FIVE FORMULATE GOALS AND STRATEGIES

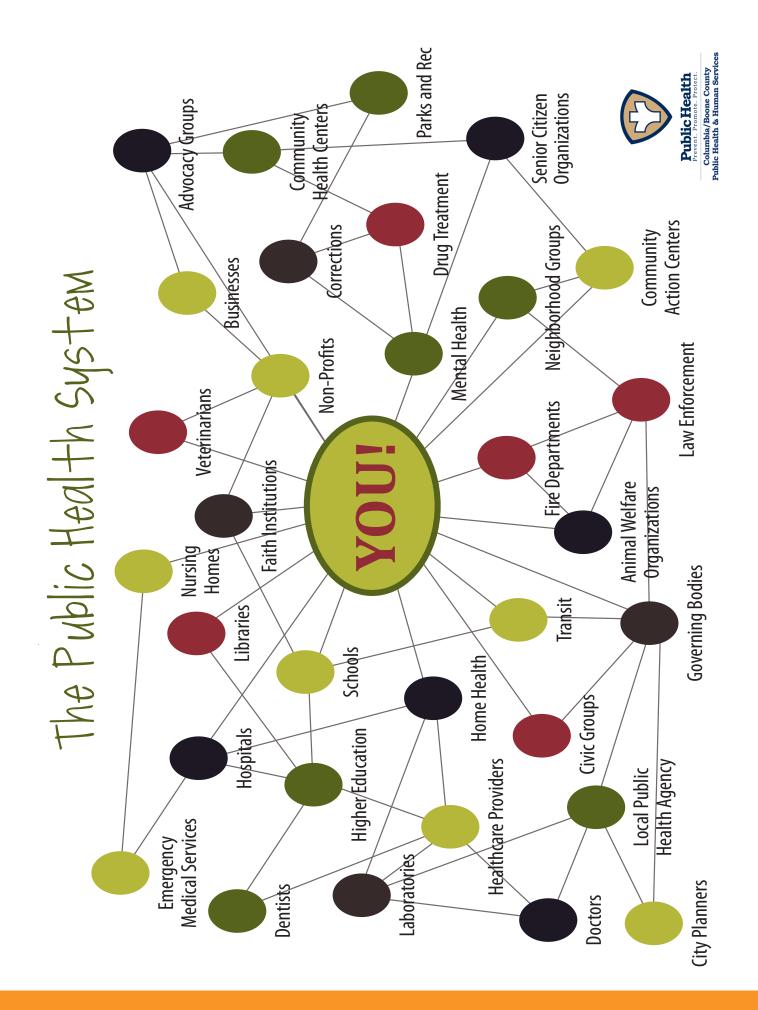
We are currently in Phase Five of the MAPP process. Work groups have formed around each of the five strategic issues. These work groups will identify goals and strategies for each strategic issue based upon the data gathered in Phase Three, from interview sessions with key stakeholders, and input from attendees at a community forum.

PHASE SIX

ACTION CYCLE

Phase Six will commence in March 2014. This phase uses goals and strategies identified in the previous phase to develop a Community Health Improvement Plan (CHIP) comprised of multiple practical work plans. The CHIP will be released in Summer 2014.





The PARTICIPANTS

MAPP Core Team

Geni Alexander Kim Becking Stephanie Browning Scott Clardy Sarah Rainey Stacia Reilly Michelle Riefe Rebecca Roesslet Carolyn Sullivan Andrea Waner Jason Wilcox

Steering Committee

Geni Alexander Rachel Bacon Leigh Britt Stephanie Browning Barbara Buffaloe Karen Cade Amy Camp Scott Clardy Gloria Crull Erin Harris Steve Hollis Sarah Klaassen Sarah Rainey Tom Reddin Stacia Reilly Michelle Riefe Rebecca Roesslet Trina Teacutter Andrea Waner Jason Wilcox Carmen G. Williams

The PARTICIPANTS

CHAMP

Boone County Commission Karen Miller **Boone County Community Services Advisory** Commission & MU Health Care Amy Camp **Boone County Council on Aging** Jessica Macy **Boone County Fire Protection District** Josh Creamer Scott Olsen **Boone County Sheriff's Department** Dwayne Carey Tom Reddin **Boone Hospital** Angy Littrell Jessica Park **Boys & Girls Club** Valorie Livingston **Central Missouri Community Action** Darin Preis Sarah Klaassen Jackie Rivera **Central Missouri Humane Society** Julie Aber Mary Pat Boatfield Centralia Public Schools, Chance Elementary Tanya Hann Centro Latino de Salud Eduardo Crespi City of Columbia, City Manager's Office Tony St. Romaine City of Columbia, Commission on Human Rights Scott Dean City of Columbia, Community Development **Rachel Bacon** City of Columbia, Disabilities Commission Homer Page City of Columbia, Fire Department Chuck Witt City of Columbia, Office of Neighborhood Services Leigh Britt City of Columbia Office of Sustainability Barbara Buffaloe

City of Columbia, Parks and Recreation Erika Coffman City of Columbia, Police Department Ken Burton City of Columbia, Transit Drew Brooks Columbia/Boone County Board of Health Michael Szewczyk Columbia/Boone County Public Health & Human Services Geni Alexander Stephanie Browning Scott Clardy Linda Cooperstock Erin Harris Steve Hollis Debra Howenstine Sarah Rainey Stacia Reilly **Michelle Riefe** Rebecca Roesslet Lara Salveter Trina Teacutter Andrea Waner Jason Wilcox **Columbia Chamber of Commerce** Kristi Rav **Columbia Housing Authority** Becky Markt Phil Steinhaus **Columbia Daily Tribune** Jodie Jackson **Columbia Public Schools** Patty Cornell Laina Fullum Christi Hopper Maria McMahon Lori Osborne Peter Stiepleman **Daniel Boone Regional Library** Melissa Carr Family Counseling Center Karen Cade **Family Health Center** Gloria Crull

CHAMP

Hamilton, Mathis and Hamilton Dental Office Andrew Hamilton Harry S. Truman Memorial Veterans' Hospital Virgina Law Health Literacy Missouri Pamela Kelly Lutheran Family & Children's Services Christine Corcoran Kathryn Wright **MBS Textbook Exchange** Jerome Rader MedZou Matthew Benage Jackie Herzberg **Mid-Missouri Legal Services** Steve Kuntz Missouri Association of Local Public Health Agencies (MOALPHA) Mahree Skala **Missouri Department of Health & Senior Services** Cherri Baysinger Andrew Hunter **Missouri Restaurant Association** John LaRocca **Missouri Veterans Commission** Eugene O'Loughlin **MU** Center for Applied Research & Environmental Systems (CARES) Erin Barbaro **MU** Center for Health Policy Stan Hudson **MU** Department of Family Medicine Kevin Everett **MU Extension** Kent Shannon Vera Massey **MU Health System** Karen Edison Marty McCormick **Bridget Myers** Kevin Myers **Carol Toliver MU Institute of Public Policy** Bridget Kevin-Myers **Emily Johnson** Jacqueline Schumacher

MU Master of Public Health Program Jessica Hosey Lise Saffran MU Masters of Public Health Program & Veterinary **Biomedical Sciences** Chada Reddy **MU Office of Service Learning** Mike Burden **MU School of Nursing** Marv Fete **MU Student Health Center** Susan Even Office of Social and Economic Data Analysis Tracy Greever-Rice Parents as Teachers **Belinda Masters Phoenix Home Care** Gina Ridgeway Long Phoenix Programs Inc. Heather Harlan **Providence Urgent Care** Scott Schultz Rain-Central Missouri, Inc. Cale Mitchell **Refugee and Immigration Services Phil Stroessner Russell Chapel Christian Methodist Episcopal** Church Carmen G. Williams Second Baptist Church Phyliss Golden Southern Boone Elementary **Robin Bullard** Southern Boone Learning Garden Jenny Grabner The PedNet Coalition Annette Triplett **Tiger Pediatrics Ellen Thomas** Trail to a Cure Kevin Clohessy Voluntary Action Center Nick Foster Youth Community Coalition - YC2 Ryan Worley

More INFORMATION

Contact

If you are interested in more information or would like to be involved in the action phase, please contact:

Columbia/Boone County Department of Public Health & Human Services 1005 West Worley Columbia, MO 65203 Phone: 573-874-7345 Fax: 573-874-7756 Web: www.GoColumbiaMO.com/Health Email: champ@GoColumbiaMO.com



These assessment results, issues, and strategies represent the collective work of the MAPP Core Team, Steering Committee, CHAMP members, stakeholders, related participants, and do not necessarily reflect the opinion of the Columbia/Boone County Department of Public Health and Human Services or any participating community member organization.



Phase One: Organize for Success/ Partnership Development

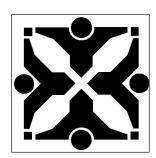


Prevent, Promote, Protect, Columbia/Boone County Public Health & Human Services This page left intentionally blank

Executive SUMMARY

In February 2013, the Community Health Assessment and Mobilization Partners (CHAMP) was brought together by the Columbia/Boone County Department of Public Health and Human Services (PHHS) to initiate a community health assessment and planning process. A model called Mobilizing for Action through Planning and Partnerships (MAPP), created by the National Association of County and City Health Officials (NAACHO) and the Centers for Disease Control and Prevention (CDC) Public Health Program Practice Office, was selected for the process.

MAPP is a six-phase, community-driven process which includes a Community Health Assessment (CHA) and a Community Health Improvement Plan (CHIP). Phase One: Organize for Success/Partnership Development involves two critical and interrelated activities: organizing the planning process and developing the planning partnership. The purpose of this phase is to structure a planning process that builds commitment, engages participants as active partners, uses participants' time efficiently, and results in a plan that can be realistically implemented. This phase identifies who should be involved and how the partnership will approach and organize the process. The assembly of the MAPP Core Team, MAPP Steering Committee, CHAMP, and subcommittees completed Phase One.



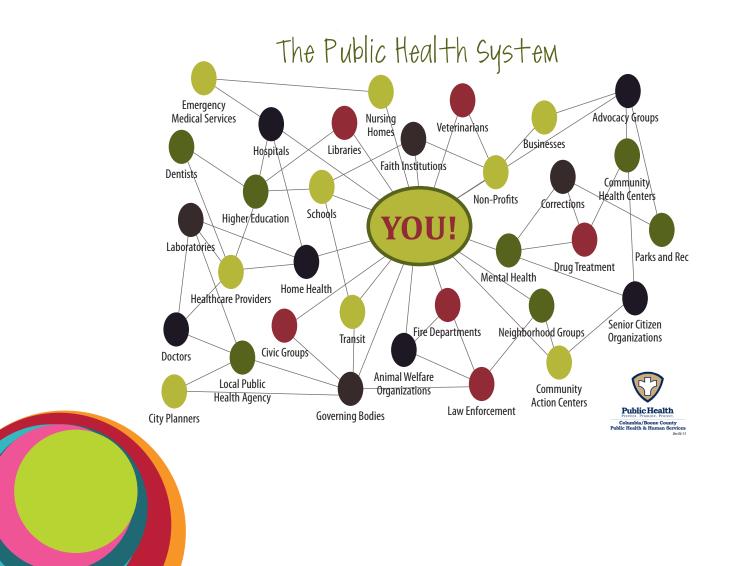






In January 2013, PHHS established a MAPP Core Team, consisting of PHHS staff, to organize the MAPP process. The MAPP Core Team outlined each step of the process in detail, carried out the logistics of meeting planning and execution, and ensured that the process moved forward. Part of the initial planning efforts included: program budget development, completing a readiness assessment worksheet (Appendix), establishing a process work plan (Appendix), creating a common email address for partner communication (champ@GoColumbiaMO.com), and the development of a comprehensive list of potential community partners for the project.

The MAPP Core Team established a diverse and representative group of the local public health system. The MAPP Core Team invited local public health system members from each segment of the system to build the Community Health Assessment and Mobilization Partners (CHAMP) group. See figure below.



The MAPP Core Team invited 56 members of the local public health system to join the CHAMP group. Invitations were sent via email and U.S. Postal Service (Appendix). In the meeting invitation, potential CHAMP members were informed of the process and their opportunities to: access additional resources, access accurate and current data, increase collaboration on projects and activities, reduce duplication of services within the community, and improve the community's focus on priorities. Invitees were asked to commit to attending four CHAMP meetings between February and November 2013 and were informed of their opportunity to: shape goals, identify strengths and weaknesses in our current public health system, identify the health priorities of our community, and develop a community-wide strategic plan to meet identified priorities as part of the MAPP process. Invitees were asked to RSVP for the initial CHAMP meeting, and were given the opportunity to designate another member of their organization as their CHAMP representative.

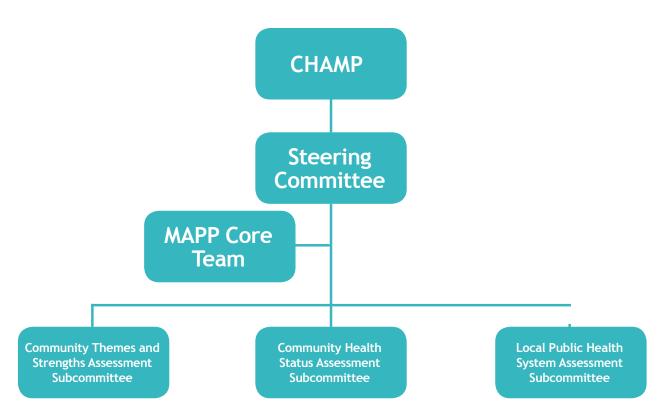
The initial CHAMP meeting, held February 6, 2013, was facilitated by the PHHS Director. The meeting objectives included: assembling a team of community partners, informing community partners of Public Health Accreditation Board (PHAB) national accreditation, presenting the basic concepts and purposes of the MAPP process, enlisting support for the MAPP process, and identifying possible data sources for primary and secondary data. Of the 56 members invited, 38 (68%) attended the first meeting. CHAMP members were asked to demonstrate their commitment to the MAPP process by signing a MAPP Partnership Commitment Agreement (Appendix).

In March 2013, a Steering Committee formed out of the CHAMP membership group. The Steering Committee is a group of 18 individuals responsible for organizing the MAPP Process and giving it direction. Steering Committee members were identified by the MAPP Core Team for their subject matter expertise, sector representation, and commitment to the MAPP process. Throughout the entire process, the Steering Committee met one to two times per month and carried out key functions including facilitating the visioning phase, overseeing assessments, and compiling potential strategic issues.

Due to the scope of this project, the MAPP Core Team decided to enter into contract with two external professionals for the purposes of process facilitation and community engagement. Their addition to the MAPP Core Team helped to ensure a neutral and community-wide focus. The external contractors became involved in March 2013.

The April 2013 CHAMP meeting was facilitated by the external contractors. It was during this meeting that the 18 member Steering Committee was introduced to the larger CHAMP group. Meeting objectives included: summarizing the MAPP assessments, explaining the roles and responsibilities for the subcommittees for Phase Three, inviting CHAMP members to sign up for Phase Three subcommittees, discussing the 10 Essential Public Health Services, and identifying participants for Phase Two: Visioning. At the conclusion of the meeting, CHAMP members were asked to provide contact information for community members to invite to focus groups for Phase Two.

The figure below shows the structure of each committee relative to each other.



*The Forces of Change assessment was completed using a large group process and did not require a subcommittee.

RESULTS

At the conclusion of Phase One, PHHS successfully formed the organizational structure for the MAPP Process. This included the MAPP Core Team, CHAMP, Steering Committee, and subcommittees tasked with completing three of the four assessments in Phase Three.

DISSEMINATION OF PHASE ONE RESULTS

The results of Phase One were shared with the community participants in Phase Two. Media coverage after the initial CHAMP meeting in February allowed for community-wide exposure to the MAPP Process.

LIMITATIONS

Establishing a working structure for the CHAMP group and the MAPP Core Team was one of the most challenging aspects of this phase. It included not only recruiting community members, but also educating them on the MAPP process, its goals, and its timeline. Since the MAPP process is fairly complex, several CHAMP meetings were dedicated to educating other CHAMP members on the process. In addition, the majority of CHAMP members signed an agreement formalizing their involvement in the process; however, the agreement did not specify criteria for remaining on CHAMP, which became an issue later in the process with decreased attendance at CHAMP meetings. Additionally, PHAB national accreditation was mentioned in the CHAMP invitation and first presentation which later presented a challenge when emphasizing that MAPP is a community-driven process, as opposed to a local public health agency project.

EVALUATION

A meeting satisfaction survey was completed at the conclusion of each CHAMP meeting. Results were shared with the MAPP Core Team for planning purposes.

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Appendices

Readiness Assessment Worksheet

Readiness Assessment Worksheet

Critical Elements:

| | <u>Yes</u> <u>No</u> |
|--|----------------------|
| Process has strong community partners | _X |
| Process has effective champions | _X |
| Support outweighs opposition | _X |
| Key resources are budgeted | X |
| Community partners are willing/available | _X |
| There is general agreement on purpose and outcomes | _X |
| There is general agreement on how to proceed | _X |
| Scope of the planning effort is reasonable | _X |
| Staff and technical support have been identified | _x |
| Desired Elements: Purpose and benefits are well-understood | _X |
| Core team (partners) understands strategic planning | _X |
| All needed resources are in place | X |
| Outside technical assistance has been lined up | X |
| Participation and organizational structure is clear | _X |
| Roles and responsibilities are clear | _X |
| A planning process has been specified | _X |
| Time frame has been specified in a workplan | _X |

Process Work Plan

MAPP WORKPLAN

The purpose of this workplan is to guide, not dictate, the planning process. As the process unfolds, the Core Support Team should reference the workplan to assess progress and consistency with the timeline. The workplan should also be revised as needed. It is important to incorporate concepts or elements that help customize the process to the community's needs. As the workplan evolves, build in opportunities to celebrate achievements and recognize successes throughout the entire process.

The workplan is organized by phase. The table of contents below includes internal hyperlinks that connect to the different sections of the workplan.

| ORGANIZING FOR SUCCESS/PARTNERSHIP DEVELOPMENT | |
|---|----|
| Phase Objectives | |
| Resources Needed | |
| Organizational Structure & Community Representation | |
| Phase Checklist | |
| Visioning | 6 |
| Phase Objectives | 6 |
| Resources Needed | |
| Organizational Structure & Community Representation | 6 |
| Phase Checklist | 7 |
| COMMUNITY HEALTH STATUS ASSESSMENT | |
| Phase Objectives | |
| Resources Needed | |
| Organizational Structure & Community Representation | |
| Phase Checklist | |
| LOCAL PUBLIC HEALTH SYSTEM ASSESSMENT | |
| Phase Objectives | |
| Resources Needed | |
| Organizational Structure & Community Representation | |
| Phase Checklist | |
| COMMUNITY THEMES AND STRENGTHS ASSESSMENT | |
| Phase Objectives | |
| Resources Needed | |
| Organizational Structure & Community Representation | |
| Phase Checklist | |
| Phase Objectives | |
| Resources Needed | |
| Organizational Structure & Community Representation | |
| Phase Checklist | |
| IDENTIFYING STRATEGIC ISSUES | |
| Phase Objectives | |
| Resources Needed | |
| Organizational Structure & Community Representation | |
| Phase Checklist | |
| FORMULATING GOALS AND STRATEGIES | |
| Phase Objectives | 21 |
| Resources Needed | |
| Organizational Structure & Community Representation | |
| Phase Checklist | |
| ACTION CYCLE | |
| Phase Objectives | |
| Resources Needed | |
| Organizational Structure & Community Representation | |
| Phase Checklist | |

ORGANIZING FOR SUCCESS/PARTNERSHIP DEVELOPMENT

Phase Objectives

- To make the process more manageable by laying the groundwork
- To ensure that the <u>appropriate participants are included</u> in the process
- To <u>educate participants</u> on the activities that will be undertaken, their responsibilities, how long it will take, and the results that are expected
- To structure a planning process that engages participants as active partners
- To structure a planning process that uses participants' time well
- To structure a planning process that builds commitment
- To set a tone of openness and sustained commitment among participants
- To structure a planning process that results in a realistic plan

Resources Needed

| Resource | Current Resource Availability | Partner Availability | Potential Availability |
|---|----------------------------------|----------------------|------------------------|
| At least 1 FTE staff | | | |
| Meeting space | | | |
| Food for first meeting | | | |
| Paper and copy costs for orientation materials | | | |
| Neutral facilitator | | | |

Organizational Structure & Community Representation

| | Core Support Team | MAPP Committee | Subcommittees | Community |
|------------------------------------|--|---|---------------|--|
| Roles and Responsibilities | Get the process "off the ground" Organize and plan the process Identify resources Conduct readiness assessment Recruit membership for the MAPP committee | Convened during this phase Provide input on participant recruitment Approve plan for MAPP process (as determined by Core Support Team) Identify additional resources | None | Community residents should be recruited to participate in committee. Broader community should be made aware of the new initiative. |
| Lead staff (Name & Affiliation) | | | | |

| | Lead | Due | 2 4 4 |
|--|-------|------|--------------|
| Activity | Staff | Date | Status |
| Complete the <u>"Organizing the Planning Effort: Reasons.</u> | | | |
| Benefits, and Sponsorship" Worksheet. The reasons for | | | |
| conducting MAPP and the benefits expected should be | | | |
| communicated to partners. | | | |
| Identify partners and create a spreadsheet that includes | | | |
| contact name, email, phone, organization, mission, | | | |
| expertise, resources/assets, long-term availability/interest, | | | |
| and EPHS. | | | |
| <u>Create committee structure</u> Organize participants according to their potential roles on | | | |
| the Core Support Team, MAPP Committee, | | | |
| Subcommittees, and as members of the community. | | | |
| Committee organization is subject to change as the | | | |
| process progresses. Partners can influence how | | | |
| committees will function. This activity simply provides | | | |
| guidance on how well the community and LPHS is | | | |
| represented among the different working committees. | | | |
| Identify members of MAPP Committee and determine who | | | |
| the best person would be to formally invite selected | | | |
| members to participate on the MAPP Committee. | | | |
| Identify key sponsors for the process | | | |
| Sponsors should give legitimacy to the effort by | | | |
| demonstrating public support and endorsing the | | | |
| initiative. | | | |
| Sponsors will also be actively involved in the | | | |
| planning process. | | | |
| Sponsors will also support the process through | | | |
| resource commitment. | | | |
| Sponsors will play a management or leadership | | | |
| role (e.g. subcommittee chairmanship) in the | | | |
| planning process. | | | |
| Communicate to sponsors the importance of their | | | |
| involvement. | | | |
| Consider how participation will be organized | | | |
| Think about: | | | |
| What are the expectations of our participants? Do | | | |
| they prefer formal or informal meetings? | | | |
| What level of participation can we expect from | | | |
| them? | | | |
| Will participants be willing to serve on more than | | | |
| one subcommittee? | | | |
| What kind of overlap should there be among | | | |
| subcommittee membership and MAPP Committee | | | |
| membership? | | | |
| What time constraints do participants face? | | | |
| What is their availability for meetings (bi-weekly, | | | |
| monthly)? | | | |
| Should meetings be scheduled regularly or should | | | |
| we identify meeting dates as we proceed through | | | |
| the process? | | | |
| How long should meetings run? | | | |
| How willing are participants to do "homework" | | | |
| between meetings? | | | |
| What are their expectations for the timeframe of | | | |
| the planning process? | | | |
| What meeting logistics should be considered | | | |

| | Lead | Due | |
|---|-------|------|--------|
| Activity | Staff | Date | Status |
| (such as size of the geographical area, travel | Cian | 24.0 | |
| required for meetings, and meeting locations)? | | | |
| Even though it may be difficult to determine the answers | | | |
| to these questions, and partners should have | | | |
| opportunities to answer these questions at a later time, an | | | |
| early consideration of these issues will help create a | | | |
| timeline and workplan for the MAPP process. | | | |
| Create a timeline and draft workplan (this document) | | | |
| Think about: | | | |
| What will the process entail? | | | |
| How long will it take? | | | |
| What results are we seeking and how will we | | | |
| know when we are finished? | | | |
| Who will be responsible for carrying out specific | | | |
| activities? | | | |
| See Meeting Planning for 18 months.xls | | | |
| Assess resource needs | | | |
| Staff time | | | |
| Data collection and information gathering | | | |
| Meeting space, meals, and refreshments | | | |
| Travel by participants, staff, or consultants | | | |
| Report production and printing | | | |
| Consultant costs | | | |
| Educational and training materials | | | |
| Create a budget | | | |
| See MAPP Budget Worksheet.doc | | | |
| Factor in resources available through partners | | | |
| Conduct a readiness assessment | | | |
| See Readiness Assessment Worksheet.doc | | | |
| Plan first meeting | | | |
| Agenda | | | |
| Pre-meeting assignments (orientation materials | | | |
| for review) | | | |
| Post-meeting assignments (follow-up work) | | | |
| Meeting objectives | | | |
| Food | | | |
| Meeting space | | | |
| Room set-up | | | |
| Sub-committee sign up sheet | | | |
| Meeting evaluation (reference meeting objectives) | | | |
| Contact all partners, inform them about the MAPP | | | |
| process, and invite them to the first meeting. Partners | | | |
| should be informed about what their participation will entail | | | |
| and how their participation will contribute to their missions | | | |
| and the overall health of the community. | | | |
| With the MAPP Core Support Team, determine how the | | | |
| process will be managed as it moves along. Update the | | | |
| workplan, meeting planning document, and subcommittee | | | |
| assignments. Complete Barriers Worksheet. | | | |
| Evaluate the effectiveness of Organizing for Success | | | |
| using this workplan document and phase objectives (see | | | |
| example evaluation questions). | | | |

VISIONING

Phase Objectives

- To guide the community through a collaborative process resulting in a shared vision
- To create a vision that is a statement of the ideal future
- To guide the community through a collaborative process resulting in common values
- To create values that are fundamental principles and beliefs that will guide the community through the process
- To create a vision that provides focus, purpose, and direction to the MAPP process

Resources Needed

| Resource | Current Resource Availability | Partner Availability | Potential Availability |
|----------------------------|----------------------------------|----------------------|------------------------|
| At least 1 FTE staff | | | |
| Meeting space | | | |
| Food | | | |
| Materials for visioning | | | |
| process (e.g. flip charts) | | | |
| Neutral facilitator | | | |
| Printing of vision | | | |

| | Core Support Team | MAPP Committee | Subcommittees | Community |
|--|--|---|--|---|
| Roles and Responsibilities Individuals Involved (Name & Affiliation) | Plan visioning sessions Ensure proper facilitation Summarize the results of the meeting(s) Draft vision and values statements | Oversee and participate in the visioning phase Develop a plan for gaining broad community participation and identify community representatives | None recommended, however, some committees may want to designate a subcommittee to conduct the activities identified for the core support team. | Broad community participation is essential. • Announcements should be made broadly through community mechanisms (media, etc.). • Visioning session logistics should promote broad community participation. |
| Lead staff (Name & Affiliation) | | | | |

| | Lead | Due | |
|--|-------|------|--------|
| Activity | Staff | Date | Status |
| Identify other visioning efforts. Make connections | Otan | Duit | 011110 |
| between previous and existing visions. | | | |
| Design the visioning process | | | |
| Who will be invited? | | | |
| Where will the process be conducted? | | | |
| What methods will be used to gather information | | | |
| for vision? (e.g. small-group discussions, town- | | | |
| hall, multi-method approach) | | | |
| How will the values be developed? | | | |
| Who will facilitate the process? | | | |
| How will the information be captured? Who will | | | |
| record the information? | | | |
| • How will the vision be shared with the community? | | | |
| See Tip Sheet-The Visioning Process | | | |
| Invite participants | | | |
| How will the visioning session be marketed? | | | |
| Invitations from MAPP Committee or other county | | | |
| leaders | | | |
| Formal invitations | | | |
| Community flyers | | | |
| Website | | | |
| E-mail/distribution Lists | | | |
| Media | | | |
| Community centers, churches, schools, civic | | | |
| clubs, local businesses, recreation centers, etc. | | | |
| Finalize vision and value statements and share with the | | | |
| community and LPHS partners | | | |
| Display on website, flyers, orientation materials, | | | |
| local newspaper, etc. | | | |
| Remember to refer to vision at subsequent | | | |
| phases of the MAPP process. | | | |
| Consider branding the MAPP process. Logos and | | | |
| marketing materials can be created based on vision and | | | |
| value statements. | | | |
| Evaluate the visioning process | | | |

COMMUNITY HEALTH STATUS ASSESSMENT

Phase Objectives

- To determine the health status of the community
- To gather data for important health indicators

Resources Needed

| Resource | Current Resource Availability | Partner Availability | Potential Availability |
|------------------------|----------------------------------|----------------------|------------------------|
| At least 1 FTE staff | | | |
| Access to data sources | | | |
| Computer with software | | | |
| Paper and copy costs | | | |
| Meeting space for | | | |
| subcommittee meeting | | | |

| | Core Support Team | MAPP Committee | Subcommittees | Community |
|------------------------------------|---|---|--|--|
| Roles and Responsibilities | Support Committee and Subcommittee activities Assist with collection and analysis of data, compilation of community health profile, and dissemination/ presentation of results to community | Oversee subcommittee activities Identify sources for data Select locally- appropriate indicators Provide input into Community Health Profile development | Subcommittee, with expertise in data, should oversee the CHSA Collect and analyze data Compile Community Health Profile Present/ disseminate results to community | The Community Health Profile should be presented to and disseminated throughout the community Community participation should occur through the committee, but additional community participants may be recruited if desired. |
| Lead staff (Name & Affiliation) | | | | |

| | Lead | Due | |
|--|-------|------|--------|
| Activity | Staff | Date | Status |
| Create subcommittee | | | |
| Subcommittee should include members who: | | | |
| Have access to data | | | |
| Can analyze data | | | |
| Can facilitate community ownership of data | | | |
| Have an interest in data | | | |
| Collect data for core CHSA indicators | | | |
| Reference Core Indicators | | | |
| Reference state and local databases, previous | | | |
| health assessment reports, partner organization | | | |
| data sources before determining if primary data | | | |
| collection is necessary | | | |
| Collect data for indicators that are particular interest to the | | | |
| community Reference the vision statement | | | |
| Reference the vision statement Reference results from the CTSA | | | |
| | | | |
| Reference Extended Indicators List Conduct primary data collection, if necessary | | | |
| Data collection does not have to be perfect. Note | | | |
| limitations. Improvements can be made in future | | | |
| iterations. | | | |
| Organize and analyze data | | | |
| At a minimum, analyze data by demography, | | | |
| socioeconomic status, mortality rates, gender, | | | |
| age, race, ethnicity, and other common population | | | |
| subgroups | | | |
| Compile results into a community health profile | | | |
| The community health profile can be presented in several | | | |
| different formats: | | | |
| Written report | | | |
| PowerPoint presentations | | | |
| Online report | | | |
| Disseminate community health profile | | | |
| Share with the community, partners, elected | | | |
| officials, media, etc. | | | |
| Create a system to monitor indicators over time | | | |
| Sustainable system monitoring requires clear definition of roles, including leadership, coordination and | | | |
| communication. One organization can take the lead, but | | | |
| other organizations should contribute to the monitoring of | | | |
| the data system. | | | |
| Subcommittee should make decisions related to: | | | |
| Frequency of data collection | | | |
| Quality of data | | | |
| Comparison to peer, state, or national data | | | |
| Need to modify or add indicators | | | |
| Methods for maintaining data systems, and | | | |
| Communication mechanisms to assist in keeping | | | |
| the monitoring in place. | | | |
| Create a list of challenges and opportunities related to | | | |
| health status. | | | |
| Partners should examine the CHSA results in light of the | | | |
| following questions: | | | |
| Does this health problem affect large numbers of | | | |

| | Lead | Due | |
|--|-------|------|--------|
| Activity | Staff | Date | Status |
| people, have serious consequences, show evidence of wide disparity between groups or increasing trends, and is it susceptible to proven interventions? Does the issue have broad implications over the long term for potential health improvements? By addressing this issue, is there potential for a major breakthrough in approaching community health improvement? Is this issue one that has been persistent, nagging, and seemingly unsolvable? Does this issue identify a particular strength that can be replicated throughout the community? Is ongoing monitoring of this issue possible? Ideally, the final list will include 10-15 community health status issues that will be more closely examined in the Identify Strategic Issues phase of MAPP. | | | |

LOCAL PUBLIC HEALTH SYSTEM ASSESSMENT

Phase Objectives

- To determine the components, activities, competencies, and capacity of the local public health system
- To determine how the essential public health services are being provided in the community

Resources Needed

| Resource | Current Resource Availability | Partner Availability | Potential Availability |
|--|----------------------------------|----------------------|------------------------|
| At least 1 FTE staff | | | |
| Meeting space for subcommittee | | | |
| Meeting space for NPHPSP instrument completion | | | |
| Food for NPHPSP instrument meeting | | | |
| Paper and copy costs for orientation materials for NPHPSP instrument completion | | | |
| Facilitators & recorders for NPHPSP meeting | | | |

| | Core Support Team | MAPP Committee | Subcommittees | Community |
|---|---|--|--|---|
| Roles and Responsibilities | • Support Committee and Subcommittee activities | Participate in Essential Services Orientation session Respond to performance measures instrument Discuss results/identify challenges and opportunities | Subcommittee may be convened to oversee LPHSA. Prepare for LPHSA activities and ensure effective implementation Ensure facilitation/ recording of all sessions | • Community participation should occur through the committee, but additional community participants can be recruited if desired. |
| Individuals Involved (Name & Affiliation) | | | | |
| Lead staff (Name & Affiliation) | | | | |

| Activity | Lead Staff | Due Date | Status |
|---|---------------|-------------|--------|
| Convene LPHSA subcommittee | Stall | Dale | Status |
| Members should: | | | |
| Represent diverse segments of the local public | | | |
| health system. Ideally, at least one individual | | | |
| from each essential service should be recruited. | | | |
| Familiarize themselves with the NPHPSP | | | |
| instrument | | | |
| Get leadership support | | | |
| Sponsors and leaders should advocate and | | | |
| explicitly support NPHPSP instrument | | | |
| completion. | | | |
| Leaders should articulate the purpose, | | | |
| importance, and function of the NPHPSP within | | | |
| the context of community health improvement | | | |
| Decide NPHPSP local instrument completion format | | | |
| (see pp. 17-21 User's Guide.) | | | |
| Retreat | | | |
| Series of meeting | | | |
| Note: It takes about 8-10 hours for groups of 12- | | | |
| 20 participants to complete the entire | | | |
| instrument. Meeting time can be reduced by | | | |
| assigning different groups 1-2 essential | | | |
| services. Identify <u>resource needs</u> for NPHPSP instrument | | | |
| completion | | | |
| Facilitators(s) | | | |
| Recorders | | | |
| Meeting space | | | |
| Food | | | |
| Materials (instruments, voting cards, flip charts) | | | |
| Staff time | | | |
| Identify organizations and contacts that represent all the | | | |
| different sectors of the local public health system. | | | |
| Identify in what ways local public health system entities | | | |
| contribute to essential public health services. | | | |
| (Preliminary brainstorm can be supplemented at the | | | |
| NPHPSP meeting using facilitated discussion.) (see | | | |
| EPHS Partner Worksheet) | | | |
| Invite system partners | | | |
| Explain how their organizations are components | | | |
| of the local public health system and the | | | |
| importance of their participation in the NPHPSP | | | |
| process. | | | |
| Explain the purpose of the NPHPSP. Explain how the assessment results will be used. | | | |
| Explain the time commitment. | | | |
| Explain the time communent. Explain the benefits of completing the NPHPSP | | | |
| • Explain the benefits of completing the NPHPSP instrument (see User's Guide p.4). | | | |
| Provide background materials (e.g. essential | | | |
| service model standards, description of the | | | |
| NPHPSP, meeting agenda) | | | |
| Identify and train facilitators and recorders (see | | | |
| Facilitator's Guide and User's Guide p. 30) | | | |
| Review the instrument and ensure facilitators | | | |

| | Lead | Due | |
|--|-------|------|--------|
| Activity | Staff | Date | Status |
| are very familiar with the structure of the | ••••• | | |
| instrument and the process that will be used to | | | |
| complete the instrument. | | | |
| Ensure that facilitators understand how | | | |
| consensus will be reached. | | | |
| Ensure that facilitators will be able to address | | | |
| clarification questions related to instrument | | | |
| questions. | | | |
| Ensure that all facilitators will lead their groups | | | |
| in the same way to ensure consistency in | | | |
| response (see User's Guide pp. 26-28). | | | |
| Ensure a systematic and consistent process for | | | |
| capturing qualitative information shared at the | | | |
| meeting. | | | |
| Orient participants to the NPHPSP instrument | | | |
| Ensure that partners understand the concept of | | | |
| the LPHS. | | | |
| Review the instrument format, ground rules, | | | |
| voting methods, and materials available for | | | |
| reference (e.g. 10 EPHS Poster). | | | |
| Complete the priority and agency contribution questionnaires (Optional, see User's Guide pp. 77-84) | | | |
| Submit data to PHF | | | |
| Remember to submit the respondent | | | |
| information form (see User's Guide pp. 72-75) | | | |
| and include priority and agency questionnaires if | | | |
| completed. | | | |
| Review results and determine challenges and | | | |
| opportunities | | | |
| Through facilitated discussion, categorize essential | | | |
| activities into one of the following groups (see | | | |
| Challenges and Opportunities Matrix): | | | |
| Success, maintain effort | | | |
| Success, cut back resources | | | |
| Challenge, requires increased activity | | | |
| Challenge, requires increase coordination | | | |
| Supplement responses with comments captured by | | | |
| recorders during instrument completion. | | | |
| Evaluate NPHPSP instrument completion | | | |
| Share results with partners. PHF generated reports can | | | |
| be tailored to different audiences. | | | |

COMMUNITY THEMES AND STRENGTHS ASSESSMENT

Phase Objectives

- To identify concerns, opinions, and issues that are important to the community
- To determine how quality of life is perceived in the community
- To identify assets in the community that can be used to improve health
- To encourage community ownership and responsibility of the process
- To identify themes that validate findings from other assessments

Resources Needed

| Resource | Current Resource Availability | Partner Availability | Potential Availability |
|---|----------------------------------|----------------------|------------------------|
| At least 1 FTE staff | | | |
| Meeting space for subcommittee meeting | | | |
| Meeting space for collecting CTSA data | | | |
| Food for CTSA meeting | | | |
| Paper and copy costs for orientation materials | | | |
| Neutral facilitator | | | |

| | Core Support Team | MAPP Committee | Subcommittees | Community |
|------------------------------------|---|---|--|---|
| Roles and Responsibilities | Support Committee and Subcommittee activities | Oversee subcommittee activities Provide recommendations for gaining broad community participation Participate in activities as needed | Subcommittee to oversee activities is recommended Identify appropriate activities and plan how to undertake them Oversee implementation of activities Compile results | Broad community participation is essential. • Announcements should be made broadly through community mechanisms (media, etc.). • All activities should promote broad community participation. |
| Lead staff (Name & Affiliation) | | | | |

| | Lead | Due | |
|--|-------|------|--------|
| Activity | Staff | Date | Status |
| Create a CTSA subcommittee. Members should have an | | | |
| interest or expertise in collecting qualitative data. | | | |
| Choose the method(s) for collecting CTSA data | | | |
| Methods include: | | | |
| Community meetings | | | |
| Community asset mapping | | | |
| Community dialogues | | | |
| Focus groups | | | |
| Walking or windshield surveys | | | |
| Photovoice | | | |
| Individual discussions/interviews | | | |
| Surveys | | | |
| Reference CTSA Information Gathering Matrix | | | |
| | | | |
| Remember that this assessment collects three different | | | |
| types of information: | | | |
| Community concerns, opinions, suggestions | | | |
| Perceptions of quality of life | | | |
| Community assets | | | |
| (see question examples) | | | |
| Identify resource needs such as: | | | |
| Consultants | | | |
| Survey instrument development and | | | |
| dissemination | | | |
| Meeting space | | | |
| Travel costs | | | |
| Staff time | | | |
| Implement data gathering activities | | | |
| Ensure broad representation of input | | | |
| Capture information offered by the community that | | | |
| is not solicited via formal data collection methods | | | |
| Collect data | | | |
| Summarize data (see CTSA Issues, Perceptions | | | |
| & Assets worksheet) | | | |
| Create an asset map | | | |
| Share results with community and engage community in | | | |
| subsequent process activities. | | | |

FORCES OF CHANGE ASSESSMENT

Phase Objectives

- To determine what is occurring or might occur that affects the health of the community and the local public health system
- To identify threats and opportunities related to forces of change

Resources Needed

| Resource | Current Resource Availability | Partner Availability | Potential Availability |
|--|----------------------------------|----------------------|------------------------|
| At least 1 FTE staff | | | |
| Meeting space | | | |
| Food | | | |
| Paper and copy costs for orientation materials | | | |
| Neutral facilitator | | | |

| | Core Support Team | MAPP Committee | Subcommittees | Community |
|---|---|---|--|---|
| Roles and Responsibilities | Prepare for and plan brainstorming session(s) Ensure facilitation and work with the facilitator Summarize and compile the results of the meetings | Entire committee should participate in brainstorming session(s). Identify threats and opportunities for each force of change | None recommended, however, some committees may want to designate a subcommittee to conduct the activities identified for the core support team. | Community participation should occur through the committee, but additional community participants may be recruited if desired. |
| Individuals Involved (Name & Affiliation) | | | | |
| Lead staff (Name & Affiliation) | | | | |

| | Lead | Due | |
|---|-------|------|--------|
| Activity | Staff | Date | Status |
| Determine the brainstorming method (e.g. round robin, | | | |
| brainwriting) that will be used to collect Forces of Change | | | |
| information | | | |
| Identify a facilitator | | | |
| Identify a notetaker | | | |
| Find a convenient location | | | |
| Prepare materials and questions for facilitator | | | |
| Brainstorming Worksheet | | | |
| Threats & Opportunities Worksheet | | | |
| Invite MAPP committee members and other leaders in the | | | |
| community. | | | |
| Participants should be: | | | |
| "big picture" thinkers, "movers and shakers" | | | |
| aware of the important social, economic, and | | | |
| political trends | | | |
| Compile and synthesize results | | | |
| Threats & Opportunities Worksheet | | | |

IDENTIFYING STRATEGIC ISSUES

Phase Objectives

- To analyze and synthesize the data from all four MAPP assessments
- To determine which issues are critical to the success of the local public health system
- To identify the fundamental policy choices or critical challenges that must be addressed in order for a community to achieve its vision

Resources Needed

| Resource | Current Resource Availability | Partner Availability | Potential Availability |
|---|----------------------------------|----------------------|------------------------|
| At least 1 FTE staff | | | |
| Meeting space | | | |
| Food for meeting | | | |
| Paper and copy costs for printing data results and vision | | | |
| Neutral facilitator | | | |

| | Core Support Team | MAPP Committee | Subcommittees | Community |
|------------------------------------|---|---|---|---|
| Roles and Responsibilities | Prepare compilation of results from four MAPP Assessments. Staffs meeting(s) at which strategic issues are identified Summarize the results of the meeting(s) | • Entire committee should participate in meeting(s) at which strategic issues are identified and analyzed. | Small groups can be charged with specific tasks | None recommended. However, some MAPP users have invited community members to Identifying Strategic Issue retreats and meetings while other MAPP users have completed this phase in 2 stages. First, the MAPP committee solicits feedback from the community then uses community feedback to finalize strategic issues. |
| Lead staff (Name & Affiliation) | | | | |

| | Lead | Due | |
|---|-------|------|--------|
| Activity | Staff | Date | Status |
| Determine the method(s) for completing this phase | | | |
| Identify the forum and duration (e.g. 1 day retreat, | | | |
| town hall event, several meetings in different | | | |
| locations) | | | |
| Identify who will be involved (e.g. MAPP | | | |
| Committee with/out all subcommittees and/or | | | |
| entire community) and in what ways (e.g. | | | |
| community provides input first, then MAPP | | | |
| committee finalizes strategic issues) | | | |
| Identify a facilitator | | | |
| Create a process for analyzing and synthesizing the data | | | |
| the data | | | |
| Devise a consensus or voting process for deviding final strategic issues | | | |
| deciding final strategic issues | | | |
| Compile and share summarized results from all four | | | |
| assessments, together with the vision, with community | | | |
| partners Using the method identified for completing this phase, | | | |
| identify potential strategic issues referencing data | | | |
| assessment results and community vision. | | | |
| Reference the assessment data to establish an | | | |
| understanding of the challenges and opportunities | | | |
| related to a strategic issue | | | |
| Use the Strategic Issues Relationship Diagram to | | | |
| ensure that each strategic issue is informed by all | | | |
| four assessments | | | |
| Compose strategic issues as questions that need to be | | | |
| answered in order for a community to reach its vision and | | | |
| verify that issues are strategic. See Verifying Strategic | | | |
| Issues. See Strategic Issues Identification Worksheet | | | |
| Prioritize strategic issues | | | |
| Determine the consequences of not addressing | | | |
| an issue (see Strategic Issues Identification | | | |
| Worksheet). Issues usually fall into one of three | | | |
| categories: | | | |
| No action is currently required, but the | | | |
| issue should be monitored for future | | | |
| action (e.g., population, immigration, | | | |
| demographic shirts, or growth of | | | |
| managed care) | | | |
| Action can be determined through the strategic planning process (most issues | | | |
| will fall into this category) | | | |
| | | | |
| The issue appears urgent and requires an immediate response (e.g., legislation that | | | |
| is being considered) | | | |
| Consolidate overlapping or related issues. | | | |
| Strategic issues should be consolidated to a | | | |
| limited number of discrete non-overlapping issues. | | | |
| Review all identified strategic issues and ask: | | | |
| • How are they related? | | | |
| Do they chare causes or influences that | | | |
| make them strategic? | | | |
| Can strategic issues be combined without | | | |
| losing a key perspective? | | | |

| Activity | Lead Staff | Due Date | Status |
|---|---------------|-------------|--------|
| Arrange issues into an ordered list. Strategic issues can be ordered in 3 ways. Logical order: Resolving issues in the sequence in which they should be addressed. The resolution of one issue leads is contingent on the resolution of another Impact order: Resolving easier issues can build momentum, teamwork, consensus, and solutions to more complicated issues Temporal order: Resolving issues according to a timeline (e.g. legislative or funding cycle) | | | |
| Share final list of strategic issues with community partners and evaluate the process used to identify the issues | | | |

FORMULATING GOALS AND STRATEGIES

Phase Objectives

- To formulate goal statements for each strategic issue. Goals are broad, long-term aims that define the desired result associated with identified strategic issues.
- To identify broad strategies for addressing issues and achieving goals related to the community's vision.
 Strategies are patterns of action, decisions, and policies that guide a local public health system toward a vision or goal.
- To develop and adopt an interrelated set of strategy statements
- To create a collection of goals and strategies that provide a comprehensive picture of how local public health system partners will achieve a healthy community

Resources Needed

| Resource | Current Resource Availability | Partner Availability | Potential Availability |
|----------------------|----------------------------------|----------------------|------------------------|
| At least 1 FTE staff | | | |
| Meeting space | | | |
| Food | | | |
| Paper and copy costs | | | |
| Neutral facilitator | | | |

| | Core Support Team | MAPP Committee | Subcommittees | Community |
|---|--|--|---|--|
| Roles and Responsibilities | Staff meeting(s) Prepare information to assist in developing strategies and goals Summarize the results of the meeting(s) Draft the planning report | Entire committee should participate in meeting(s) at which strategies and goals are selected and confirmed. Oversee development of the planning report and adopt the plan | None recommended, although if desired, small groups may be formed to discuss each strategic issue in-depth and identify the goals, strategies, and barriers. | Community buy-in of strategies and goals should occur. |
| Individuals Involved (Name & Affiliation) | | | | |
| Lead staff (Name & Affiliation) | | | | |

| | Lead | Due | |
|--|-------|------|--------|
| Activity | Staff | Date | Status |
| Determine the method(s) for completing this phase | | | |
| Identify the forum and duration (e.g. 1 day retreat, | | | |
| series of meetings) | | | |
| Identify who will be involved (e.g. MAPP | | | |
| Committee or small groups comprised of MAPP | | | |
| committee, subcommittee, and community | | | |
| members) and in what ways | | | |
| Identify a facilitator | | | |
| Create a process for identifying and agreeing | | | |
| upon goals and strategies | | | |
| Using the method identified for completing this phase, | | | |
| develop goals by referencing the vision statement and | | | |
| strategic issues Visions often have several components. Each of | | | |
| the components may require a different goal and | | | |
| strategy. | | | |
| Review strategic issues and identify goals that will | | | |
| be achieved when those issues are resolved. | | | |
| Small groups can be created around each goal. | | | |
| Using the method identified for completing this phase, | | | |
| generate strategy alternatives | | | |
| In generating strategies | | | |
| Think about past patterns of action, new | | | |
| realizations, and previous strategies that worked | | | |
| or didn't work. | | | |
| Reference vision statement and assessment data. | | | |
| Consider strengths, opportunities, and threats that | | | |
| will need to be addressed. | | | |
| Remember that goals may have several strategy | | | |
| alternatives and strategies may cut across goals. | | | |
| Generate several strategies that reflect the range of choices the community may select in order to achieve its | | | |
| vision. | | | |
| Resist pressures to settle for an obvious or comfortable | | | |
| strategy. | | | |
| Brainstorm barriers to implementation | | | |
| Think about | | | |
| Resources | | | |
| Community support | | | |
| Legal or policy impediments to authority | | | |
| Technological difficulties | | | |
| Limited organizational or management capacity | | | |
| Barriers do not necessarily eliminate a strategy | | | |
| alternative. However, they should alert the community to | | | |
| obstacles that must be addressed if the alternative is | | | |
| pursued. | | | |
| See Strategy Development Worksheet Draft implementation details | | | |
| Consider | | | |
| What specific actions need to take place? | | | |
| What specific actions need to take place? What is a reasonable timeline? | | | |
| Which organizations and individuals should be | | | |
| involved? | | | |
| What resources are required and where will they | | | |
| That recently are required and where will they | | 1 | |

| | Lead | Due | |
|---|-----------|------|--------|
| Activity | Staff | Date | Status |
| come from? | | | |
| See Strategy Development Worksheet | 1 | | |
| Select strategies | | | |
| Use the Strategy Development Matrix to examine how | 1 | | |
| strategies and goals related to each other as well as for | 1 | | |
| resolving redundancies and identifying gaps. Strategies | 1 | | |
| may be seen not only as alternatives, but as | 1 | | |
| complementary elements of a strategy set. Closely- | 1 | | |
| related strategy alternatives may be consolidated or | 1 | | |
| organized in a sequential or hierarchical order. | 1 | | |
| (See PEARL test.) | | | |
| Adopt strategies | 1 | | |
| This can be a formal or informal adoption. If decision | 1 | | |
| making has been informal throughout the process, than an | 1 | | |
| informal adoption may be best. However, a separate | 1 | | |
| decision to adopt the entire plan should take place to | 1 | | |
| indicate its significance and the participants' commitment | 1 | | |
| to the identified strategies. Formal adoption at a special | 1 | | |
| meeting can mark the end of the planning process and beginning of plan adoption. Take into account challenges | 1 | | |
| encountered throughout the process in reaching | 1 | | |
| agreement. Also take note of the political and economic | 1 | | |
| context in which the strategies are publicly adopted. | 1 | | |
| Draft the planning report | . <u></u> | | |
| The report should serve as a reference for what | 1 | | |
| has been decided. | 1 | | |
| The report will test the consensus about the | l | | |
| agreements reached during the process. | 1 | | |
| The report will communicate the vision, goals, and | 1 | | |
| strategies to partners and the broader community. | 1 | | |
| The report is not an implementation plan. Rather, it is a | 1 | | |
| plan outlining broad strategic courses of action about | 1 | | |
| which the community has reached consensus. | 1 | | |
| | l | | |
| In developing the plan, think about | 1 | | |
| Content and format: Will the plan report be a | 1 | | |
| simple summary of the strategies or will it | 1 | | |
| document the whole process? | 1 | | |
| Logistics for producing the plan: How will the plan | 1 | | |
| be produced? Who will produce the plan? | 1 | | |
| Incorporating input throughout the document | 1 | | |
| development process. How will input from | 1 | | |
| participants be gathered between the production | 1 | | |
| of the rough draft and the final product? | | | |
| Celebrate the final plan | 1 | | |
| The MAPP Committee should adopt the final plan. | 1 | | |
| Participant organizations could also adopt the final plan. The plan should be widely disseminated and celebrated | 1 | | |
| throughout the community. | 1 | | |
| | | 1 | |

ACTION CYCLE

Phase Objectives

- To use goals and strategies identified in the previous phase to develop practical work plans
- To implement an action plan for addressing priority goals and objectives
- To evaluate an action plan for addressing priority goals and objectives
- To create an action cycle process that uses evaluation to improve subsequent iterations of the cycle
- To create local public health system partner accountability for action plan activities
- To sustain the process and continue implementation over time
- To ensure the continuous involvement of local public health system partners

Resources Needed

| Resource | Current Resource Availability | Partner Availability | Potential Availability |
|----------------------|----------------------------------|----------------------|------------------------|
| At least 1 FTE staff | | | |
| | | | |
| | | | |

| | Core Support Team | MAPP Committee | Subcommittees | Community |
|------------------------------------|--|--|---|--|
| Roles and Responsibilities | Provide support rotan Provide support rotans sustains itself and action occurs Recruit additional participants as needed | Oversee action planning, implementation, and evaluation Oversee recruitment of additional participants as needed | Subcommittee(s) should be formed to oversee implementation and evaluation. Small groups may be formed to oversee action plans for each strategy. | Broad community awareness of implementation. Community participation in action plan implementation. |
| Lead staff (Name & Affiliation) | | | | |

| | Land | Due | |
|---|---------------|-------------|--------|
| Activity | Lead Staff | Due Date | Status |
| Activity Organize for action | Stall | Dale | Status |
| Participants should address the following questions: | | | |
| Are the right people included? Who are they? | | | |
| What should the structure be for facilitating | | | |
| accountability? | | | |
| What committees should be convened? | | | |
| Participants should include the participants that will play a | | | |
| key role in implementing and evaluating the strategies. | | | |
| The selection of strategies in the previous phase may | | | |
| have identified necessary players who have, thus far, not | | | |
| been participants. | | | |
| This step should involve individuals who can make | | | |
| budgetary or broad policy commitments for their agencies, | | | |
| groups, or coalitions. | | | |
| (See NKY PHSIP Survey) | | | |
| Create an action cycle oversight committee | | | |
| There should be an entity responsible for ensuring that the | | | |
| MAPP process is sustained. Several options may be | | | |
| considered: | | | |
| Have the MAPP Committee, as a whole, play this | | | |
| role. | | | |
| Establish a subcommittee to oversee the three | | | |
| components of the Action Cycle. | | | |
| Establish a subcommittee to oversee | | | |
| implementation, while a separate subcommittee | | | |
| oversees evaluation. | | | |
| The committee overseeing implementation should address | | | |
| the following questions: | | | |
| What do we expect from the leaders of this | | | |
| coordination, etc.? | | | |
| What kinds of communication mechanisms need | | | |
| to be in place among participants (including | | | |
| quality, frequency, breadth, depth)? | | | |
| What products should result from evaluation and | | | |
| monitoring activities (e.g., evaluation model, | | | |
| reports, recognition, etc.)? | | | |
| The committee also considers how work will be completed | | | |
| and how connections will be made throughout the planning and implementation process. | | | |
| Create a subgroups | | | |
| Small subgroups around each goal and its selected | | | |
| strategies can help manage the process. | | | |
| Include appropriate representatives and key implementers | | | |
| in the relevant groups. | | | |
| The small groups develop objectives and establish | | | |
| accountability, and then bring recommendations back to | | | |
| the MAPP Committee for refinement. | | | |
| Develop objectives accountability | | | |
| Develop measurable outcome objective(s) for each | | | |
| identified strategy. Measurable objectives | | | |
| Are valid and reliable, | | | |
| Are directly associated with the achievement of | | | |
| the strategy, | | | |
| Link performance to the expected improvement, | | | |
| Tighten rather than diffuse accountability, | | | |
| · · · · · · · · · · · · · · · · · · · | | • | |

| A etiinitu | Lead | Due | Status |
|--|-------|------|--------|
| Activity Are responsive to changes in expected results, & | Staff | Date | Status |
| Provide timely feedback at a reasonable cost. (See Tip Sheet-Description of Terms Used in Objective Setting) | | | |
| Establish accountability for achieving objectives | | | |
| In subgroups, using brainstorming processes and dialogue, develop the objectives and identify a plan for accountability. | | | |
| Subgroups should bring their recommendations to the MAPP Committee for discussion. | | | |
| Conduct periodic discussions among all participants to identify linkages, address gaps, and ensure that the small groups are working effectively. | | | |
| Once accountability for each objective is identified, each participating organization should individually identify how the goals, strategies, and outcome objectives can be incorporated into their organizational mission statements and plans. | | | |
| Develop action plans | | | |
| Translate outcome objectives into specific action plans and activities to be carried out by the responsible MAPP | | | |
| participants. Action planning should include: | | | |
| Specific activities | | | |
| Names of implementers | | | |
| Timeframes | | | |
| Needed resources. | | | |
| Action plans may be organization-specific or may call for collective action from a number of organizations. (see example action plans: Action Group Planning Template, Draft Action Plan NKY, Implementation Plan Worksheet) | | | |
| Review action plans for opportunities for coordination | | | |
| MAPP Committee should identify common or duplicative activities and seek ways to combine or coordinate the use of limited community resources. | | | |
| Organize a large meeting where all of the goals, objectives, and action plans are presented and discussed. | | | |
| The implementation plan (strategies, objectives, accountability) should also be reviewed so that all participants understand their role in the implementation of the MAPP plan. | | | |
| During this meeting also identify opportunities to coordinate and collaborate on action plan activities. A review of the four MAPP Assessments may be useful for exploring assets, strengths, and opportunities. | | | |
| Implement and monitor action plans | | | |
| All MAPP participants should be involved in involved in | | | |
| implementing a minimum of one strategy. | | | |
| Other organizations or individuals might have to be brought on board. | | | |
| The broad community should be made aware of | | | |

| | | Lead | Due | |
|---|---|-------|------|--------|
| | Activity | Staff | Date | Status |
| Media, s and tele communities b Tip She The imp that imp subcom action p | tegic goals that are being addressed. such as newspapers, newsletters, radio, evision, should be used to educate the nity about the strategies and the progress being made on an ongoing basis. See the eet-Engaging the Media for suggestions. blementation subcommittee should ensure blementation moves forward. The mittee should maintain contact with each blan leader to ensure that activities are g and that barriers are being addressed. | | | |
| | ire MAPP process and each strategy | | | |
| evaluatiIdentify | ine who needs to be involved in ion what is being evaluated refine the strategies and activities that will | | | |
| | be evaluated. Revisit the goals, strategies, and action plans being implemented, as well as the components of the vision that connect to each strategy. | | | |
| answer. o o o | ate the questions the evaluation will Examples include: How well was the activity performed? How effective was the activity? How well did the activity meet our stated goals (i.e., the shared community vision)? What could be changed to improve the activity next time? | | | |
| evaluati Form, E Report | the methodologies for answering on questions (see examples: Feedback valuation MP Form, Sample Evaluation East Central HD Nebraska, San Antonio mittee Feedback Form) | | | |
| Create a | a plan for carrying out evaluation activities | | | |
| Define a | a strategy for reporting evaluation results | | | |
| accepta question o | credible evidence, i.e. trustworthy, able information to answer the evaluation ns. Information may come from a variety of sources, including participants, community health indicators, and other sources of data that demonstrate what happened after the implementation of the activity. | | | |
| implicat analysis opinions impleme | conclusions, i.e. recommendations and ions of the evaluation are based on an s of the data gathered, not just the team's s or feelings about how the activity was ented. mple Evaluation Report East Central HD | | | |
| See Sal Nebrasi | | | | |
| | arned and celebrate successes | | | |
| Recogni | participants for their hard work. ze volunteers and develop a resource | | | |
| μουι οι μ | eople who can be called upon to help out. | | | |

| Activity | Lead Staff | Due Date | Status |
|--|---------------|-------------|--------|
| Use frequent, on-going, and creative approaches to celebrate successes and recognize the efforts of the community. | | | |

MAPP Partnership Commitment Agreement

.....



Boone County, MO MAPP Partnership 2013 CHAMP Commitment

I am committed to helping Boone County residents achieve optimal health and overall well-being under the premise that ALL individuals have a fulfilling purpose in life and an enduring value to our community.

I believe that area organizations, professionals, and agencies have a special role in society to provide healthy, affordable, and ethical health care services. My objective is to support other MAPP Partnership members to provide the highest quality and most compassionate care and services to the people they serve.

I acknowledge my commitment to the Boone County MAPP Partnership and will support the efforts of the various workgroups and committees on their journey toward achieving the optimal health for Boone County.

I will support and participate in the Boone County, Missouri MAPP Partnership.

Print name

Organization

Date

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CHAMP Kickoff Meeting Invitation



As a valued community partner of Columbia/Boone County Public Health and Human Services you are invited to the kickoff meeting of "CHAMP"

COMMUNITY HEALTH ASSESSMENT AND MOBILIZATION PARTNERS

WEDNESDAY, FEBRUARY 6TH ■ 3:30-5:00 P.M. COLUMBIA/BOONE COUNTY PUBLIC HEALTH AND HUMAN SERVICES ■ 1005 W WORLEY

As part of our efforts to attain national public health accreditation, our department is in the beginning stages of a special planning process that will, when completed, identify strengths and weaknesses in our current public health system, identify health priorities of our community and develop a community-wide strategic plan to meet these priorities. We are looking to our valued community partners to provide input throughout the process. Your participation provides your organization with access to additional resources (including accurate and current data) and allows for increased collaboration on projects and activities. The group's efforts will also help reduce duplication of services within the community and improve the community's focus on priorities.

Please respond with your availability by Monday, February 4th by clicking here, calling Michelle Riefe at 573-874-6331 or emailing CHAMP@gocolumbiamo.com







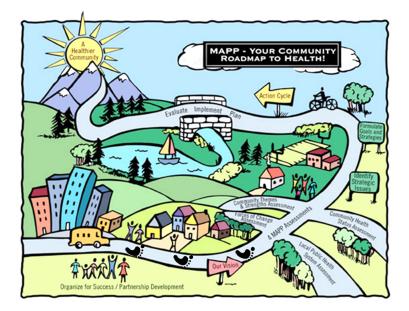
Phase Two: Visioning

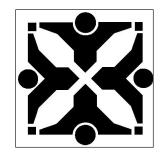


Columbia/Boone County Public Health & Human Services This page left intentionally blank



Phase Two: Visioning, included the development of a community-wide vision and a set of community values. This phase provided an opportunity to increase community awareness and engagement in the MAPP Process. Residents gathered to create a common understanding of what a healthy community looks like. This achievement is known as the community's vision. The vision provides a picture of the long-range results of the MAPP planning process and what will be accomplished when the strategies are implemented. A community's values are its guiding principles and behaviors. These values help a community obtain their vision. The development of a community vision and seven community values completed Phase Two.











Our PROCESS

Visioning began with the April 3, 2013 Steering Committee meeting. Members of the Steering Committee served as the primary support for this phase, branded the phase "Picturing Our Future", and outlined the process. Due to the large geographic area of Boone County, the Steering Committee decided to hold three Picturing Our Future community visioning sessions, one in each region of Boone County (northern, central, and southern).

During the April 24, 2013 CHAMP meeting, attendees were asked to provide contact information for community members to invite to a Picturing Our Future community visioning session. Broad community participation was essential in this part of the process. Using the information provided, the MAPP Core Team and Steering Committee members created diverse and representative groups for each region, seeking demographic diversity as well as representation in the following sectors: business, civic, disabled/disability, education, faith, general community member, government, LGBT, low-income, medical, military connection, minority, philanthropy, retired, senior citizen, young adult, and youth. Invitations were sent via mail and email (Appendix). Follow-up phone calls were made to approximately 80 community members per region.

The Picturing Our Future visioning sessions were facilitated and recorded by members of the Steering Committee. Members volunteered to serve in this role during the May 9, 2013 Steering Committee meeting. Those volunteers were provided formal group facilitation and recorder training by the external contractor for the MAPP Process.

The three Picturing Our Future community visioning sessions took place on weeknights during June 2013. Sessions were held in centrally located, well-known locations with ADA accessibility and ample parking. Free childcare was also provided. Each session began with a complimentary dinner followed by a two-hour work session. The work sessions included an overview of the MAPP process, public health informational video, and vision and values brainstorming (Appendix). Participants were divided into small groups of 3-5 people led by a facilitator. They were given three questions related to a community vision and two questions related to community values. Participants reflected on the questions individually and then reported their responses to the members of their small group.

Our PROCESS

The community vision and community values questions were developed by members of the MAPP Core Team.

COMMUNITY VISION

- What are important characteristics of a healthy community?
- The year is 2023. What does a healthy Boone County ideally look like?
- Who is responsible for making and keeping Boone County healthy?

COMMUNITY VALUES

- What community values promote a healthy community?
- (Optional) In the next 5-10 years, what behaviors will the local public health system partners, community members, and others need to engage in for the community to achieve the general vision your group has discussed?

All responses were recorded on flip charts and shared between groups. Participants were asked to self-report their demographics by completing the optional demographic survey (Appendix).

After the three Picturing Our Future community visioning sessions were completed, seven participants from the sessions volunteered to attend an additional work session to write the final vision and values. The work session was facilitated by the external contractor. The qualitative information from each of the three sessions was compiled into one document (Appendix) for the purposes of this work session. The group reviewed responses from each of the three sessions and vision statements from other communities. Using this information, the group compiled a vision statement and values, and distributed the work session results to the MAPP Core Team.

The MAPP Core Team members made minor adjustments and defined community values based on the discussion held in the work session. These adjustments were shared with the participants of the work session. After the adjustments were approved by the participants, they were formally adopted by the CHAMP members during the August 7, 2013 CHAMP meeting.



RESULTS

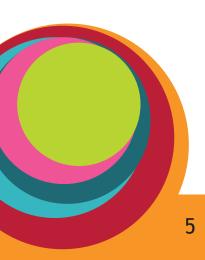
The Community vision and values are listed below. This vision has been incorporated into many aspects of the process. It is listed as a header for meeting materials and was used for branding MAPP promotional material.

VISION STATEMENT

A vibrant, diverse, and caring community in which all individuals can achieve their optimum physical, mental, cultural, social, spiritual, and economic health.

COMMUNITY VALUES

- Access Our residents will have equal access to the opportunities which support their achievement of optimum health.
- Caring Our community will value respect, diversity, and service to others.
- **Excellence** Our residents will strive for individual excellence in a community that maximizes resources and provides opportunities to succeed.
- **Knowledge-Sharing** Our residents will be equipped with the knowledge, education and means to change their behaviors, adopt healthy lifestyles and maintain optimum health.
- **Preparedness** Our community will be prepared to address health challenges due to unexpected events.
- Shared Responsibility Our residents will take responsibility for their physical, mental, cultural, social, spiritual and economic health in a community which works together to provide and maintain a support system.
- **Wellness** Our community will promote healthy behaviors which will reduce and prevent disease and improve the overall health of our residents.



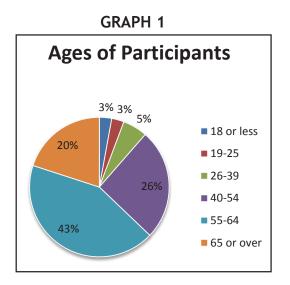
Our PROCESS

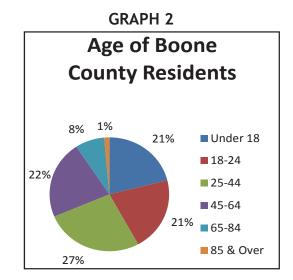
DISSEMINATION OF PHASE TWO RESULTS

The final vision and values were shared via email with all community members involved in the process. The vision and values were shared with CHAMP members during the August 7, 2013 CHAMP meeting. The vision and values were also shared with the participants of the eight community focus groups held during the Community Themes and Strengths Assessment in Phase Three.

DEMOGRAPHIC RESULTS

The optional demographic survey was distributed to the participants at the end of the Picturing Our Future community visioning sessions (Appendix) and reported the large majority of the participants were white/ Caucasian. In addition, approximately 75% reported having a college degree or higher. Most geographic areas within Boone County were represented. Graph 1 shows the age of the participants compared to the age of Boone County residents, Graph 2. The age group 55-64 was overrepresented while the two youngest age groups (under 18 and 18-24) were largely underrepresented. The breakdown between the age categories does not match between the two graphs. This is explained further in the limitations section.







LIMITATIONS

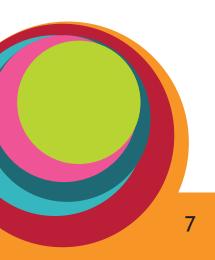
The Steering Committee members anticipated the number of participants per Picturing Our Future community visioning session would be 25-35, however, each session averaged 11 participants. The small number of participants reflected the difficulty of this recruitment process and may have impacted the results of this visioning process. Visioning sessions were held during the summer months, a time when college students are not typically available and family commitments can impede participation in community efforts.

Picturing Our Future participants were asked to self-report their age. The age categories do not directly correlate with categories from comparison data sources; therefore we are unable to compare our sample to Boone County age data. In future data collection, staff will ensure questions are asked in a manner that supports comparison (i.e. age categories in the survey will match age categories defined by the U.S. Census).

Recommendations for future community visioning sessions include: identifying local champions for the process, increasing the time allotted for invitations and follow-up; preparing for other ways to gather community input; hosting sessions during regularly scheduled community meetings; and personalizing invitations when possible.

EVALUATION

Steering Committee members who served as facilitators and/or recorders evaluated the training provided to them by the external contractor. Picturing Our Future community visioning session participants completed a participant evaluation at the conclusion of the work session (Appendix). Evaluation results were shared with the MAPP Core Team for planning purposes.



Appendices

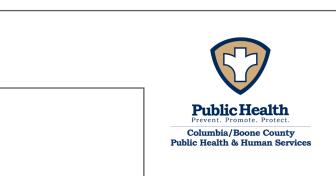
Picturing Our Future Invitations

PLEASE JOIN COLUMBIA/BOONE COUNTY PUBLIC HEALTH AND HUMAN SERVICES FOR



The Picturing Our Future event is your opportunity to help create the future you wish to see for Boone County. Please join us to share your thoughts and help develop a shared focus, purpose and direction for the health, safety and well-being of our citizens.

Free childcare provided by interns from the Columbia/Boone County Department of Public Health and Human Services. Please respond with your availability by May 31st to Michelle Riefe at 573-874-6331 or <u>meriefe@GoColumbiaMo.com</u>



Vision and Values Brainstorming Exercise

Picturing Our Future



Community Values Exercise

What are community values?

- The guiding principles and behaviors that embody how a group of people (in this case community) are expected to operate.¹
- Values reflect and reinforce the desired culture of the group of people.²
- Values help the group attain its vision.³

Directions

At your table, please answer the following questions. Reflect quietly for a 2-3 mins., then share your thoughts with the others at your table.

1. What community values promote a healthy community?

2. In the next 5-10 years, what behaviors will the local public health system partners, community members, and others need to engage in for the community to achieve the general vision your group has discussed?

¹ 2011-2012 Baldrige Criteria for Performance Excellence

² Id.

³ Id.

Sample Community Values

- 1. **Knowledge-Sharing**: Our residents should be equipped with the knowledge, education, and means to adopt healthy behaviors and lifestyles.
- 2. **Personal Responsibility**: As we reach adulthood, we should all take ultimate responsibility for maintaining our own physical, mental, emotional, and spiritual health.
- 3. **Resource Stewardship**: All residents value partnerships and collaborative efforts that maximize community resources in promoting and assuring community health.
- 4. **Environmental Justice**: Our community supports the principle of environmental justice the belief that no population should be forced to shoulder a disproportionate burden of the negative health and environmental impacts of pollution or other environmental hazards.
- **5. Equal Access:** Everyone in our community should have access to quality, affordable health care.
- 6. **Continuous Improvement:** We value and strive for continuous improvement through assessment, planning, learning, and innovative practices, and regularly seek the input of our residents in these processes.

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Demographic Survey

Please answer the following questions so we can see which different groups of people are represented at the Picturing Our Future sessions

- 1. What is your Zip code? _____
- ____ 18 or less 2. Age:
 - ____ 19 25 ____ 26 - 39 ____ 40 - 54 ____ 55 - 64 ____ 65 or over
- 3. Gender: ____ Male Female
- 4. Ethnic group you most identify with:
 - ____ African American / Black
 - ____ Asian / Pacific Islander
 - ____ Hispanic / Latino
 - ____ Native American
 - ____ White / Caucasian
 - ____ Other _____
- 5. Marital Status:
 - ____ Married / co-habitating
 - Not married / Single
- 6. Education
 - ____ Less than high school
 - ____ High school diploma or GED
 - ____ College degree or higher
 - Other
- 7. Household income
 - ____ Under \$15,000
 - ____ \$15,000 to \$29,999
 - ____ \$30,000 to \$59,999
 - ____ \$60,000 to \$99,999
 - ____ More than \$100,000
 - ____ Don't know
 - No income (student or dependent)

8. How do you pay for your health

- care? (check all that apply)
 - ____ Pay cash (no insurance)
 - Do not use health care or use free
 - clinics (no insurance)
 - ____ Health insurance (e.g., private
 - insurance, Blue Shield, HMO)
 - ____ Medicaid
 - ____ Medicare
 - ____ Veterans' Administration
 - ____ Indian Health Services ____ Other ____
- 9. Which sector of the community do you belong to? (Check all that apply)

____ Education

- ____ General Community Member
- ____ Medical
- ___Civic
- ___Law
- Faith Government
- Business
- ____ Philanthropy Low-income
- ___Youth
- ____Minority
- ___LGBT
- Young Adult
- ____Senior citizen
- ____Military (connection)
- Retired
- ____Disabled/Disability

Thank you for your response!

Compiled Picturing Our Future Discussions

.....

Values 1: What community Values Promote a Healthy Community?

- Sustainability (5): Development intentionally focused on endurance a generational approach that incorporates good health long term (sidewalks, bike paths, etc.); prevent before a major downfall or destruction of self or community. Ex: gardening and all the health benefits related walking to the garden, growing/eating healthy foods, communities grow; adaptability to changing conditions; vision for the future where do we want to be? Shared values lead to shared vision; Commitment not just talk work together to reduce barriers, take risks;
- Youth (2): Preparing for the future mentoring, inviting, learning from, and listening to youth and young people; knowledge sharing; if it's good for the kids, it's good for everybody;
- **Caring (5):** Caring for those who are most vulnerable (children, elderly); caring about the welfare of neighbors, even at the micro level; feeling of belonging; caring and concern; kindness/compassion
- Excellence (11): Commitment to truth, excellence, and progress; knowledge sharing; acknowledgement that there is always room for improvement in the community; maximizing our human potential and valuing the common good; stand up not by, lead not follow; Honest, collaborative initiatives where trust is built; valuing what works knowledge; innovation; fact-driven decision making; lead by example; leadership it takes a strong person to keep things going in a small town;
- Social Justice (11): speaking for and including the disenfranchised; active concern for others; don't hate, appreciate; no person left behind; respect/value diversity allow people to be who/where they belong; recognizing and accepting diversity (inclusive, accepting, openness); respect different opinions coming together; value all people rich, poor, young, old equal access; sensitivity to all people all residents, regardless of age, race, how long they've lived somewhere; personal responsibility balanced with a sense of common good/community; respect for people
- Education (4): education; college, technical, vocational
- Employment (2): Stable household income; meaningful employment;
- Environment (2): Respect for natural environment; respect for others and environment;
- Infrastructure (11): Responsive governance that reflects community values; developing infrastructure for involvement/activities beyond sports, i.e. community theater; equity in access to healthcare; healthcare; access to what "lights you up"; mutually supportive; cross-sector collaboration (employers, providers, environmental groups); responsible partnerships; protection of health resources, health systems, healthy environment; accessibility of health care local or via transportation; collaborative with other communities share resources;

- Family (4): God, family, country; family values starting kids off right be good examples; promoting and developing (inclusive) family unit cohesion; family support system not just biological, all manifestations
- Community (9): Inviting community which understands the value of community returns; participatory; community involvement; sense of community; leadership to grassroots and support buy-in at the top, not necessarily money but access to other resources; sense of heritage develop and maintain; it takes a village emphasis on community responsibility; honoring past history and people; working together, volunteering, servant hood
- **Overall Health (5):** Healthy lifestyle; values health as a positive state to aspire to; easy access to effort driven rewards, "you feel better because you did something", "this is your brain on carrots, not drugs"; hard work, hard play; marketing and promoting healthy actions quit smoking, deal with addiction;
- Spiritual (2): churches/religion; faith communities in mission together

Values 2: Values to Help Achieve Vision in the next 5-10 Years

- Move beyond politics
- Make a commitment to be part of the solution
- Partnerships

Vision 1: Characteristics of a Healthy Community

- Infrastructure (9): safer neighborhoods protect our residents; good business policies regarding health; good civic policy local government is important; good infrastructure fire, ambulance, water, sewer, etc.; multisystem for safety and protection; low crime; not afraid to go outside/enjoy neighborhood; nearly crime free; infrastructure fire, police, medical, parks/green space;
- **Respect (1):** Value of all citizens (respect of community, environment, nature, self); tolerance of difference/diversity;
- Employment (7): Good jobs; low unemployment and good economy means to be prosperous; thriving entrepreneurial environment; employment opportunities other than white collar; low unemployment; living wage jobs; thriving community with full employment;
- Education (3): Strong education system; education system with focus on health; quality education;
- Seniors (5): Access to nursing home and adult care, senior housing in rural areas; affordable services that encourage aging in home nursing, meals on wheels,

transportation; senior citizen center in Hallsville; care for elders; elders who continue to contribute;

- Lifestyle (2): lifestyles to promote health and variety of community lifestyles to promote them; start at young age and learn healthy lifestyles;
- Substance Abuse (3): resources for a drug-free community; less young adults with/doing substances; less deaths from substances and guns
- Resources
 - **Health (2)**: Information about health resources readily available; availability of educational resources school, informational and programs, healthy lifestyles;
 - Environment (2): Clean water, air, sewage, sidewalks; clean air and water
 - Sharing of resources and information
 - Educated citizenship beyond schools workshops (i.e. seniors and STDS), what programs are available
 - O Community re-entry programs
 - Emergency resources, broadly defined and all kinds, disaster
 - Knowledge
 - O Disabled housing (ADA) access
 - Equity, efficiency, environment
- Access
 - O Available, affordable, and the community is aware of it
 - Healthy Food (7): access to fresh/healthy foods; affordable and healthy food less junk food; everyone has access to healthy food; food security/low rates of malnutrition; connecting rural and urban community with adequate access to farmer's markets (affordable food that's natural/not processed); availability of food for all people – no one is hungry; healthy food system – heritage livestock and poultry;
 - Healthcare (8): Timely access to quality healthcare; access to healthcare and mental healthcare; everyone has place to receive healthcare; access to resources for medical care; easy access to good public health services in Columbia; access to healthcare for everyone; care for mental, emotional, and spiritual health in addition to physical health; available/affordable mental and medical substance abuse and health services;
 - **Transportation (2)**: Access to transportation; ability to carpool and co-commute to work;
 - Housing (1): Access to safe and affordable housing

- Recreation (10): Access to green space; access to recreation programs and availability of natural parks; more positive activities for teens; opportunities for physical activity; local access to proximal and affordable recreation facilities; exercise program for the community; highly "walkable" communities; Trail system for walking, riding, jogging, fitness trails; exercise
- Social Support and Involvement (13): social support; organizations to create a sense of belonging; lowering incidence of heart disease, diabetes, obesity socially active; community programs education, childhood activity, keeping people active and socially connected; advocacy for healthy regulation of health issues; youth and young adult engagement; engaged community and empowered population; good health role models for children; social cohesion cross class interactions; collaborative efforts to implement what works to create/maintain health; emphasis on positive adaptation and recognition or that as a learned phenomenon; care for the weakest young and old; safe and healthy children
- Services open at convenient times (1)
- Idea of an existing healthy community: Boulder, Colorado

Vision 2: Boone County in 2023

- **Overall Health (7):** Excellent health indicators for all; no illness everyone has what they need basic needs and services; general health; no overweight people; decrease in rates of obesity in children and adults; healthy populace; life giving opportunities for all
- Healthcare (11): Affordable and available treatment programs and medical and mental health services; lots of healthcare facilities; open access (acceptance) to alternative medicines and therapies; expanded Medicaid coverage; fully funded clinic, used allied health professionals; access to healthcare education programming; total access – health insurance and sufficient healthcare without politics; easy to navigate medical system; access to better mental health services - currently a growing need; universal access to health and social services; continued stellar medical community; wide public access to physical and mental health resources and mentoring to assist/direct
- **Prevention (4):** invest in prevention; routine screenings for physical/mental health and know where to send them; early intervention; systems in place to provide education on positive adaptation
- Quality of life/Lifestyle (17): Slow down your schedule; spending money on what we value; happy; life-giving opportunities for all; making the choice to be healthy the easier choice incentives; balanced work, play, and social interaction; convinced children to

play outside; active, happy adults and families part of a safe and welcoming community; Healthy Boone County is community based health and wellness; positivity; loving and accepting – not putting each other down; people want to live in Columbia; highly desirable place to live; personal responsibility for own health; family, faith, friend oriented; family provides a means of community; social freedom to be who we are; continued community involvement in improving services

- Transportation (5): people commuting to work together (reducing carbon emissions); more public transit; transportation that crosses community and outer communities – public transit, walking to public transit; less cars; mass transit to Jefferson City and Columbia;
- **Employment (4):** full employment at a livable wage; business opportunities; job opportunities for living wage jobs; unemployment eliminated
- Recreation (11): community and rural trail systems; walking trails and parks; exercise program; preserved green spaces being used; physical activity; accessible recreation don't drive a car to the trail to exercise; children and families playing outside; green space/gathering places; pet parks; expansion of the arts; community rec center in Ashland
- Infrastructure (13):low poverty rates; low crime (also, reduction in abuse by others elderly, domestic, children, sexual); poverty and homelessness eliminated; thoughtful development; spending money on what we value; safe- low crime rate, quality of water, food, and air, safety at work and in community; drug free; dispersed local energy production and control; Wifi everywhere; food pantry in Hallsville and life necessities; clean air and water; responsive governing bodies; clean
- Healthy Food (6): healthy, natural food affordability and availability; more fresh food; we eat a lot of good, healthy, locally grown foods healthy diets; producing our own county food and easier access to it (especially fruits and vegetables); living wages for farmers, "farm to table"; education in healthy shopping and food preparation; gardens
- Seniors (1): Access to safe, appropriate housing to living and aging in place maintain independence

Vision 3: Who is responsible for making and keeping Boone County healthy?

• Everyone (14): Residents/citizens through informed, supported, health choices and individual habits; All citizens are responsible; older generation is a role model for the younger generation; everyone has a role; we are responsible for ourselves as individuals plus the community; Collaborative effort of all; everyone; people of Boone County; we all are; "ME!"; shared - general public; citizenry/everybody

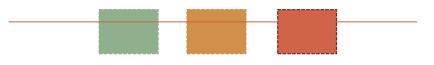
- Education (5): teach populace how to stay healthy, PSAs, packaging, taxes on "bad" products; schools drug and alcohol prevention; teachers; daycare workers
- Government/Leadership (7): Government in the county involve everyone and help fund agencies that do the work; Responsible leadership - government, community groups, etc; City, county, state, & federal government; county government; leadership; small communities need assistance with building trails/parks. Resources from each level of government and ensure tax money is used at all levels; city planners – help with streets/sidewalks
- Health care (2): Funding for healthcare professionals psychiatrists, quality geriatric care (staff), Hallsville clinic; doctors
- **Community (2)**: Grassroots democracy is essential for a healthy community; County communities
- Health Department to provide leadership (1)
- Private Sectors/Partnerships (1)
- Parents/Grandparents (1)
- Young people need to get involved apprenticeship programs (1)
- Help from others social/community motivation, knowledge, and social (1)

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Participant Evaluation Form

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Picturing Our Future



Participant Evaluation

Please circle the answer that best fits your experience.

1. Participating in today's visioning process was a good use of my time.

| Strongly Agree |
|-------------------|
| Agree |
| Neutral |
| Disagree |
| Strongly Disagree |

2. My small group facilitator created a safe environment for sharing my ideas.

| Strongly Agree |
|-------------------|
| Agree |
| Neutral |
| Disagree |
| Strongly Disagree |

3. My small group facilitator ensured all voices were heard.

Strongly Agree Agree Neutral Disagree Strongly Disagree

4. I believe this three-session community-based process will result in a shared vision statement reflecting the desired future state of Boone County residents.

Strongly Agree Agree Neutral Disagree Strongly Disagree

5. I believe the completed vision statement will reflect an ideal picture of health in my community.

Strongly Agree Agree Neutral Disagree Strongly Disagree

6. I understand how information collected during today's event will be used.

Strongly Agree Agree Neutral Disagree Strongly Disagree

7. The visioning process was well organized.

Strongly Agree Agree Neutral Disagree Strongly Disagree

8. What did you like most about today's event?

9. What do you think could have been improved?

10. Are you interested in participating in future MAPP events? Y/N

11. Additional comments:



Phase Three: The Four Assessments



Columbia/Boone County Public Health & Human Services



Forces of Change Assessment

Boone County, Missouri

Prepared August 2013 by: Michelle Riefe, MPH, Health Educator Columbia/Boone County Department of Public Health and Human Services 1005 West Worley, Columbia, MO 65203 T: 573-874-7355 E: health@GoColumbiaMO.com



Columbia/Boone County Public Health & Human Services This page intentionally left blank.

Executive Summary

The Forces of Change assessment is one of four assessments conducted in the MAPP Process. The purpose of this assessment is to identify the trends, factors, and events that are likely to influence community health and quality of life, or impact the work of the local public health system in Boone County.

The Forces of Change brainstorming session focused on the following questions:

- What has occurred recently that may affect our local public health system or the health of our community?
- Are there trends occurring that will have an impact? Describe.
- What forces are occurring locally? Regionally? Nationally? Globally?
- What may occur in the foreseeable future that may affect our public health system or the health of our community?



Assessment Process

In June of 2013, 31 members of the Community Health Assessment and Mobilization Partners (CHAMP) committee convened to conduct the Forces of Change assessment. Members included representatives of the local public health system (see Acknowledgments for the Forces of Change participant list).

The MAPP Core Team members decided to use SWOT analysis (**S**trengths, **W**eaknesses, **O**pportunities, and Threats) to develop a more comprehensive picture of Boone County in addition to identifying the forces of change. The assessment was designed with a Forces of Change brainstorming session followed by a SWOT exercise.

Participants were placed in six groups and discussed the Forces of Change brainstorming questions listed in the Executive Summary. Answers were then categorized into opportunities or threats. The strengths and weaknesses were identified using a large group process. The following prompts were provided:

- What does our public health system do well that helps us to positively influence the health of our community?
- Where must our public health system improve in order to more positively influence the health of our community?

(See Appendix: Outline of the Forces of Change meeting, Forces of Change analysis worksheet, and SWOT matrix)

Following the CHAMP meeting, the strengths, weaknesses, opportunities, and threats were categorized into general themes. See Table 1 for a complete list. The MAPP Core Team members reviewed all the forces of change and identified forces which were particularly significant in Boone County (see below). These forces were mentioned many times from different groups throughout the assessment.

Affordable Care Act

- Crime and safety
- Disparities in achievement, earnings, and health
- Extensive health care services
- Housing availability and development
- Medicaid expansion

- Drug use and disposal
- Increase in aging population and new retirees
- Rising number of students
- Transportation

• Social Media



| TABLE 1: FORCES OF CHANGE ASSESSMENT FOR BOONE COUNTY, MI | SSOURI |
|---|--------|
|---|--------|

| FORCE STRENGTHS | WEAKNESSES | OPPORTUNITIES | THREATS |
|--|--|---|---|
| ECONOMIC | | | |
| Leveraging federal and state funds to assist with infrastructure Local funding that includes city/county, United Way, and Putting Kids First tax Compassionate and dedicated workforce Active farming community (local food) and good education component | Lack of focus on low-income and aging population Lack of resources Lowest cigarette tax in the country Low alcohol tax Lack of housing availability Disparity in earnings | Rising number of students bringing in money and providing community service Student housing University decisions (SEC, etc) Change in United Way funding Children services tax Status of jobs (Ward 1) | Dependence on college student revenue Sequestration Aging population and attracting new retirees including those who are not financially prepared Rising number of students affecting infrastructure More service jobs vs. manufacturing jobs (more working in lower wage jobs) Income disparities among races University decisions (SEC, etc) Price of healthy food vs. unhealthy foods Change in United Way funding Increased cost of housing/renting Status of jobs (Ward 1) |
| FORCE STRENGTHS | WEAKNESSES | OPPORTUNITIES | • Status of Jobs (Ward 1) THREATS |
| ENVIRONMENTAL • Park facilities per capita • PedNet/Walking School Bus • Safe environment • Good regulatory foundation (nuisance, sewage, food, etc.) • Active farming community (local food) and good education component • Focus on sustainability • Safe drug take back program | Need an easier way to dispose of unwanted prescription drugs Lack of access to public transit outside the city limits City planning/ infrastructure (sidewalks, transit, access to food, medical care, etc.) Lack of housing availability | Built environment Safe disposal of prescription drugs Population spread ComoConnect transit expansion Greater understanding on how to maintain/ improve environment | Physical growth of city Housing development downtown Lack of access to healthy food Lack of transportation access High density of fast food and liquor stores in Columbia Built environment Climate change |

| FORCE | STRENGTHS | WEAKNESSES | OPPORTUNITIES | THREATS |
|---------|--|---|--|---|
| LEGAL/F | POLITICAL | | | |
| FORCE | Community and agency partnerships Good at advocating for legislation and policy pertaining to health Elected officials good at adopting progressive policies | Not staying up to date with crime and drug prevention Disparity in policies between city and county (i.e. rental housing) Lack of minority representation in our public health system WEAKNESSES • Lack of community awareness Hungry kids (hunger) Lack of outreach to rural parts of the county Public perception of social service agencies and their clients Little focus on physical activity in outlying areas of the city and county Disparity in achievement | Affordable Care Act Farm Bill Progressive view of judicial enforcement Local ordinances related to health Minority representation OPPORTUNITIES Relationship between University of Missouri and Columbia Goods and services are available to multiple demographics Changes in family- Columbia is a transient community Changing values Cultural attitudes | Affordable Care Act Lack of Medicaid expansion State level stalemate/state doesn't support city policies Lack of minority representation THREATS Lack of physical activity Misuse of prescription drugs among youth Changing values Substance abuse and prescription drug use Cultural attitudes Perception of crime and safety Culture that glamorizes gangs and drugs |



| E STRENGTHS | WEAKNESSES | OPPORTUNITIES | THREATS |
|--|---|---|---|
| CAL | | | |
| Response to vaccination needs, outbreaks, etc. Availability of medical specialists Coordination of care among various providers Good school health system Cross-over services Large public health system The division of community health promotion Emergency response system Good network for disease surveillance Community health services | Need more of a focus on low-income and aging population Lack of knowledge about resources and access to them, leading to health disparities Lack of dental care for the uninsured Fragmentation of health delivery system Lack of outreach to rural parts of the county Lack of affordable services for seniors High rate of obesity in our community Lack of health programs focusing on obesity in children Disparity in health Difficult to make healthy choices easy | Changes in reimbursement structure for healthcare- emphasis on prevention Columbia is a work and health center Changing roles of physicians Changing roles of health care provider expectations and expectations of patients Growing awareness of obesity | Changes in reimbursement structure for healthcare Health disparities Changing roles of health care provide expectations and expectations of patients Expanding medical practices |

| TABLE 1: FORCES OF CHANGE ASSESSMENT FOR BOONE COUNTY, MISSOURI (CONTINUED) | | | | | | |
|---|---|--|--|---|--|--|
| FORCE | STRENGTHS | WEAKNESSES | OPPORTUNITIES | THREATS | | |
| TECHNO | TECHNOLOGY/SCIENTIFIC/EDUCATION | | | | | |
| | Good school health system including school nurses, counselors, expertise in special education, and behavioral issues Central MO Children and Family Services Higher education Strong educational system (pre-K through college) Well-educated community | • Lack of resources, knowledge of them, and access to them | Access to technology; Social Media Research, innovation changing science, and medicine Greater access to communication information | Lack of appreciation of scientific approach to health Decreased education outside of Columbia Technology overload and lack of technology accuracy Lack of high speed internet Social Media Greater access to communication information | | |
| FORCE STRENGTHS WEAKNESSES OPPORTUNITIES THREATS | | | | | | |
| | • Central MO Children and Family Services | • Not enough cultural competency | Cultural attitudes Social determinants of health Need voice for minority | Cultural attitudes Social determinants of health | | |

Facilitators

Carolyn Sullivan and Kim Becking

Acknowledgements

Julie Abner, Leigh Britt, Stephanie Browning, Barbara Buffaloe, Mike Burden, Karen Cade, Amy Camp, Scott Clardy, Erika Coffman, Gloria Crull, Mary Fete, Jackie Herzberg, Steve Hollis, Emma Hosman, Sarah Klaassen, Steve Kuntz, Gina Long, Jessica Macy, Sarah Rainey, Tom Reddin, Stacia Reilly, Michelle Riefe, Rebecca Roesslet, Ron Schmidt, Jacqueline Schumacher, Mahree Skala, Trina Teacutter, Ellen Thomas, Alexis Wilbers, Jason Wilcox, Carmen G. Williams

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Thank you to all of the people that helped and participated in the Forces of Change Assessment.

------Appendices

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Outline for Forces of Change CHAMP Meeting, May, 2013

Outline for Forces of Change CHAMP Meeting

Pre-Session Preparations (CORE)

• Discuss and determine how we intend on FOCA results throughout MAPP; how will it inform the rest of the process?

FOCA Session

- Resources needed
 - 5-6 individuals to facilitate and record (CORE)
 - Flipchart & markers, pens (for tables), name tags
 - FOC session worksheets: 1. FOC Analysis Worksheet; 2. SWOT Matrix
 - Public health system map handout
 - Session evaluation

• Materials to develop/provide

• Public health system map handout (revised version?)

• Session design

- Welcome, Introductions, Agenda Review (5 mins.)
 - Welcome (Stephanie or Scott)
 - Thank you
 - Introductions (CHAMP members, Carolyn)
 - Agenda Review (Carolyn)
- Quick MAPP Update (Subcommittee Chairs) (10 mins.)
- Forces of Change: Identification of Types (5 mins.)
 - Round robin around room (Carolyn)
 - Flipchart each type of force of change
- Forces of Change: Brainstorm

(10 mins.)

- Table discussions (Facilitator leads discussion and records responses)
- Generate brainstorm list at each table (Sample discussion questions include the following)
 - What has occurred recently that may affect our local public health system or the health of our community?
 - Are there trends occurring that will have an impact? Describe.
 - What forces are occurring locally? Regionally? Nationally? Globally?
 - What may occur in the foreseeable future that may affect our public health system or the health of our community?
- Gather through round robin around room and categorize into each type of force of change

o Break

• SWOT Exercise

(70 mins.)

For ea section, 3 mins. of brain writing and 12 mins. of full group discussion

Strengths

What does our public health system do well that helps us to positively influence the health of our community?

(Additional questions for discussion)

- What advantages does our public health system have over others?
- What do we do better than anyone else?
- What unique or lowest-cost resources can we draw upon that others can't?
- What do people in our community see as our strengths?

• Weaknesses (Sample questions for discussion) Where must our public health system improve in order to more positively influence the health of our community?

(Additional questions for discussion)

- How is our public health system disadvantaged compared to others?
- What do people in our community see as our weaknesses?

Opportunities

What forces of change may create opportunities for us to more positively influence the health of the community or the public health system? (Refer to forces of change brainstorm list)

Threats

What forces of change may pose a barrier to us more positively influence the health of our community or the public health system? (Refer to forces of change brainstorm list)

• Evaluation, Next Steps, and Close

(5 mins.)

- Evaluation
- Next Steps
- Thanks!



Forces of Change Analysis Worksheet

Exercise objective: To identify the forces of change that may influence the health of our community or Boone County's public health system.

What are forces of change?

Trends, factors, and events outside of our control that may influence the health of our community or our local public health system. Reflect on both the recent past and the foreseeable future.

- **Trends** = patterns over time (e.g. Columbia's growing population)
- **Factors** = discrete elements (e.g. fact that Columbia is a university town)
- **Events** = one-time occurrences (e.g. natural disaster)

Types of forces of change include the following:

- Social
- Economic
- Political
- Demographic
- Technological
- Environmental
- Scientific
- Legal/Legislative
- Ethical

Step One. After reviewing the above list of types of forces of change, consider other types of forces of change that may influence the health of our community or Boone County's public health system. List these types below.

Step Two. Using the list of types of forces of change as your guide, brainstorm a list of all the specific forces of change that may influence the health of our community or Boone County's public health system. List these forces of change below.

| 1. | |
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| | |
| 8. | |
| 9. | |
| 10. | |

Forces of Change Brainstorm List

When we gather for the June 5th CHAMP meeting, this information will help us to identify the changes in the environment that present threats and opportunities to the health of our community and Boone County public health system. We'll also look at the public health system's weaknesses and strengths. Your input is invaluable to this analysis. We look forward to your participation.



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SWOT Matrix

SWOT Matrix

What are the strengths, weaknesses, opportunities and threats of our public health system and the health of Boone County?

| Internal Forces | External Forces | | |
|---|---|--|--|
| | | | |
| Strengths: What does our public health | Opportunities: What forces of change may | | |
| system do well that helps us to improve the | create opportunities for improving our public | | |
| health of our community? | health system or the health of our community? | | |
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| | | | |
| Weaknesses: Where must our public health | Threats: What forces of change may create | | |
| system improve in order to improve the | barriers for improving our public health system | | |
| health of our community? | or the health of our community? | | |
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Local Public Health System Assessment

Boone County, Missouri

Prepared August 2013 by: Jason Wilcox, MPH, Senior Planner Columbia/Boone County Department of Public Health and Human Services 1005 West Worley, Columbia, MO 65203 T: 573-874-7355 E: health@GoColumbiaMO.com



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Executive Summary

The Local Public Health System Assessment (LPHSA) is an instrument developed by the National Public Health Performance Standards Program (NPHPSP). The NPHPSP is a collaborative effort to improve the practice of public health and the performance of public health systems.

The NPHPSP helps the local public health system in answering questions such as, "What are the components, activities, competencies, and capacities of our public health system?" and "How well are the 10 Essential Public Health Services being provided in our system?" The LPHSA is a self-assessment tool that focuses on the delivery of the 10 Essential Public Health Services by the local public health system (see Figure 1: The Local Public Health System). The local public health system is commonly defined as all "public, private, and voluntary entities that contribute to the delivery of the essential health services within a jurisdiction." There are four core concepts of the LPHSA:

- The standards are designed around the 10 Essential Public Health Services. These services provide the fundamental framework describing all the public health activities that should be carried out in all states and communities.
- The standards focus on the overall public health system, rather than a single organization.
- The standards describe an optimal level of performance rather than provide minimum expectations.
- The standards are intended to support a process of quality improvement .

The information from the assessment can be used by the local public health system to create a snapshot of activities being performed. In addition, results can help identify the system's strengths and weaknesses. Areas that show weak activity can be prioritized for future improvement.

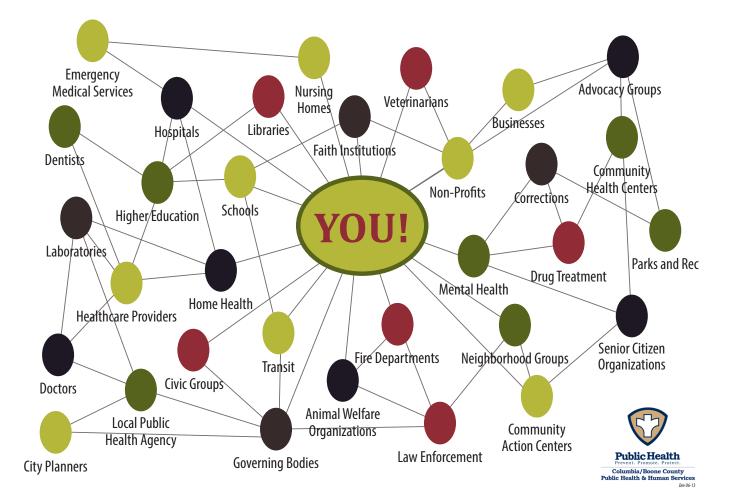
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| |



Local Public Health System

FIGURE 1: LOCAL PUBLIC HEALTH SYSTEM DIAGRAM



Essential Public Health Services

FIGURE 2: 10 ESSENTIAL PUBLIC HEALTH SERVICES WHEEL DIAGRAM

Using the 10 Essential Public Health Services as a framework, a total of 30 Model Standards (2-4 Model Standards per Essential Service) describe an optimally performing local public health system. Each Model Standard is followed by assessment questions that serve as measures of performance. Responses to these questions should indicate how well the Model Standard, or "gold standard," is being



met. Participants in the LPHSA were lead in a facilitated discussion. Each Model Standard was read and discussed, with follow-up voting on each question. After discussion, participants used color-coded cards to respond to the question. Further discussion occurred when there was disparity in responses. Participants responded to the assessment questions using the activity levels listed in Table 1 below.

TABLE 1: SUMMARY OF ASSESSMENT RESPONSE OPTIONS

| Optimal Activity (76-100%) | The public health system is doing absolutely everything possible for this activity, and there is no need for improvement. |
|----------------------------------|--|
| Significant Activity (51-75%) | The public health system participates a great deal in this activity, and there is opportunity for minor improvement. |
| Moderate Activity (26-50%) | The public health system somewhat participates in this activity, and there is opportunity for greater improvement. |
| Minimal Activity (1-25%) | The public health system provides limited activity, and there is opportunity for substantial improvement. |
| No Activity (o%) | The public health system does not participate in this activity at all. |

Using the responses to all of the assessment questions, a scoring process generates a score for each Model Standard, Essential Service, and finally the overall score.

THE 10 ESSENTIAL PUBLIC HEALTH SERVICES

- 1. Monitor health status to identify community health problems
- 2. Diagnose and investigate health problems and health hazards in the community
- 3. Inform, educate, and empower people about health issues
- Mobilize community partnerships to identify and solve health problems
- Develop policies and plans that support individual and community health efforts
- Enforce laws and regulations that protect health and ensure safety
- Link people to needed personal health services and assure the provision of health care when otherwise unavailable
- Assure a competent public health and personal health care workforce
- Evaluate effectiveness, accessibility, and quality of personal and populationbased health services
- Research for new insights and innovative solutions to health problems

Assessment Process

As suggested by the MAPP Process Handbook, a subcommittee, consisting of volunteers from the CHAMP group, formed to complete the Local Public Health System Assessment. CHAMP, which stands for Community Health Assessment Mobilization Partnership, includes members from each segment of the local public health system (refer to Figure 1) who were invited to participate by the MAPP Core Team. LPHSA subcommittee members represented organizations that were part of the local public health system, and also had relationships with other local public health professionals in the community. The timeline for conducting the LPHSA was approximately two months, from May - July, 2013.

Three subcommittee meetings were held over the two month timeline to plan the assessment. Two staff members from the Columbia/Boone County Department of Public Health and Human Services (PHHS) were included in the subcommittee. PHHS staff liaisons to the subcommittee held meetings during this time to plan the larger subcommittee meetings.

At each of the three meetings, the subcommittee assigned CHAMP members and PHHS staff to each of the 10 Essential Public Health Services they best represented. In addition, community members representing other local public health system agencies that were not CHAMP members were also included as participants in the assessment. The subcommittee initially decided to have each of the 10 groups separate. After noticing that the same participants were listed under multiple Essential Services, the subcommittee chose to combine similar services and their respective participants. The 10 groups were assigned Essential Services as follows:

- Essential Services 1 & 2
- Essential Services 3 & 4
- Essential Services 5 & 6
- Essential Service 7
- Essential Services 8 & 9
- Essential Service 10

The subcommittee chose not to combine Essential Services 7 and 10 with other groups due to the types of questions asked in each service, as well as the need for specific participants to answer the questions.

To prepare for the assessment, subcommittee members attended a two-hour facilitator training performed by the external contractor. Training included overcoming issues with the assessment, how consensus would be reached among participants, and common facilitation challenges. The training was evaluated with a survey and the results made available to the PHHS subcommittee liaisons.

Once the date, format, and location for the assessment were finalized, the PHHS Public Information Officer created invitations (Appendix) that were emailed to identified individuals asking for their participation. If the participant could not attend, the invitation indicated an alternate person or persons to attend. Those who replied their intention to participate received their assessment questions in advance by email. The assessment took place over a two-day period in July 2013. Essential Services 1-6 were performed on day one and Essential Services 7-10 on day two (Appendix). PHHS was chosen as the location for the assessment.

On the day of the assessment, participants gathered for an introductory session. The session familiarized participants with the 10 Essential Public Health Services, assessment, and voting procedures. After completing the session, participants then broke into separate small groups to address their Essential Service questions. Each Essential Service took approximately two hours to complete. There were a total of 44 participants: 23 on day one and 21 on day two. The LPHSA was evaluated by a survey, which participants completed at the end of the assessment. Survey results were shared with PHHS subcommittee liaisons for planning purposes.

Results

Based upon the responses provided in the assessment, an average score was calculated for each of the 10 Essential Services. The score of each Essential Service can be interpreted as the degree in which the local public health system meets the performance standards for each Essential Service. Scores can range from a minimum value of 0% (no activity performed compared to the standard) to a maximum value of 100% (all activity performed compared to the standard).

Figure 3 displays the average score for each Essential Service as well as the overall assessment score. The overall assessment score is the average of all 10 Essential Service scores.

Figure 4 displays the summary of average Essential Public Health Service Performance Scores in order of activity level. Displaying the results in this format helps to identify areas where performance is strong or needs to be improved.

Figure 5 displays the percentage of Essential Public Health Service Performance Scores that fall within the five activity ranges.

Figure 6 displays the percentage of the 30 Essential Service Model Standard Performance scores that fall within the five activity ranges.

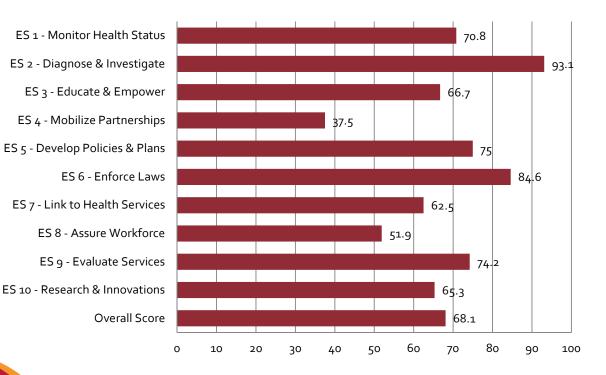


FIGURE 3: SUMMARY OF AVERAGE ESSENTIAL PUBLIC HEALTH SERVICE PERFORMANCE SCORES

FIGURE 4: SUMMARY OF AVERAGE ESSENTIAL PUBLIC HEALTH SERVICE PERFORMANCE SCORES IN ORDER BY ACTIVITY LEVEL

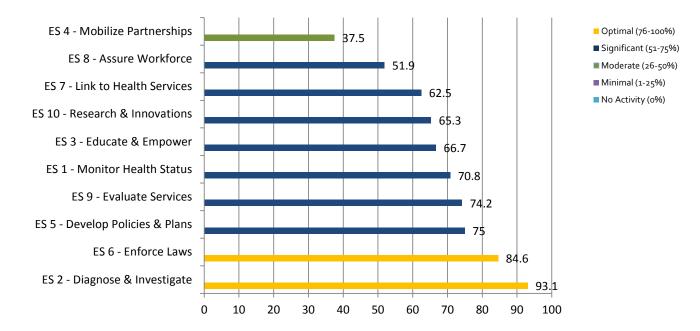


FIGURE 5: PERCENTAGE OF ESSENTIAL SERVICE PERFORMANCE SCORES THAT FALL WITHIN THE FIVE ACTIVITY RANGES

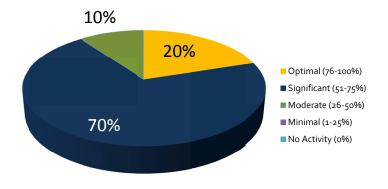
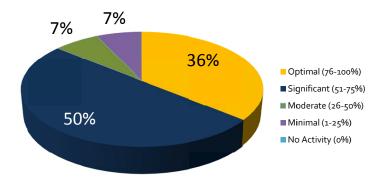
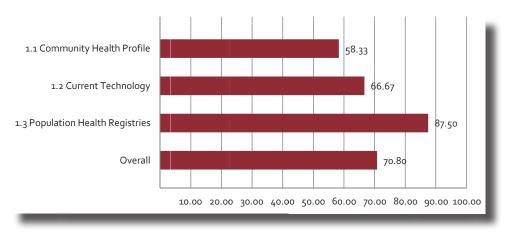


FIGURE 6: PERCENTAGE OF THE 30 ESSENTIAL SERVICE MODEL STANDARD PERFORMANCE SCORES THAT FALL WITHIN THE FIVE ACTIVITY RANGES



Essential Service 1: Monitor Health Status to Identify Community Health Problems

Participants indicated that the local public health system (LPHS) displayed optimal activity related to contributing and maintaining population health registries (disease tracking). A number of infectious disease tracking systems are used in the county and data is shared among partners. Significant activity was displayed in

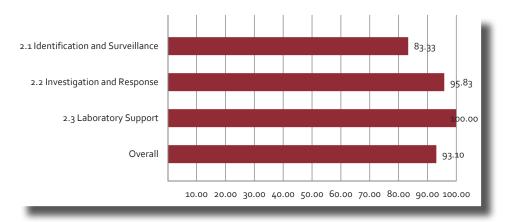


conducting community health assessments and making community health data available electronically (such as on community partners' websites). However, the group noted that past community health assessments were more of a health status assessment that only gathered quantitative data.

Opportunities for improvement relate to using data for public health programs. Data is collected by system partners but it is not always analyzed. An example the group discussed was using Geographic Information System (GIS) mapping of cases of West Nile Virus to coordinate mosquito spraying.

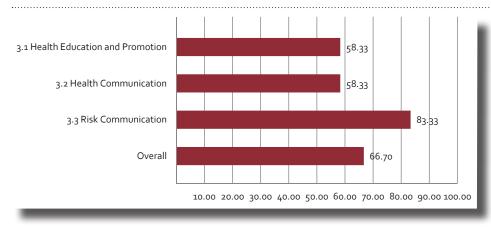
Essential Service 2: Diagnose and Investigate Health Problems and Health Hazards in the Community

The overall activity score related to Essential Service 2 was the highest among the 10 Essential Services provided in Boone County. Optimal activity was demonstrated in areas including disease case investigation protocols, public health emergency response plans, and ready access to laboratory services to support



investigations of public health threats, hazards, and emergencies. The group determined that there was less established methods for investigations of environmental health hazards within the county. This is due to unclear guidelines of which entity (state or local) will act as lead investigators for non-infectious diseases or conditions.

Essential Service 3: Inform, Educate, and Empower Individuals and Communities About Health Issues

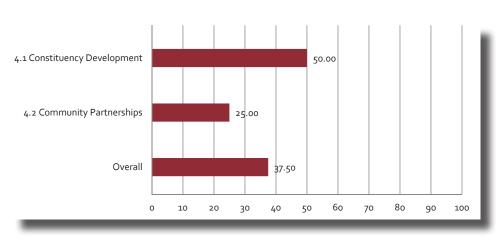


Optimal activity levels were displayed in relation to developed emergency communications plans. The communication plans include pre- and post-event communication and planning, as well as information that is provided to the community in order for them to make the best possible decisions about well-

being during times of crisis or emergency.

Participants prioritized two areas for improvement. The first area is related to improved and targeted public health messages and campaigns through a variety of methods (print, radio, television, online) and better coordination between system partners to conduct health education and health promotion activates. The second area included evaluating health education and health promotion activities on an ongoing basis. The group noted that short-term or grant-funded projects often are evaluated, but there is a need to evaluate long-term projects and activities.

Essential Service 4: Mobilize Community Partnerships to Identify and Solve Health Problems

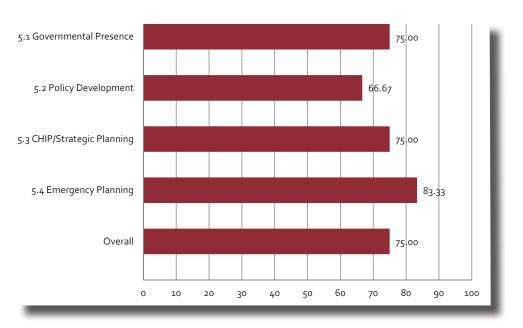


Essential Service 4 scored the lowest activity level of the 10 Essential Services provided in Boone County. Overall the system does well in informing and educating the majority of the population with small gaps and low scores in constituency development. Community partnerships lacked a formal process. Partnerships should be formalized, publicized, and

promoted going forward. Activity levels were also low in questions related to the Community Health Improvement Plan (CHIP). In the MAPP process, the CHIP is implemented in Phase Six: Action Cycle. The Model Standard and overall scores for Essential Service 4 are expected to increase once the CHIP has been completed in 2014.

Essential Service 5: Develop Policies and Plans that Support Individual and Community Health Efforts

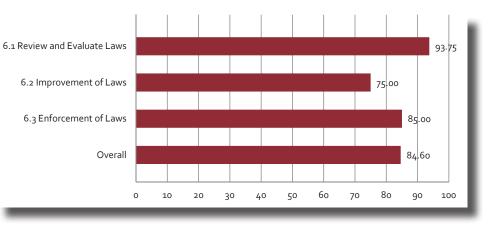
Participants indicated that there was significant activity related to having governmental presence at the local level, system partners contributing to the development of public health policies, and in participating in a community health improvement process. Broad representation of system partners in an emergency planning task force, reviewing the All-Hazards plan, and performing mock events were determined to show optimal activity. An area for



improvement discussed by the participants was to include community constituents, including affected populations, in reviewing policies that impact public health.

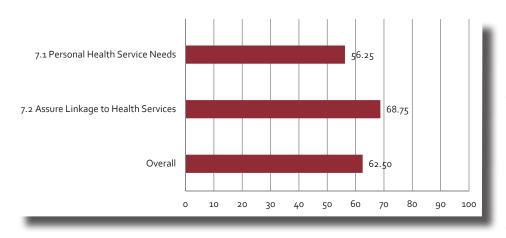
Essential Service 6: Enforce Laws and Regulations that Protect Health and Ensure Safety

Essential Service 6 showed the second highest overall activity level (84.60%), second to Essential Service 2 (93.10%). The LPHS shows strong activity in identifying local issues that are addressed through laws, ordinances, and regulations. Areas identified include, but are not limited to, food safety, water and air



quality, emergency preparedness and response, quarantine and isolation, and day care centers. The Columbia/Boone County Department of Public Health and Human Services has been given the authority to enforce these laws. Information about local laws has been provided to individuals and organizations that must comply with them. The LPHS has also assessed the community's compliance with local laws, ordinances, and regulations.

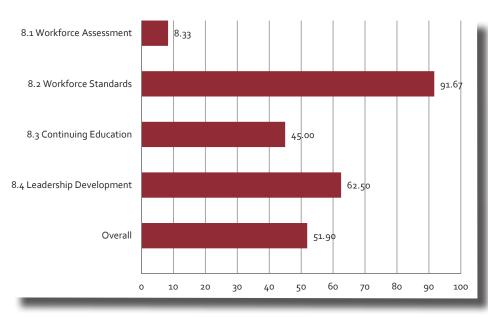
Essential Service 7: Link People to Needed Personal Health Services and Assure the Provision of Health Care When Otherwise Unavailable



Participants felt that the LPHS did a good job of identifying populations in Columbia/Boone County that experience barriers to personal health services. However, the LPHS has not assessed the extent to which personal health services are available to those who have barriers. Activity levels were lower in questions related to providing assistance to

vulnerable populations in accessing needed health services. Transportation was determined to be one of many barriers. Participants noted an area that is improving is providers coordinating services targeting vulnerable populations.

Essential Service 8: Assure a Competent Public and Personal Health Care Workforce:

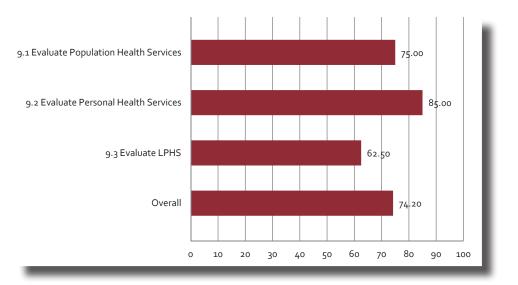


Within the past three years, an assessment of the LPHS workforce has not been conducted, which contributed to the low activity level on Model Standard 8.1. Continuing education for the LPHS workforce can be difficult if organizations do not understand public health concepts. Participants noted that continuing education is encouraged but not required. The majority of continuing education in the LPHS is on emergency preparedness.

The LPHS scored optimal activity in questions related to workforce standards. These standards include awareness of guidelines, licensure, and certification requirements for both the public and private health workforce. There are written job standards for all personnel and performance evaluations are carried out on a regular basis.

Essential Service 9: Evaluate Effectiveness, Accessibility, and Quality of Personal and Population-Based Health Services

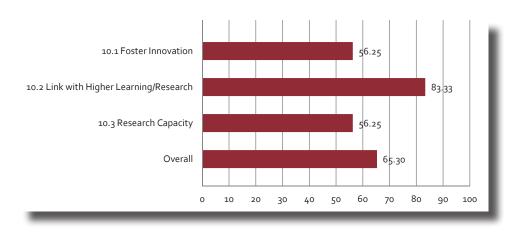
The LPHS showed significant activity in the area of evaluation of population health services. Examples of evaluations discussed by the group include immunization programs, server training, and substance abuse. Optimal activity level was shown in evaluation of personal health services. Many LPHS organizations perform community assessments every 3-5 years and assess client satisfaction with services.



LPHS entities participate in a system evaluation, but an assessment has not been performed on how the entities work together. However, certain areas such as emergency preparedness and social services work well among system partners. The group noted that an area for improvement is evaluating partnership development.

Essential Service 10: Research for New Insights and Innovative Solutions to Health Problems

Participants agreed that LPHS organizations encouraged staff to develop new solutions to health problems. The group noted that the system looked at issues such as social determinants of health, diversity, and best practices. Policies and programs are often put into place by the LPHS to address barriers or gaps to health



problems. With three institutes of higher education (University of Missouri, Columbia College, and Stephens College) in the community, linking with higher learning and the ability to perform research scored in the optimal activity range. Many organizations in the LPHS partner with community organizations, but not all partnerships are for research purposes. Research capacity in the LPHS can be limited due to the fact that not all system partners have researchers on staff or disseminate findings from their research.

Post-Assessment

After completing the assessment, the subcommittee reconvened to discuss the results, identify major themes, and complete the Priority Questionnaire. The Priority Questionnaire is an optional questionnaire that is available so that sites may consider the priority of each of the 30 Model Standards to their system. Prioritizing the Model Standards will help the local public health system identify areas for improvement or where resources could be realigned. Using a scale from 1 to 10 (1 being the lowest and 10 being the highest), the subcommittee answered the following question: "On a scale of 1 to 10, what is the priority of this model standard to our public health system?" Based on the priority given to each of the 30 Model Standard was assigned to one of four quadrants as follows:

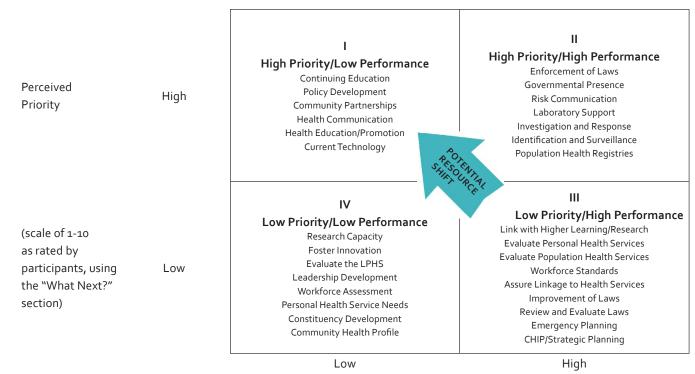
- Quadrant I: High Priority/Low Performance may need increased attention
- Quadrant II: High Priority/High Performance important to maintain efforts
- Quadrant III: Low Priority/High Performance potential areas to reduce efforts
- Quadrant IV: Low Priority/Low Performance may need little or no attention

See Tables 2 and 3 for prioritization results.

Before moving to Phase 4: Identifying Strategic Issues, the subcommittee members received a process evaluation in the form of an electronic survey in order to evaluate the effectiveness of the work done during Phase Three of the MAPP Process. Those who participated in the LPHSA were sent a fact sheet summarizing the results of the assessment.

The subcommittee identified four themes from the assessment that were presented to the CHAMP Steering Committee. A PHHS subcommittee liaison presented the results of the assessment before the Steering Committee and answered questions from the group. Based on feedback, the appropriate revisions were made before the assessment results were presented at the August 2013 CHAMP meeting. A fact sheet (Appendix) was made available for the meeting summarizing the results and feedback of the assessment. The fact sheet was also made available on the PHHS website.

TABLE 2: PERCEIVED PRIORITY DIAGRAM



Current Level of Performance (scale of 1-100 as reported in the NPHPSP report)

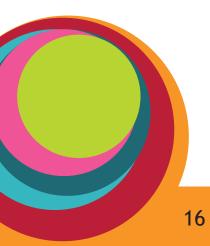


TABLE 3: MODEL STANDARDS BY PRIORITY AND PERFORMANCE SCORE

| QUADRANT | MODEL STANDARD | PERFORMANCE SCORE (%) | PRIORITY RATING |
|----------|---|-----------------------|-----------------|
| I | 8.3 Continuing Education | 45.0% | 9 |
| I | 5.2 Policy Development | 66.7% | 10 |
| I | 4.2 Community Partnerships | 25.0% | 10 |
| I | 3.2 Health Communication | 58.3% | 10 |
| Ι | 3.1 Health Education/Promotion | 58.3% | 9 |
| Ι | 1.2 Current Technology | 66.7% | 9 |
| II | 6.3 Enforcement of Laws | 85.0% | 9 |
| II | 5.1 Governmental Presence | 75.0% | 9 |
| II | 3.3 Risk Communication | 83.3% | 9 |
| II | 2.3 Laboratory Support | 100.0% | 9 |
| II | 2.2 Investigation and Response | 95.8% | 10 |
| II | 2.1 Identification and Surveillance | 83.3% | 9 |
| II | 1.3 Population Health Registries | 87.5% | 9 |
| | 10.2 Link with Higher Learning/Research | 83.3% | 6 |
| | 9.2 Evaluate Personal Health Services | 85.0% | 8 |
| | 9.1 Evaluate Population Health Services | 75.0% | 8 |
| | 8.2 Workforce Standards | 91.7% | 7 |
| | 7.2 Assure Linkage to Health Services | 68.8% | 8 |
| | 6.2 Improvement of Laws | 75.0% | 7 |
| III | 6.1 Review and Evaluate Laws | 93.8% | 7 |
| III | 5.4 Emergency Planning | 83.3% | 8 |
| 111 | 5.3 CHIP/Strategic Planning | 75.0% | 7 |
| IV | 10.3 Research Capacity | 56.3% | 6 |
| IV | 10.1 Foster Innovation | 56.3% | 7 |
| IV | 9.3 Evaluate the LPHS | 62.5% | 8 |
| IV | 8.4 Leadership Development | 62.5% | 8 |
| IV | 8.1 Workforce Assessment | 8.3% | 7 |
| IV | 7.1 Personal Health Service Needs | 56.3% | 8 |
| IV | 4.1 Constituency Development | 50.0% | 7 |
| IV | 1.1 Community Health Profile | 58.3% | 7 |

Limitations

There are a number of data limitations in the LPHSA. Due to the fact that there are a wide variety of participants involved in performing the assessment, variations in the knowledge of the local public health system's activities occurs. Each respondent self-reports with their different experiences and perspectives. Based on these perspectives, gathering responses for each question includes some subjectivity. Each score of the assessment is an average. Model Standard scores are an average of the questions discussed in each Model Standard. Essential Service scores are an average of the scores of the Model Standards within the Essential Service. The overall score is an average of each Essential Service score. Although there are a number of recommended ways to conduct the LPHSA, the process differs by site.

.....

Some organizational participation was limited, potentially due to the date and time the assessment was conducted. The subcommittee was responsible for identifying potential participants for the assessment. However, the final participant list was not shared with the Steering Committee. In the future, the participant list should be shared with the Steering Committee to help identify areas with low representation and brainstorm potential participants. The assessment itself was very fast-paced, as the participants shared a lot of data during the discussions. A standard document to record the qualitative data was not made in advance. Version 3 of the LPHSA, which was under development at the time this assessment was conducted, provides a standardized data collection form. Version 3 also includes a suggested participant list for each of the 10 Essential Services.

THEMES

- The assessment was an honest, critical look at the Boone County local public health system.
- All Essential Services, except Essential Service 4, scored "Significant" or higher activity levels. The activity level of Essential Service 4 is expected to improve once CHAMP implements the Community Health Improvement Plan (CHIP) in 2014.
- The local public health system in Boone County has many informal partnerships that need to be formalized, publicized, and promoted.
- Based on the results of the assessment, the Boone County local public health system is 6.9% away from the "Optimal" performance activity level.

Acknowledgements

Subcommittee Members: Chelsie Chambers (Columbia/Boone County Department of Public Health and Human Services), Erika Coffman (City of Columbia Parks and Recreation), Laina Fullum (Columbia Public Schools), Jessica Hosey (MU Master of Public Health program), Stan Hudson (MU Center for Health Policy), Gina Ridgeway Long (Phoenix Home Care/ Human Rights Commission), Mahree Skala (Missouri Association of Local Public Health Agencies), Ellen Thomas (Tiger Pediatrics)

Thank you to all who participated in the Local Public Health System Assessment.

Appendices

Local Public Health System Assessment Invitation

PLEASE JOIN COLUMBIA/BOONE COUNTY PUBLIC HEALTH & HUMAN SERVICES FOR A

local public health system assessment

MONDAY, JULY 15TH

9:00 A.M. - APPROXIMATELY 3:00 P.M.

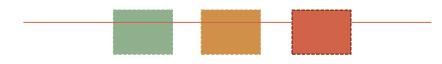
COLUMBIA/BOONE COUNTY PUBLIC HEALTH & HUMAN SERVICES 1005 WEST WORLEY

Lunch will be provided. Join us as we identify the competencies, capacities and activities of our local public health system. Please respond with your availability by June 26th to Jason Wilcox at 573-874-7224 or <u>jrwilcox@GoColumbiaMo.com</u> or Mahree Skala at <u>moalpha2004@yahoo.com</u>



Local Public Health System Assessment Agenda

Local Public Health System Assessment



Agenda

July 15-16, 2013

Columbia/Boone County Department of Public Health & Human Services 1005 W. Worley, Columbia MO

- I. Welcome, Introductions, Meeting Objective
- II. Mobilizing for Action Through Planning and Partnership (MAPP): Process Overview
- III. Local Public Health System Assessment: Purpose, Process, Materials Review
- IV. LPHSA Implementation: Discussion & Voting 1st Session
- V. Lunch
- VI. LPHSA Implementation: Discussion & Voting 2nd Session
- VII. Evaluation, Close, Next Steps

Local Public Health System Assessment Fact Sheet

LOCAL PUBLIC HEALTH SYSTEM ASSESSMENT

PROCESS

- The Local Public Health System Assessment helps to answer questions such as, "What are the components, activities, competencies, and capacities of our public health system?" and "How well are the 10 Essential Services being provided in our system?"
- To complete this assessment, a subcommittee was formed. Subcommittee members assigned CHAMP members, staff from the Columbia/Boone County Department of Public Health and Human Services (CBCDPHHS), and community members to each of the 10 Essential Services that they or their organization best represented. The subcommittee chose to combine similar essential services and their respective participants. Therefore, each group of participants would participate in answering the standards of one or two essential services.
- The process to complete the 10 sections of the assessment consisted of two meetings on two days in which the larger group initially met for an introductory session, then broke into separate small groups to address two Essential Services per group (except for Essential Services 7 and 10). A total of 44 individuals participated in the assessment: 23 on day 1 and 21 on day 2. Each Essential Service took approximately two hours to complete.
- Sectors represented at the LPHSA:
 - The local governmental public health agency
 - The local governing entity
 - Other governmental entities
 - Neighborhood Organizations
 - Hospitals
 - o Primary care clinics and physicians

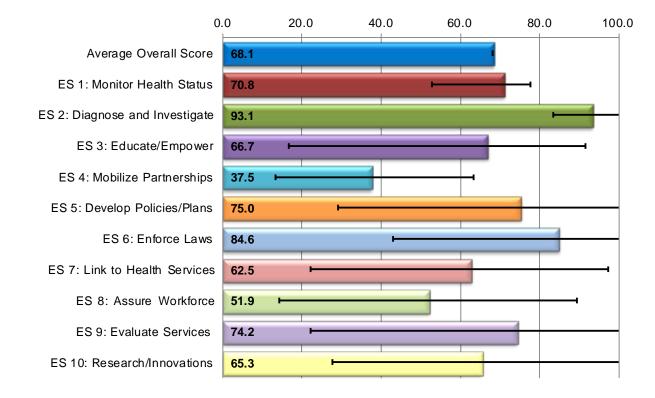
- Educational Institutions
- Public safety and emergency response organizations
- Environmental and occupational organizations
- Home health care
- When asked what participants liked best about the assessment, responses included:



RESULTS

| A summary of assessment response options: | | | | |
|---|---|--|--|--|
| Optimal Activity (76-100%) | Greater than 75% of the activity described within the question is met. | | | |
| Significant Activity (51-75%) | Greater than 50%, but no more than 75% of the activity described within the question is met. | | | |
| Moderate Activity (26-50%) | Greater than 25%, but no more than 50% of the activity described within the question is met. | | | |
| Minimal Activity (1-25%) | Greater than zero, but no more than 25% of the activity described within the question is met. | | | |
| No Activity (0%) | 0% or absolutely no activity. | | | |

Summary of Average Essential Service Performance Score



ACKNOWLEDGEMENTS

Subcommittee Members: Mahree Skala- MOALPHA, Erika Coffman- City of Columbia Parks and Recreation, Jessica Hosey- University of Missouri Master of Public Health Program, Stan Hudson- University of Missouri Center for Health Policy, Laina Fullum- Columbia Public Schools, Gina Ridgeway Long- Phoenix Home Health Care, Ellen Thomas- Tiger Pediatrics, Chelsie Chambers- Columbia/Boone County Public Health and Human Services and Jason Wilcox- Columbia/Boone County Public Health and Human Services

Additional thanks to everyone who participated in the assessment.





Community Health Status Assessment

Boone County, Missouri

Prepared August 2013 by: Sarah Rainey, Epidemiology, Planning and Evaluation Supervisor Columbia/Boone County Department of Public Health and Human Services 1005 West Worley, Columbia, MO 65203 T: 573-874-7355 E: health@GoColumbiaMO.com



Columbia/Boone County Public Health & Human Services This page intentionally left blank.

Executive Summary

The Community Health Status Assessment (CHSA) is one of four assessments completed as part of the MAPP Process (Mobilizing for Action through Planning and Partnerships). The CHSA provides quantitative information on community health conditions and answers the questions "How healthy is the community?" and "What does the health status of the community look like?"

A team of community members with experience in data collection and analysis worked together to identify data that best represented the health status of Boone County, Missouri. The data used for this assessment came from data sources such as the U.S. Census, Community Commons, Missouri Department of Health and Senior Services, Centers for Disease Control and Prevention, and the County Health Rankings and Roadmaps. When possible, county level data was used to compare against state and national data and analyzed by race, sex, and gender to give a clearer picture of the community.

Overall, Boone County is a healthy community with many health and community resources, well-educated residents, and a stable economy. The 2013 County Health Rankings and Roadmaps rank Boone County sixth out of 115 counties in Missouri for overall health outcomes.

Although good health outcomes and behaviors are prominent in Boone County, there are still gaps to be addressed. Disparities were identified between racial and socioeconomic groups within income, education, birth outcomes, sexually transmitted diseases, chronic diseases, and health outcomes. For some of these issues, the gap is markedly wide. With other indicators including obesity, child obesity, drug abuse, and mental health, limited information is available at the local level.

The information in the CHSA, along with the three other MAPP assessments, will be used by community teams to identify strategic indicators and to develop the Community Health Assessment and Community Health Improvement Plan.

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Demographic Characteristics

Population and Characteristics

Boone County is centrally located in the state of Missouri and covers 685.41 square miles. According to the 2010 U.S. Census, the population of the county was 162,642 with a population density of 237.30 persons/square mile. Between 2000 and 2010, the population of the county increased 20.07%, making it the seventh most populous of Missouri's counties (U.S. Census, 2010).

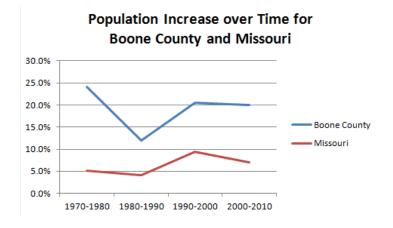
FIGURE 1: POPULATION/PERCENT CHANGE

| | | | | PERCENT |
|------------------------|-------------|-------------|-------------|--------------|
| | 1990 CENSUS | 2000 CENSUS | 2010 CENSUS | CHANGE |
| | POPULATION | POPULATION | POPULATION | FROM 2000 TO |
| | | | | 2010 |
| Boone County, Missouri | 112,379 | 135,454 | 162,642 | 20.07% |
| Missouri | 5,117,073 | 5,595,211 | 5,988,927 | 7.04% |
| United States | 248,709,873 | 281,421,906 | 308,745,538 | 9.71% |

(U.S. Census)

The population increase in Boone County was nearly three times greater than the state population increase during the same time period. As Figure 2 shows, population increase is not a new trend in Boone County. For the last 40 years, Boone County had percentage increases during every 10 year period well above the state average.

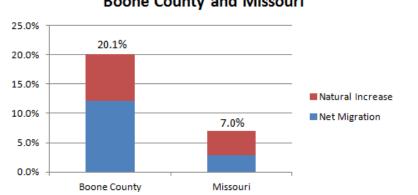
FIGURE 2: PERCENT POPULATION INCREASE FOR BOONE COUNTY AND MISSOURI



(Missouri Department of Health and Senior Services, 2013)

Boone County's increase was fueled by both natural increase and net migration. Natural increase (births minus deaths) was estimated to have increased by approximately 10,660 persons, while migration into the county accounted for approximately 16,520 persons. As Figure 3 demonstrates, about 60% of Boone County's population increase was a result of migration as opposed to only 40% increase of the state population.

FIGURE 3: 2000-2010 POPULATION INCREASE FOR BOONE COUNTY AND MISSOURI



2000-2010 Population Increase for Boone County and Missouri

There are 10 incorporated cities in Boone County: Ashland, Centralia, Columbia, Hallsville, Harrisburg, Hartsburg, McBaine, Pierpont, Rocheport, and Sturgeon. Approximately 73% of Boone County residents live in a city/town. The largest city is Columbia, the county seat, with a population of 108,500 (U.S. Census, 2010). Over two-thirds (66.7%) of the county population reside inside the city limits of Columbia. Centrally located in Boone County, Columbia is located on Interstate 70 with Kansas City 125 miles to the west and St. Louis 125 miles to the east.

Located in the northern part of the county, Centralia is the second largest community with a population of 4,027. Ashland, located in the southern part of the county, is the third largest town with a population of 3,707. Hallsville, in northern Boone County, is the fourth largest with a total of 1,491. The remaining six communities, (Sturgeon, Harrisburg, Rocheport, Hartsburg, Pierpont and McBaine) each have less than 1,000 persons (U.S. Census, 2010).

⁽U.S. Census Bureau; Missouri Department of Health and Senior Services)

| | 2010 POPULATION | 2000 CENSUS POPULATION | PERCENT INCREASE |
|------------|-----------------|---------------------------|------------------|
| Ashland | 3,707 | 1,869 | 98.3% |
| Centralia | 4,027 | 3,774 | 6.7% |
| Columbia | 108,500 | 84,531 | 28.4% |
| Hallsville | 1,491 | 978 | 52.5% |
| Harrisburg | 266 | 184 | 44.6% |
| Hartsburg | 103 | 108 | -4.6% |
| McBaine | 10 | 17 | -41.2% |
| Pierpont | 76 | XX | XX |
| Rocheport | 239 | 208 | 14.9% |
| Sturgeon | 872 | 944 | -7.6% |

FIGURE 4: POPULATION INCREASE OF BOONE COUNTY COMMUNITIES

(U.S. Census Bureau)

As Figure 4 shows, many communities have seen large increases since the 2000 Census. Ashland saw the largest increase, nearly doubling in population (98.3%) from 2000-2010. Hallsville, Harrisburg and Columbia all saw population increases larger than the county overall. Centralia's population increase of 6.7% was near the state average (7.0%). Hartsburg, McBaine and Sturgeon had a reduction in population between the two census periods. Pierpont was incorporated after the 2000 Census.

Age

FIGURE 5: MEDIAN AGE, BOONE COUNTY, 2010

BOONE COUNTY MEDIAN AGE = 29.5 MISSOURI MEDIAN AGE = 37.9

(U.S. Census, 2010)

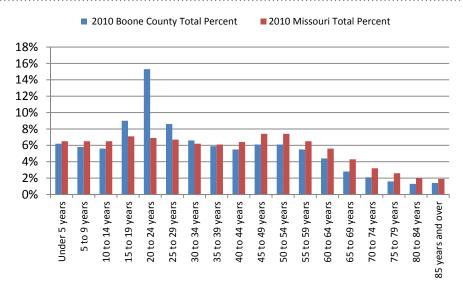
The age distribution (Figure 6) for Boone County is also markedly different than the state as a whole. In Boone County, 20.9% of the population is between the ages of 18-24, as compared to 9.8% of the state. The age distribution is impacted by several colleges and universities which are located in Boone County, including the University of Missouri, the largest university in the state. The 25-44 age group is also slightly larger for Boone County compared to Missouri (26.6% vs. 25.4%). Boone County has a smaller percentage of residents 65 years and older than the state of Missouri.

| TOTAL | 162,642 | 100% | 5,988,927 | 100% |
|-------------|---------|--------|-----------|-------|
| 85 and over | 2,293 | 1.4% | 113,779 | 1.9% |
| 65-84 | 12,779 | 7.9% | 724,515 | 12.1% |
| 45-64 | 35,937 | 22.1% | 1,611,850 | 26.9% |
| 25-44 | 43,324 | 26.6% | 1,524,083 | 25.4% |
| 18-24 | 34,058 | 20.9% | 589,264 | 9.8% |
| Under 18 | 34,251 | 21.1% | 1,425,436 | 23.8% |
| | BOONE | COUNTY | MISSOL | IRI |

FIGURE 6: AGE DISTRIBUTION FOR BOONE COUNTY AND MISSOURI, 2010

(U.S. Census)

FIGURE 7: BOONE COUNTY AND MISSOURI POPULATION BY AGE GROUP, 2010



(Profile of General Population and Housing Characteristics, 2010)

Columbia was named the "4th Best Small Metro City to Successfully Age In" by the Milken Institute Report Best Cities for Successful Aging (Chatterjee, 2012). This ranking was due in part to the youthful population which provides a large working-age population and strong tax base that helps support services for seniors.

Households and Families

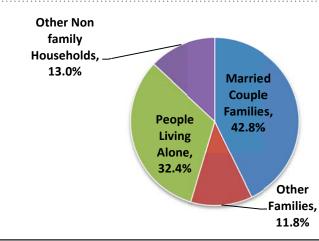
In 2012 there were 66,360 households in Boone County with an average household size of 2.4 people.

Families made up 55% of the households. This includes both married couple families (43%) and other families (12%). Of other families, 4% are female head of household with minor age children and no partner present.

Non-family households made up 45% of all households in Boone County. The majority of the non-family households were people living alone. The remainder were adults living in households in which no one was related to the householder.

In Boone County, 26% of all households have one or more people under the age of 18; 16% of all households have one or more people 65 years and older.

FIGURE 8: TYPES OF HOUSEHOLDS, BOONE COUNTY, 2012



⁽American Community Survey, 2012)

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Among persons 15 and older, 42.0% are currently married, 4.2% are widowed, and 8.5% are divorced (American Community Survey, 2012).



Race and Ethnicity

Whites and black/African-Americans compose the two largest racial groups in Boone County and in Missouri. The percentage of whites in both Boone County and Missouri is 82.8% (Profile of General Population and Housing Characteristics: 2010). In percentage terms, the African-American population is slightly smaller in Boone County compared to Missouri (9.3% in Boone vs. 11.6% in Missouri). In contrast, the Asian population is over twice the percentage in Boone County compared to Missouri. Other race groups are similar in size between Boone County and Missouri. Slightly more persons identify as belonging to multiple race groups in Boone County compared to the state overall (2.8% vs 2.1%).

FIGURE 9: POPULATION/RACE, BOONE COUNTY AND MISSOURI, 2010

| | BOONE | MISSOURI | |
|--|-------------------|----------|------------|
| | NUMBER PERCENTAGE | | PERCENTAGE |
| White, Alone | 134,621 | 82.8% | 82.8% |
| African-American, Alone | 15,111 | 9.3% | 11.6% |
| Asian, Alone | 6,144 | 3.8% | 1.6% |
| American Indian, Alone | 624 | 0.4% | 0.5% |
| Native Hawaiian or other Pacific Islander, Alone | 93 | 0.1% | 0.1% |
| Some other race, Alone | 1,476 | 0.9% | 1.3% |
| Two or more races | 4,573 | 2.8% | 2.1% |

(Profile of General Population and Housing Characteristics, 2010)

FIGURE 10: POPULATION RACE/ETHNICITY, BOONE COUNTY, 1990, 2000, 2010

| | · · · · · · · · · · · · · · · · · · · | ***** | · · · · · · · · · · · · · · · · · · · |
|-------------------------------|---------------------------------------|-------|---------------------------------------|
| | 1990 | 2000 | 2010 |
| White | 89.0% | 85.4% | 82.8% |
| African-American | 7.5% | 8.5% | 9.3% |
| Asian/Pacific Islander | 3.0% | 3.0% | 3.8% |
| American Indian/Alaska Native | 0.4% | 0.4% | 0.4% |
| Other race or multiracial | 0.4% | 2.6% | 3.7% |
| Hispanic or Latino* | 1.1% | 1.8% | 3.0% |

(Profile of General Population and Housing Characteristics, 2010)

* Hispanic or Latino may be of any race

Nativity and Language

FIGURE 11: PERCENT FOREIGN-BORN, BOONE COUNTY, 2007-2011

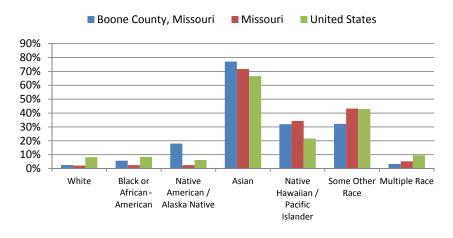
| REPORT AREA | REPORT AREA TOTAL POPULATION | | FOREIGN-BIRTH POPULATION, PERCENT OF TOTAL POPULATION | |
|------------------------|------------------------------|------------|---|--|
| Boone County, Missouri | 160,628 | 9,818 | 6.11% | |
| Missouri | 5,955,802 | 227,595 | 3.82% | |
| United States | 306,603,776 | 39,268,838 | 12.81% | |

(American Community Survey, 2007-2011)

The U.S. Census considers anyone that is not a U.S. citizen or a U.S. national as foreign-born including those born outside of the United States who have become citizens. Ninety-four percent of the people living in Boone County in 2012 were native residents of the United States with 62% of these residents born in Missouri.

In 2012, six percent of the people living in Boone County were foreign-born. This is approximately twice the percentage for Missouri, but half of what is seen in the United States. Foreign-born residents of Boone County come from different parts of the world, with the largest populations of foreign-born being Asian.

FIGURE 12: PERCENT FOREIGN-BORN POPULATION BY RACE, BOONE COUNTY, MISSOURI, UNITED STATES, 2007-2011

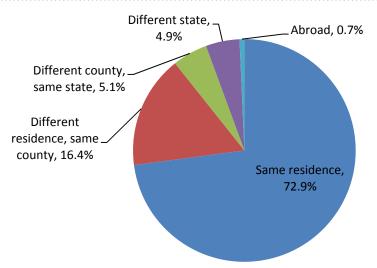


(American Community Survey, 2007-2011)

Geographic Mobility

In 2012, 73% of the people in Boone County one year of age or older were living in the same residence for at least one year. Residents in Columbia are somewhat more mobile, with 66% living in the same residence as they reported living in one year earlier.

FIGURE 13: GEOGRAPHIC MOBILITY OF RESIDENTS, BOONE COUNTY, 2012



(American Community Survey, 2012)

Language

The U.S. Census defines linguistically isolated households as those where no member of the household age 14 or older speaks English "very well." This could also be described as a household where everyone over 14 has trouble speaking English. Not being able to communicate due to language barriers can hamper access to employment, education, medical care, and social services.

Boone County has a fairly low percentage, 2.3%, of linguistically isolated households compared to the U.S. number of 4.7%. However, Boone County is slightly above the Missouri percentage of 1.3%. Figure 14 outlines the most common languages spoken in Boone County households that are linguistically isolated (American Community Survey, 2007-2011).

Language (continued)

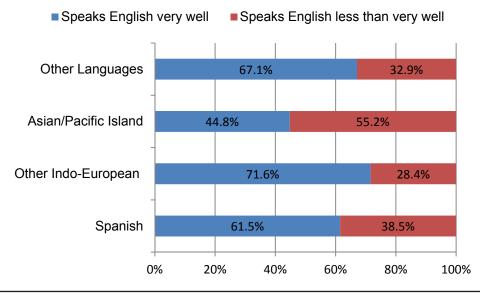
FIGURE 14: LANGUAGE SPOKEN IN LINGUISTICALLY ISOLATED HOUSEHOLDS, BOONE COUNTY, 2007-2011

| ALL HOUSEHOLDS = 2.3% | | |
|--------------------------------|--|--|
| Asian/Pacific Island languages | | |
| Spanish | | |
| Other Indo-European | | |
| Other languages | | |

(American Community Survey, 2007-2011)

While not officially considered linguistically isolated, there are also households in Boone County that live with limited English proficiency. These households may also have difficulties because of a limited ability to speak English fluently. Figure 15 outlines the most frequently spoken languages in those households. The same barriers to education, jobs, social services, and health care may apply to these households.

FIGURE 15: MOST FREQUENTLY SPOKEN LANGUAGE, BOONE COUNTY, 2007-2011



(American Community Survey, 2007-2011)

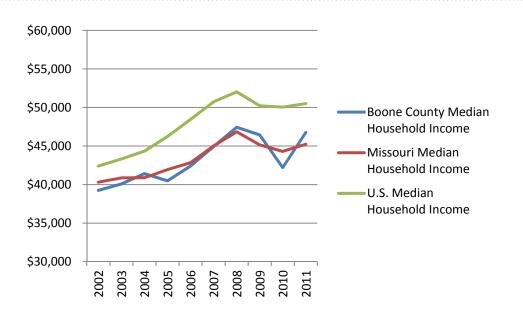
Socioeconomic and Education Characteristics

Income

Median household income is the most widely used measure of income. Median is a good predictor of household income because it is less impacted by the income highs and lows and divides the income distribution into two equal parts, one-half falling below and one-half above the median. Median income can define the ability of a household to have access to affordable housing, health care, higher education opportunities, and food.

Figure 16 shows the median income of all households in Boone County as compared to Missouri and the United States, where Boone County consistently lags behind the U.S. The dip shown for 2010 Boone median household income highlights the impact of the recession.

FIGURE 16: MEDIAN HOUSEHOLD INCOME BY YEAR, BOONE COUNTY, MISSOURI, UNITED STATES, 2002-2011



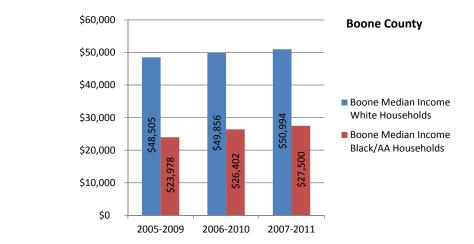
(U.S. Census Bureau: Small Area Income and Poverty Estimates [SAIPE])

Figure 16 was produced using one year U.S. Census data from the Small Area Income and Poverty Estimates (SAIPE). While the one year data is a good tool for seeing current trends, it does tend to have a higher rate of error. The next three graphs, Figures 17, 18, and 19, show median household income from the five-year U.S. Census data reports. Although the decline of 2010 is not shown as it is in Figure 16, the income is a more accurate picture of the actual dollar amounts due to the smaller margin or error.

Figures 17 and 18 highlight the disparity of income between white households and black/African-American households. This is seen not only in Boone County, but also Missouri. However, the gap is much wider in Boone County.

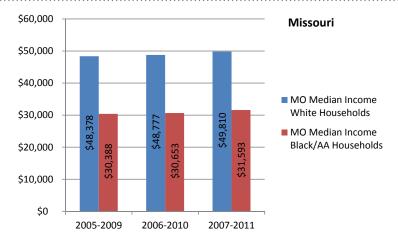
Income (continued)

FIGURE 17: MEDIAN HOUSEHOLD INCOME BY RACE, BOONE COUNTY, 2005-2009, 2006-2010, 2007-2011



(American Community Survey)

FIGURE 18: MEDIAN HOUSEHOLD INCOME BY RACE, MISSOURI, 2005-2009, 2006-2010, 2007-2011

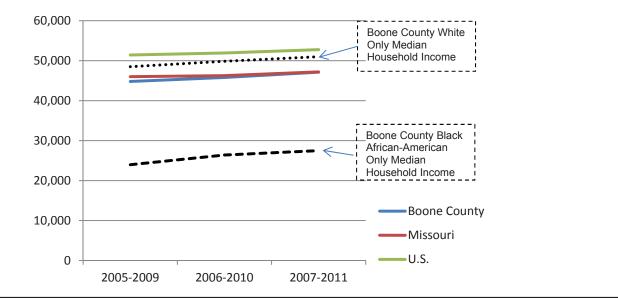


(American Community Survey)

18

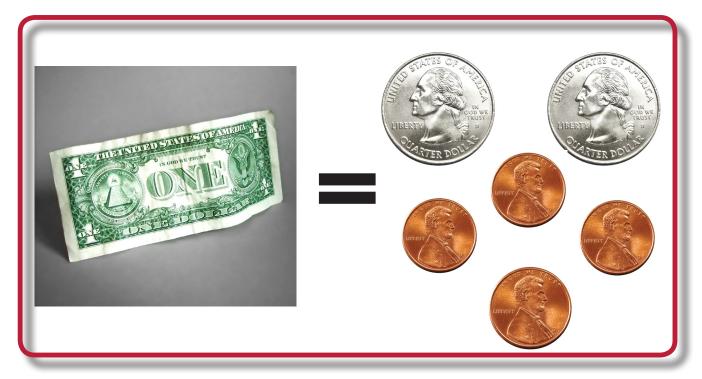
Income (continued)

FIGURE 19: MEDIAN HOUSEHOLD INCOME WITH COMPARISON BY RACE, BOONE COUNTY, MISSOURI, UNITED STATES



(American Community Survey)

Figure 19 highlights the differences between the white and the black/African-American median household earnings. According to the 2007-2011 American Community Survey, for every \$1.00 earned by a white household in Boone County, a black household earns 54 cents.



Income (continued)

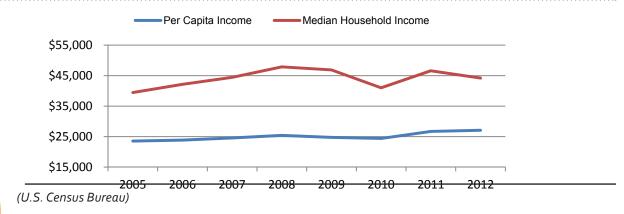
| FIGURE 20: MEDIAN HOUSEHOLD INCOME, BOONE COUNTY BY COMMUNITY, 2007-2011 | | | | |
|--|----------------------|----------------------------|--|--|
| CITY | NUMBER OF HOUSEHOLDS | MEDIAN INCOME HOUSEHOLD | | |
| Ashland | 1,543 | \$57,467 | | |
| Centralia | 1,584 | \$41,875 | | |
| Columbia | 42,388 | \$43,102 | | |
| Hallsville | 677 | \$42,981 | | |
| Harrisburg | 127 | \$56,042 | | |
| Hartsburg | 67 | \$33,977 | | |
| McBaine | 18 | \$33,750 | | |
| Pierpont | 31 | \$97,969 | | |
| Rocheport | 75 | \$36,563 | | |
| Sturgeon | 377 | \$37,250 | | |
| Boone County | 63,790 | \$47,123 | | |
| Missouri | 2,354,104 | \$47,202 | | |

(American Community Survey, 2007-2011)

Figure 20 highlights the difference in median household incomes in the 10 Boone County communities. Communities with a low number of households may have a higher margin of error.

Per capita income (the total income of an area divided by the total population) is another way of examining the income of a community. Per capita income looks at individual income; therefore, it may not be a good representation of the income of a community. Per capita income calculations have noted exclusions, such as the number of dependents supported by an individual income and income distribution.

FIGURE 21: PER CAPITA INCOME BY YEAR, BOONE COUNTY, 2005-2012



Employment

According to the Missouri Economic Research and Information Center (MERIC), the July 2013 unemployment rate in Boone County was 5.5%, the fourth best in Missouri (MO Department of Labor & Industrial Relations). During this same time period, Missouri's unemployment rate was 7.1%. Boone County traditionally has an unemployment rate well below the national and state level, but was not immune to the increased unemployment rates seen in the last few years throughout the nation. The rates doubled from 2005 to 2009, but are currently in a decline. An increase in unemployment rates is notable for a community because of the increased need for social services including supplemental food programs, school lunch programs, low income housing, and affordable health care.

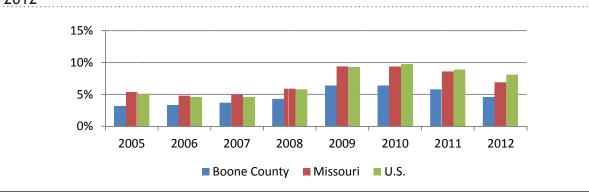


FIGURE 22: UNEMPLOYMENT RATES BY YEAR, BOONE COUNTY, MISSOURI, UNITED STATES, 2005-2012

Despite the increases in unemployment in the area, Columbia remains a hub for jobs in central Missouri, attracting workers from all over the state. Sitting halfway between St. Louis and Kansas City on Interstate 70, Columbia draws workers from both metropolitan areas. In 2009, there were over 4,800 Columbia based employees from the St. Louis metro area and 2,300 from the Kansas City area (MERIC).

The largest industry sectors for employment in Columbia include "Health Care & Social Services" and "Educational Services." For those age 29 or younger, the top employers include "Accommodation & Food Services" and "Retail Trade."

⁽U.S. Bureau of Labor Statistics)

Employment (continued)

FIGURE 23: TOP JOB CATEGORIES, COLUMBIA

.....

| TOP COLUMBIA OCCUPATIONAL CATEGORIES | | |
|--------------------------------------|--|--|
| 1. Health Care | | |
| 2. Education Services | | |
| 3. Retail Trade | | |
| 4. Accommodation and Food Services | | |
| 5. Public Administration | | |
| | | |

(Columbia Regional Economic Development Inc (REDI))

Unemployment statistics based on gender, age, and ethnicity are not collected at the county level. However, this information is tracked at state and national levels and is shown in Figures 24 and 25. Overall, black/African-Americans, Latinos, youth and adults with less than a high school diploma were more likely to be unemployed in 2011. Blacks were the only race with a higher unemployment rate in Missouri compared to the national average. Similarly, there was a higher rate of unemployment for young adults (age 16 to 19) in Missouri than in the nation (Jacqueline Schumacher, Policy Analyst, 2012).

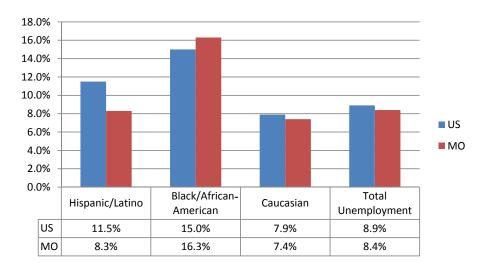
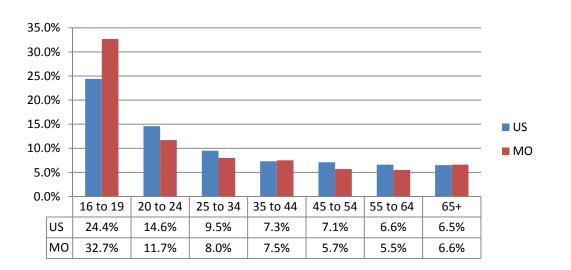


FIGURE 24: AVERAGE UNEMPLOYMENT BY RACE, ETHNICITY, MISSOURI, UNITED STATES, 2011

(Jacqueline Schumacher, Policy Analyst, 2012)

Employment (continued)

FIGURE 25: AVERAGE UNEMPLOYMENT RATE BY AGE, MISSOURI, UNITED STATES, 2011

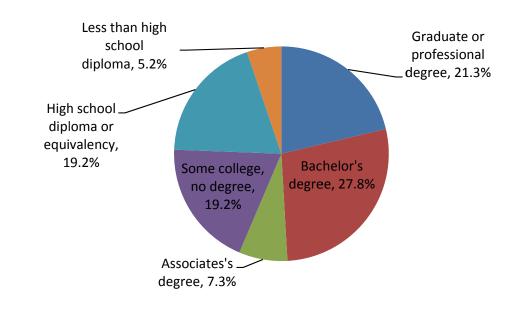


(Jacqueline Schumacher, Policy Analyst, 2012)

Education

There is a clear connection between education, race, unemployment, poverty, and health outcomes. According to the 2012 American Community Survey, 94.8% of those living in Boone County were high school graduates or higher, and 49% had at least a bachelor's degree. Boone County has higher rates of residents 25 years and over with a bachelor's degree or higher (47.7%) than both Missouri (26.1%) and the United States (28.5%).

FIGURE 26: EDUCATIONAL ATTAINMENT FOR POPULATION 25 YEARS AND OVER, BOONE COUNTY, 2012



(American Community Survey, 2012)

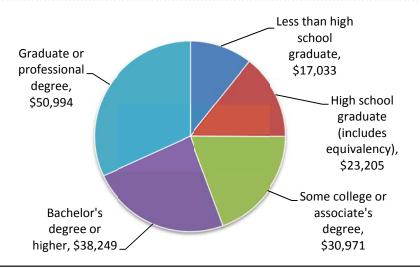
24



Education (continued)

In Boone County, adults 25 years and older with a bachelor's degree have median earnings one-and-a-half times that of adults with only a high school diploma, and twice those adults with less than a high school diploma.

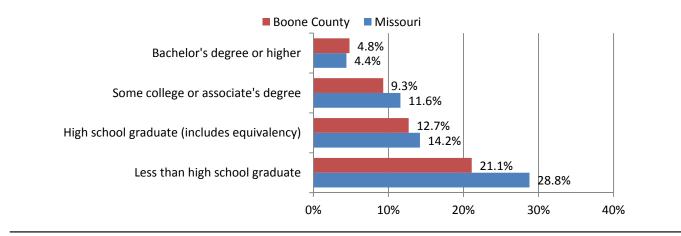
FIGURE 27: MEDIAN EARNINGS BY EDUCATIONAL ATTAINMENT 25 YEARS OF AGE OR GREATER, BOONE COUNTY, 2012



⁽American Community Survey, 2012)

Adults with a college degree are also less likely to live in poverty. In Boone County, the percentage of those with less than a high school diploma that live in poverty is actually less (21.1%) than for Missourians' (28.8%).

FIGURE 28: POVERTY RATE BY EDUCATIONAL ATTAINMENT, BOONE COUNTY, 2012



(American Community Survey, 2012)

Education (continued)

Other important education indicators include high school dropout rates and four-year graduation rates. In Boone County, these indicators are available by school district. There are six school districts in the county, ranging in size from 450 students (Sturgeon) to 17,000 students (Columbia).

FIGURE 29: DROPOUT RATES BY SCHOOL DISTRICT BY YEAR, BOONE COUNTY, 2009-2013

| | 2009 | 2010 | 2011 | 2012 | 2013 |
|----------------|------|------|------|------|------|
| Centralia | 3.6% | 1.7% | 2.5% | 2.1% | 1.7% |
| Columbia | 4.2% | 3.3% | 3.1% | 3.2% | 4.0% |
| Hallsville | 4.4% | 2.8% | 2.5% | 1.7% | 1.9% |
| Harrisburg | 3.6% | 0.0% | 1.2% | 2.3% | 1.2% |
| Southern Boone | 2.5% | 2.0% | 1.5% | 1.1% | 1.8% |
| Sturgeon | 2.3% | 3.4% | 2.2% | 0.8% | 0.0% |
| Boone County | 3.5% | 3.1% | 3.1% | 2.9% | 2.9% |

(Missouri Department of Elementary and Secondary Education)

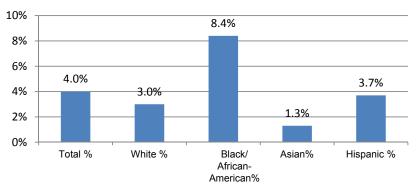


FIGURE 30: DROPOUT RATE BY RACE/ETHNICITY, COLUMBIA, 2013

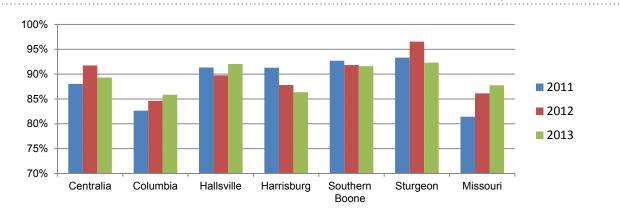
(Missouri Department of Elementary and Secondary Education)

Columbia tends to have higher dropout rates than the other school districts in Boone County. Figure 30 breaks down the Columbia dropout rate by race showing a black/African-American student is more than twice as likely as any other race to not graduate.

The four-year high school graduation rate looks at the percentage of freshmen students who graduate in four years with a traditional high school diploma. It allows rates to be compared across states. The Missouri Department of Secondary and Elementary Schools has collected this statistic since 2011. Figure 31 shows that Columbia consistently graduates fewer of its students in four years than the other Boone County districts. Of note, the Columbia school district is a much larger district than the others in Boone County. Sturgeon, the smallest district, has the lowest dropout rate and graduates the highest percentage of students.

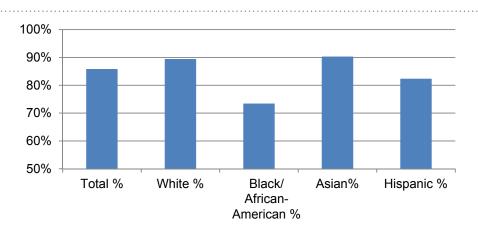
Education (continued)

FIGURE 31: FOUR YEAR GRADUATION RATES FOR BOONE COUNTY DISTRICTS, 2011-2013



(Missouri Department of Elementary and Secondary Education)

FIGURE 32: FOUR YEAR GRADUATION RATES BY RACE, COLUMBIA SCHOOL DISTRICT, 2013



(Missouri Department of Elementary and Secondary Education)

Poverty

According to U.S. Department of Health and Human Services, there are two slightly different versions of the federal poverty measure: poverty thresholds and poverty guidelines. Poverty thresholds, issued by the U.S. Census Bureau, are weighted statistical calculations that consider family size and age. Poverty guidelines, issued by the Department of Health and Human Services, vary by family size and are used to determine financial eligibility for certain programs. The poverty guidelines are often referred to as the Federal Poverty Level (FPL). The following figures are the 2013 U.S. Department of Health and Human Services poverty guidelines which were published in the Federal Register on January 24, 2013 (U.S. Department of Health and Human Services).

| PERSONS IN FAMILY/HOUSEHOLD | POVERTY GUIDELINE | |
|---|-------------------|--|
| 1 | \$11,490 | |
| 2 | \$15,510 | |
| 3 | \$19,530 | |
| 4 | \$23,550 | |
| 5 | \$27,570 | |
| 6 | \$31,590 | |
| 7 | \$35,610 | |
| 8 | \$39,630 | |
| For families/households with more than eight persons, add \$4,020 for each additional person. | | |

FIGURE 33: FEDERAL POVERTY GUIDELINES, 2013

(U.S. Department of Health and Human Services)

FIGURE 34: MONTHLY FEDERAL POVERTY GUIDELINES BY PERCENT OF POVERTY LEVEL, 2013

| SIZE OF FAMILY UNIT | 100% OF POVERTY | 135% OF POVERTY | 150% OF POVERTY | 200% OF |
|---------------------|-----------------|-----------------|-----------------|---------|
| SIZE OF FAMILE ONT | | | 150% OF FOVERTI | POVERTY |
| 1 | \$958 | \$1,293 | \$1,437 | \$1,772 |
| 2 | \$1,293 | \$1,745 | \$1,940 | \$2,392 |
| 3 | \$1,628 | \$2,197 | \$2,441 | \$3,012 |
| 4 | \$1,963 | \$2,650 | \$2,945 | \$3,632 |
| 5 | \$2,298 | \$3,102 | \$3,447 | \$4,251 |
| 6 | \$2,633 | \$3,555 | \$3,950 | \$4,871 |
| 7 | \$2,968 | \$4,006 | \$4,452 | \$5,491 |
| 8 | \$3,302 | \$4,458 | \$4,953 | \$6,108 |

(U.S. Department of Health and Human Services)

Poverty (continued)

In 2012, 19.1% of Boone County residents were living below the poverty level according to the 2012 American Community Survey. Figure 35 breaks down the percentage of the Boone County population living in poverty by age, race, and household (American Community Survey, 2012).

FIGURE 35: PERCENT LIVING IN POVERTY, BOONE COUNTY, 2012

FOR THE ESTIMATED 158,592 BOONE COUNTY RESIDENTS FOR WHOM POVERTY STATUS IS DETERMINED:

- 19.1% of Boone County residents live in poverty (30,258 of 158,592 residents)
- 16.9% of White Boone County residents live in poverty (22,355 of 132,172 residents)
- 25.0% of Black/African-American Boone County residents live in poverty (2,524 of 10,091 residents)
- 35.6% of Asian Boone County residents live in poverty (2,331 of 6,541 residents)
- 17.4% of Boone County male residents live in poverty (13,399 of 77,140 residents)
- 20.7% of Boone County female residents live in poverty (16,859 of 81,452 residents)
- 13.6% of Boone County children under 18 years live in poverty (4,578 of 33,750 residents)
- 22.8% of Boone County residents 18 to 64 years live in poverty (24,920 or 109,212 residents)
- 4.9% of Boone County residents 65 years and over live in poverty (760 of 15,630 residents)

(American Community Survey, 2012)

The number of participants receiving food stamps (SNAP benefits) is used as an indicator of a community's poverty burden. The 2013 Missouri Hunger Atlas estimates 21.6% of Boone County's total population are income eligible for SNAP with 19,525 of Boone County residents receiving SNAP benefits, or 11.8% of the total population.

Another indicator of poverty burden in a community is the number of students eligible for the Free and Reduced Lunch Program. The percentage of students eligible in each of the school districts in Boone County is less than in Missouri. Centralia has seen the largest increase in percentage since 2009, but is still has one of the lowest rates of all Boone County school districts.

Poverty (continued)

FIGURE 36: STUDENTS ELIGIBLE FOR FREE AND REDUCED LUNCH, BOONE COUNTY SCHOOL DISTRICTS, MISSOURI, 2009-2013

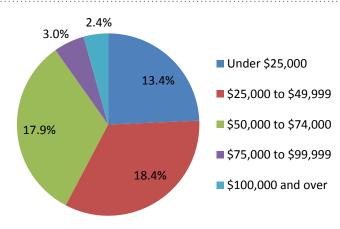
| | 2009 | 2010 | 2011 | 2012 | 2013 |
|----------------|-------|-------|-------|-------|-------|
| Missouri | 43.7% | 46.9% | 47.8% | 49.5% | 49.9% |
| Columbia | 36.0% | 38.9% | 38.9% | 40.0% | 39.6% |
| Centralia | 26.5% | 32.0% | 33.7% | 34.6% | 34.5% |
| Hallsville | 31.3% | 33.4% | 33.3% | 34.0% | 35.4% |
| Harrisburg | 35.7% | 41.3% | 41.8% | 44.0% | 42.1% |
| Southern Boone | 19.8% | 19.8% | 21.5% | 22.2% | 21.9% |
| Sturgeon | 38.9% | 40.3% | 45.1% | 43.8% | 46.1% |

(Missouri Department of Elementary and Secondary Education)

Health Insurance Coverage

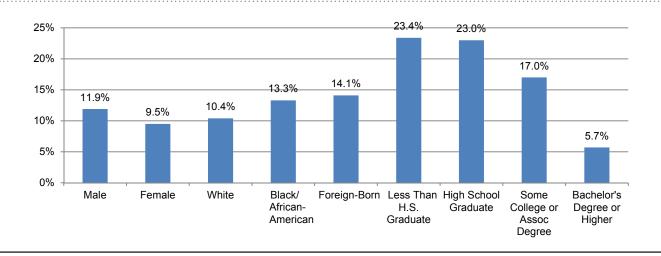
Of Boone County residents age 65 years or less, 14.5% lack health insurance (Small Area Health Insurance Estimates [SAHIE]). The age group most likely to lack health care coverage is 18-39, with males more likely than females to be uninsured. According to the American Community Survey, residents over 65 are the most likely to have health insurance with over 99% being insured.

FIGURE 37: PERCENT UNINSURED BY INCOME GROUPS, BOONE COUNTY, 2012



(American Community Survey, 2012)

Figure 37 looks at the percentage of uninsured in different income categories. Those with household income between \$25,000 and \$49,999 are more likely to be uninsured than any other income category.



Health Insurance Coverage (continued)

FIGURE 38: UNINSURED STATUS, BOONE COUNTY, 2012

(American Community Survey, 2012)

College graduates with a Bachelor's degree are about four times more likely to have health insurance than those who do not graduate from high school. Black/African-Americans, and those who are foreign-born, are more likely to be uninsured than whites, while Boone County males are also more likely to be uninsured than females.

Households and Housing

The U.S. Census Bureau defines a household as all of the people who occupy a single housing unit. A family is defined as a household with one or more people related by marriage, birth, or adoption. According to the 2012 American Community Survey, there are 66,360 households in Boone County with an average household size of 2.4. Of these households, 54.6% are family households with an average size of 3.03 people and 45.4% are nonfamily households

The availability of safe and affordable housing is an important characteristic, and can also serve as an indicator of the overall social, economic, and demographic picture of the community. As mentioned previously, Boone County is home to multiple colleges which impact the community in many ways, one of which is housing. Columbia has seen many large new apartment complexes, mostly catering to the student population, built in the last several years.

Households and Housing (continued)

FIGURE 39: HOUSING UNITS, BOONE COUNTY, 2012

| TYPE OF UNIT | NUMBER OF UNITS | % OF UNITS |
|-----------------------|-----------------|------------|
| Single family units | 46,171 | 65.1% |
| Multiple family units | 24,809 | 34.9% |
| Total | 70,980 | 100% |

(American Community Survey, 2012)

According to the 2012 American Community Survey (U.S. Census), Boone County has 70,980 housing units with an occupancy rate of 93.5%. Approximately 21% of the housing units, both single homes and complexes, have been built since the year 2000.

FIGURE 40: SELECTED HOUSING CHARACTERISTICS, BOONE COUNTY, MISSOURI, 2012

| | BOONE COUNTY | MISSOURI |
|----------------------|--------------|-----------|
| Median gross rent | \$777 | \$706 |
| Median mortgage cost | \$1,186 | \$1,176 |
| Median home value | \$158,400 | \$135,000 |

(American Community Survey, 2012)

It is important to look at the amount of income spent on housing for the Boone County resident. The U.S. Department of Housing and Urban Development (HUD) considers families who pay more than 30% of their income for housing as "cost burdened." Twenty-six percent of homeowners with mortgages and 60% of renters in Boone County spent 30% or more of household income on housing. Students may make up a large portion of this percentage. Without means of support other than educational and family assistance, students increase the number of households in Boone County living below poverty level. Students add to the demand for housing and are often able to pay the higher rent costs due to other sources of income. This often leaves those lacking additional financial support without affordable and sometimes safe housing.

Health Resources

The healthcare industry plays an important role in the health and economic well-being of Boone County. The five hospitals, with a combined total of 1,100 acute care beds and 226 intensive care beds, provide a wealth of health care resources as well as serve as a primary employer in the area.

Health Care Facilities

BOONE HOSPITAL CENTER

Opened in 1921, Boone Hospital, originally Boone County Hospital, is part of the BJC Healthcare family, one of the largest nonprofit health care organizations in the United States. Boone Hospital Center is a full-service hospital with a 24-hour emergency center, ambulance service, and helipad (Boone Hospital Center, 2013).

UNIVERSITY OF MISSOURI HEALTH SYSTEM

University Hospital, a teaching hospital affiliated with the University of Missouri, offers the only Level I Trauma Center and helicopter service in mid-Missouri. The facility serves patients from many Missouri counties and other states. University of Missouri Health System also includes Women's and Children's Hospital, home to a technologically-advanced newborn ICU; Missouri Psychiatric Center, a 57-bed facility that offers short-term, intensive treatment services for all ages; and Ellis Fischel Cancer Center, which serves thousands across Missouri through cancer prevention, detection, and treatment services (University of Missouri Health Care, 2013).

HARRY S. TRUMAN MEMORIAL VETERANS' HOSPITAL

Truman VA serves veterans from 44 counties in Missouri as well as Pike County, Illinois. While University Hospital and Truman VA share medical staff, the VA does not have an emergency room or helicopter service. The hospital is a widelyused resource for not only primary care, but also extended care and social support services for veterans (Harry S. Truman Memorial Veteran's Hospital, 2013).

RUSK REHABILITATION CENTER

Rusk Rehab is a rehabilitation hospital that offers both inpatient and outpatient services. It is the only inpatient rehabilitation hospital in central Missouri, and offers a wide variety of comprehensive services (Rusk Rehabilitation Center, 2013).

LANDMARK HOSPITAL OF COLUMBIA

Landmark Hospital is part of a larger Landmark Hospital system. The newest hospital in the community, Landmark fills a niche, providing hospital care for chronically ill patients that have medically complex conditions and are too ill for placement in a skilled nursing facility (Landmark Hospitals, 2013).

Hospital Utilization and Statistics

FIGURE 41: SELECTED HOSPITAL UTILIZATION STATISTICS, BOONE COUNTY, 2012

| | UNIVERSITY OF MISSOURI HEALTH CARE | BOONE HOSPITAL CENTER | HARRY S. TRUMAN VETERANS | RUSK REHABILITATION SERVICES | LAND- MARK |
|------------------------|--|-----------------------------|--------------------------------|------------------------------------|---------------|
| Licensed beds | 478* | 400 | 123 | 60 | 42 |
| Inpatient days | 108,035 | 72,882 | 30,395 | 16,794 | 11,208 |
| Discharges | 21,872 | 17,209 | 3,790 | 1,053 | 437 |
| Average length of stay | 4.9 | 4.2 | 8.0 | 15.9 | 25.6 |
| Occupancy | 62.8 % (2010) | 49.9 % | 72 % | 76.7 % | 73.1% |

(Missouri Department of Health and Senior Services, 2013)

*Does not include beds at the Missouri Psychiatric Center

Health Care Resources

Boone County is home to multiple physicians, multiple health care clinics, and has a high number of licensed health care providers. According to the 2013 County Health Rankings & Roadmaps, for every 949 Boone County residents, there is one primary care physician, which is well above the Missouri ratio of one primary care provider for every 1,495 Missouri residents, and above the national benchmark of 1,067:1. But even with this high ratio, Boone County has few resources for those who are uninsured. Family Health Center, the only Federally Qualified Health Center (FQHC) in the area, serves multiple counties, and MedZou, a volunteer student-operated medical clinic, provides free primary health care. Both clinics are limited on numbers of patients without resources that can be served. In July, 2013, HRSA (Health Resources and Services Administration) classified the low-income population in Boone County as having a shortage of access to health professionals.

FIGURE 42: LICENSED PRIMARY CARE PROVIDERS, BOONE COUNTY, 2012

| | NUMBER OF PRIMARY | RATIO OF POPULATION TO | |
|--------------|-------------------|------------------------|--|
| | CARE PROVIDERS | PRIMARY CARE PROVIDERS | |
| Boone County | 172 | 949:1 | |
| Missouri | x | 1,495:1 | |

(County Health Rankings and Roadmaps, 2013)

A notable gap is found in the ability of uninsured and Medicaid eligible Boone County residents to receive dental services. There are 94 licensed dentists in the county, or one dentist for every 1,832 Boone County residents. While this is above what is found in Missouri, it is still below the national benchmark of one dentist for every 1,1516 residents. The Family Health Center offers a dental clinic and is the only clinic with a sliding scale for dental patients, but few other dentists in the area accept patients with Medicaid. Also, not all Medicaid recipients receive dental coverage.

Health Care Resources (continued)

FIGURE 43: LICENSED DENTISTS, BOONE COUNTY, 2012

| | NUMBER OF DENTISTS | RATIO OF POPULATION TO | |
|----------|--------------------|------------------------|--|
| | | DENTISTS | |
| Boone | 94 | 1,832:1 | |
| Missouri | X | 2,168:1 | |

(County Health Rankings and Roadmaps, 2013)

Columbia/Boone County Public Health and Human Services

Boone County has a combined city/county public health department with a human services division. The Columbia/Boone County Department of Public Health and Human Services (PHHS) is a City of Columbia department with an appointed Board of Health which advises elected officials regarding the operations of PHHS, and makes policy recommendations in the interest of public health.

The 2012 operating budget of the department was \$6,308,027; the department operates with a staff of 62 FTEs. From 2004 to 2012 the total number of PHHS staff increased by less than two FTEs. During that same time period, the number of employees per thousand of population decreased.

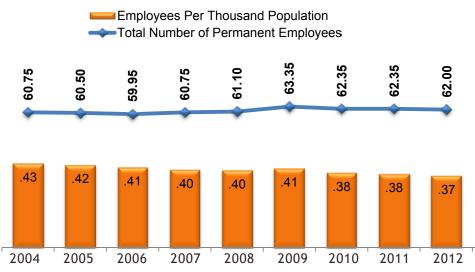
MISSION

To promote and protect the health, safety, and well-being of the community through leadership and service.

VISION

Optimal health, safety, and wellbeing for all.

FIGURE 44: COLUMBIA/BOONE COUNTY PHHS EMPLOYEES/1,000 COMPARED TO TOTAL NUMBER OF EMPLOYEES, 2004-2012



Permanent Positions

(City of Columbia; U.S. Census Bureau)

Long-Term Care and Assisted Living Facilities

Boone County has 21 licensed long-term care facilities: 11 offer skilled nursing, five are categorized as assisted living, and five as residential. A skilled nursing facility assumes responsibility for the resident, while an assisted living facility requires the resident to be able to evacuate with minimal assistance. A residential facility requires the resident to be able to evacuate with minimal assistance Senior Services). Of the 21 facilities, nine participate with Medicare/Medicaid.

FIGURE 45: LICENSED NURSING HOME BEDS, BOONE COUNTY, 2012

| | SKILLED NURSING FACILITY | ASSISTED LIVING FACILITY | RESIDENTIAL NURSING FACILITY | TOTAL |
|------------------------------|-----------------------------|-----------------------------|---------------------------------|-------|
| Number of beds | 1,002 | 316 | 175 | 1,493 |
| Number of facilities | 11 | 5 | 5 | 21 |
| Number of facilities with an | - | • | _ | - |
| Alzheimer's unit | / | 0 | 0 | / |

(Missouri Department of Health and Senior Services)

FIGURE 46: NURSING HOME BEDS TO POPULATION RATIO, BOONE COUNTY, MISSOURI, 2012

| | | | BEDS PER 1,000 |
|--------------|----------------------|---------------|----------------|
| | POPULATION | NUMBER OF | POPULATION |
| | (65 YEARS AND OLDER) | LICENSED BEDS | (65 YEARS AND |
| | | | OLDER) |
| Boone County | 15,072 | 1,493 | 99/1,000 |
| Missouri | 838,294 | 78,000 | 93/1,000 |

(U.S. Census, 2010) (Missouri Department of Health and Senior Services)

Figure 46 looks at the ratio of nursing home beds to the population over 65 years of age. Although both Missouri and Boone County have many long-term beds, it is often a struggle for a resident in need of assisted care to find a facility. Long-term care facilities in Boone County remain at almost full capacity, often with a waiting list. This may be due to the central location of these homes and the proximity to good health care and specialists.

Cost can be an important factor to consider. Many long-term care facilities can cost between \$20,000 and \$50,000 a year, with some even higher. In Missouri, 500 of the 1,144 (44%) licensed long-term care facilities support Medicare/Medicaid options, while nine of the 21 (43%) facilities in Boone County participate.

Quality of Life

How a resident perceives quality of life is an important indicator for the community. The National Association of City and County Health Officials (NACCHO) defines Quality of Life as a construct that "connotes an overall sense of well-being when applied to an individual" and a "supportive environment" when applied to a community.

Parks and Recreation

The ability to safely access and participate in outdoor activities is important to the health of a community. Parks and walking trails are widely available throughout Boone County. In Columbia there are 3,040 city-owned acres of parks and green space and 50.03 miles of trails. Rock Bridge Memorial State Park and Finger Lakes State Park, along with several Conservation and Wildlife Management Areas are also found in Boone County. The KATY Trail, which extends over 200 miles through Missouri, runs through the county. The MKT Nature & Fitness Trail trail connects to the KATY Trail near McBaine and links to over four miles of trails in Columbia. These widely used trails provide opportunities for runners, bikers, and walkers. Another project, Get About Columbia, is a collaborative effort between Parks and Recreation and Public Works (City of Columbia, 2013) with the goal of increasing safe walking and biking infrastructure in Columbia. The community has seen an increase in recent years of over 125 miles of new bikeways, pedways and sidewalks. Benefits are new bike routes, multi-use paths, trails, and on-street striped bike lanes. Both Columbia and Centralia have city-owned and operated community recreation centers.



The Arts

Residents in Boone County have several opportunities to participate in cultural events. The many parks offer festivals throughout the year and music is offered at a variety of locations, such as smaller venues, larger concert halls, and big outdoor annual events. One festival, Roots 'n Blues 'n BBQ, attracts people from throughout the United States, with an estimate of over 250,000 people attending since it began in 2007. Boone County is also home to several art galleries, the Boone County Historical Society Museum, the Museum of Art and Archeology, and the State Historical Society of Missouri. Jesse Hall and the Missouri Theatre in Columbia are well known landmarks providing both music and plays throughout the year.





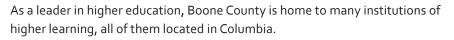
Transportation

Columbia Regional Airport is located south of Columbia and offers daily flights to Chicago O'Hare and Dallas/Fort Worth International Airports. Lambert-St. Louis International Airport, and Kansas City International Airport are each approximately two hours from Columbia and are another resource for air travel.

Columbia is the only community in Boone County with a public transportation system. The system provides bus service throughout the city with limited service on Saturday and no service on Sunday. It is heavily used on the campus of the University of Missouri with multiple buses providing students an alternate way to campus from housing areas and parking lots. Para-Transit, part of the Columbia Transit system, offers scheduled rides to ADA-eligible citizens who are unable to use the fixed-route traditional bus system. OATS, a not-for-profit corporation, also offers specialized transportation for senior citizens, people with disabilities, and the rural general population. There is also a Greyhound and Megabus stop in Columbia.

Eighty percent of Boone County workers drove to work alone in 2012, and 10% carpooled. Among those who commuted, it took them an average of 18 minutes to get to work.

Education Opportunities



The University of Missouri (Mizzou) is the flag-ship campus of the four campus University of Missouri system. A \$2.1 billion enterprise, the University of Missouri enrolls over 35,000 students each year and provides many opportunities for Boone County (University Of Missouri).

Columbia College enrolls more than 3,500 students that attend the day and evening programs at their Columbia campus (Columbia College, 2013).

Stephens College has approximately 700 full-time residential students (Stephens College).

Colleges from other areas, including Moberly Area Community College, William Woods University, Westminster College, and Central Methodist University have campuses in Columbia offering increased opportunities for a college degree. Also present in Columbia are several career school opportunities including those offering cosmetology, Licensed Practical Nursing (LPN) programs and other adult education programs.





Education Opportunities (continued)

There are six separate public school systems in Boone County: Centralia R-VI, Columbia Public Schools, Hallsville R-IV, Harrisburg R-VIII, Southern Boone Co. R-I, and Sturgeon R-V with a combined enrollment of over 22,000 students. All are accredited K-12, with limited preschool enrollment. Two high schools, Rock Bridge High School and Hickman High in Columbia are ranked in the top 20 Missouri Schools with a ranking of 8th and 14th, respectively. With both achieving a silver medal ranking based on college readiness index values, Rock Bridge is ranked 957 and Hickman 1,328 out of more than 21,000 high schools evaluated (U.S. News and World Report).



Voters

Boone County has 100,711 active voters. According to the Boone County Clerk's office, 79.33% of the active voters voted in the last major election in November 2012.

Child Services and Childcare

Affordable and safe child care services are a must in every community. Many households have two working parents, increasing the need for day care. In Boone County households with children under five years old, 51.6% have both parents working. In Boone County, there are 55 licensed child care facilities located outside of Columbia, 99 in Columbia, and many unlicensed in-home care providers.



Homelessness

According to the Institute of Public Policy's Boone County Issues Analysis, Basic Needs and Emergency Shelters (Jacqueline Schumacher, Policy Analyst, 2013), the primary community level indicator of homelessness in Boone County is the number of homeless individuals represented in the Point-In-Time Count. The Point-In-Time Count is part of a biannual homeless census conducted by the Missouri Housing Development Commission and the Missouri Association for Social Welfare. The count is a snapshot of the number of sheltered and unsheltered individuals during a specified 24-hour period in January and July. The Point-In-Time Count offers a baseline to quantify the number of individuals who are homeless on any given day in both the winter and summer months. However, one should note that the homeless census has a relatively flexible methodology and implementation, which accounts for the challenges inherent with tracking this population.

The Point-In-Time Count uses the Department of Housing and Urban Development's (HUD) definition of homeless which was adopted by the City of Columbia. According to HUD, a homeless person is considered "unsheltered" when they are living on the streets, in abandoned buildings, vehicles, parks, or in bus and train stations. A "sheltered" homeless person lives in an emergency shelter or transitional housing program specifically in place for homeless persons. The transient nature of homeless individuals brings about challenges in obtaining an accurate count of the population and in assessing individual needs.

Figure 47 describes the total number of homeless individuals in Boone County during the January and July Point-In-Time Counts between 2008 and 2012. The combined sheltered and unsheltered count reveals a steady increase in the number of homeless individuals between 2008 and 2012. The unsheltered trend line has expected seasonal variation between the winter and summer months. Between July 2008 and July 2012, the Point-In-Time Count revealed 48% more homeless individuals in Boone County. At the state level, the increase between January 2008 and January 2012 was just 22%.

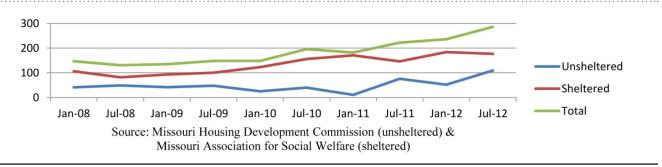


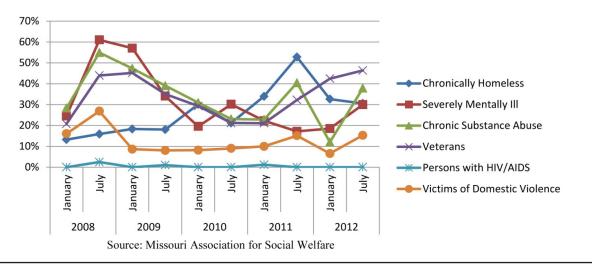
FIGURE 47: TOTAL OF HOMELESS INDIVIDUALS IN BOONE COUNTY, 2008-2012

Figure 48 provides useful information on sheltered homeless individuals in each sub-population as a rate among all sheltered homeless during the Point-In-Time counts between 2008 and 2012. During the most recent count, persons with HIV/AIDS and victims of domestic violence constitute the smallest representation of sheltered individuals in Boone County, while veterans make up the largest sub-population represented at this same point-in-time.

⁽Jacqueline Schumacher, Policy Analyst, 2013)

Homelessness (continued) 3

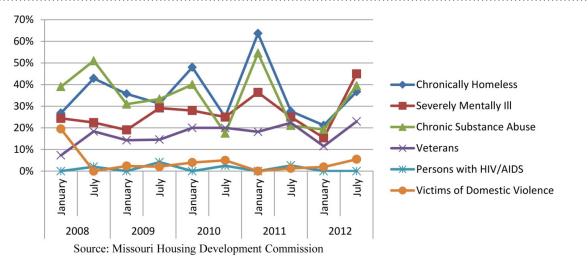
FIGURE 48: SHELTERED HOMELESS SUB-POPULATIONS AS A RATE OF ALL SHELTERED HOMELESS INDIVIDUALS IN BOONE COUNTY, 2008-2012



(Jacqueline Schumacher, Policy Analyst, 2013)

Figure 49 provides useful information on unsheltered homeless individuals in each sub-population as a rate among all unsheltered homeless during the Point-In-Time Counts between 2008 and 2012. During this time period, chronically homeless individuals, those suffering from severe mental illness, and individuals with chronic substance abuse problems make up the majority of the unsheltered homeless population for all consecutive years represented here.

FIGURE 49: UNSHELTERED HOMELESS SUB-POPULATIONS AS A RATE OF ALL UNSHELTERED HOMELESS INDIVIDUALS IN BOONE COUNTY, 2008-2012



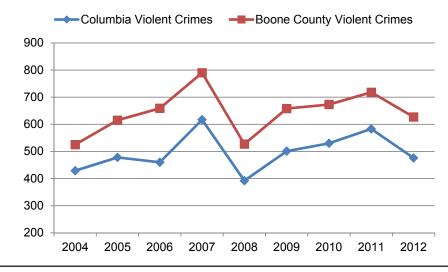
(Jacqueline Schumacher, Policy Analyst, 2013)

Crime

The Missouri State Highway Patrol keeps crime statistics with the Uniform Crime Reporting Program (UCR). Crime data can be divided into two categories: violent crimes and property crimes. Violent crimes include murder, rape, robbery, and aggravated assault. Property crimes include burglary, larceny-theft, motor vehicle theft, robbery, and arson.

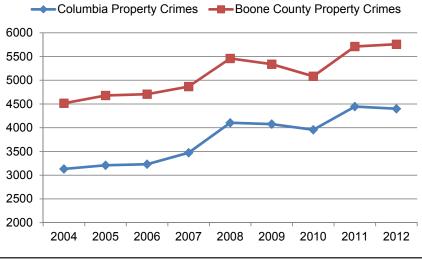
Figures 50 and 51 show the number of violent crimes and property crimes reported yearly from 2004 to 2012. Figures 52 and 53 look at these by rate per 100,000.

FIGURE 50: VIOLENT CRIME COUNT BY YEAR, COLUMBIA, BOONE COUNTY, 2004-2012

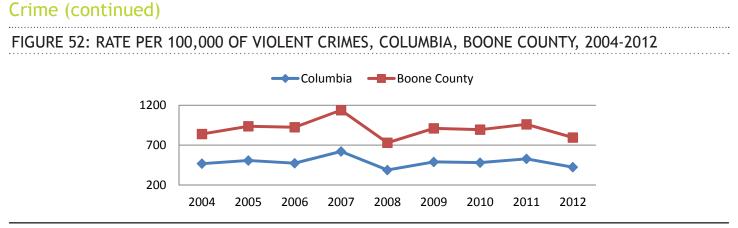


⁽Missouri Highway Patrol Statistical Analysis Center)

FIGURE 51: PROPERTY CRIME COUNT BY YEAR, COLUMBIA, BOONE COUNTY 2004-2012

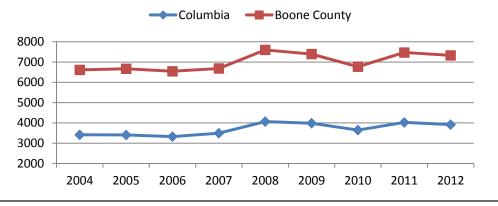






⁽Missouri Highway Patrol Statistical Analysis Center)

FIGURE 53: RATE PER 100,000 OF PROPERTY CRIMES, COLUMBIA, BOONE COUNTY, 2004-2012



(Missouri Highway Patrol Statistical Analysis Center)

Health Behaviors

Unhealthy behaviors, such as tobacco use and obesity, can be contributing factors for injuries, disease, and death. Both



tobacco use and obesity play a role in all of the leading causes of death for Boone County.

The 2013 County Health Rankings (County Health Rankings and Roadmaps, 2013) report 11% of Boone County residents feel they are in poor or fair health, having an average of 2.9 poor physical health days in the last month. Boone County factors reported from Community Commons, a website that provides community health information include:

- Adult smoking 18%
- Diabetes 7.5%
- Adult obesity 26%

Physical inactivity - 23%

• Inadequate fruit & vegetable consumption - 77.6%

Obesity

The Centers for Disease Control and Prevention (CDC) reports that more than onethird of adults in the United States are obese. With an estimated medical cost of \$147 billion in 2008, annual medical costs for obese people was \$1,429 higher than normal weight people (CDC-Overweight and Obesity). Obesity increases the risk of many health conditions, including the following:

- Coronary heart disease, stroke, and high blood pressure
- Type 2 diabetes
- Cancers, such as endometrial, breast, and colon cancer
- High cholesterol
- Sleep apnea and respiratory problems
- Liver and gallbladder disease
- Degeneration of cartilage and osteoarthritis
- Reproductive health complications
- Mental health conditions

There is a significant disparity between obesity and race/ethnicity throughout the United States. Non-Hispanic blacks have the highest age-adjusted obesity rates (49.5%) compared with Mexican Americans (40.4%), all Hispanics (39.1%) and non-Hispanic whites (34.3%). With non-Hispanic black men and Mexican American black men, those with higher income are more likely to be obese than those with low income. Higher income women are less likely to be obese than low-income women, and women with college degrees are less likely to be obese compared to women with less education. There is no significant relationship between obesity and education among men (CDC-Overweight and Obesity).

The obesity rate in Boone County (28%) has stayed fairly level for the last few years, and remains lower than the Missouri rate (31%) but higher than the national benchmark of 25%.

Childhood obesity is an even greater growing concern for the entire nation. Obesity now affects 17% of all children and adolescents in the United States, triple the rate from just one generation ago (CDC-Overweight and Obesity). While child obesity rates are difficult to measure at a county level, it remains a community problem.

Food and Nutrition

Eating five or more servings of fruits and vegetables per day has been identified as a preventive behavior for many chronic diseases and premature death. The Missouri Department of Health and Senior Services 2011 County Level Study reports that 86% in Boone County eat fewer than five fruit and vegetable servings per day. Only a little over one in every ten are consuming the recommended amount. The reports also identifies that in Boone County, 4.35% of total household expenditures were for fruit/vegetable consumption while 5.22% were for soda consumption.

It is important to look at access to healthy foods, both geographically and economically. The inability to purchase healthy foods because of financial constraints is an important link to factors that lead to chronic illnesses.

Food security is defined as "access by all people at all times to enough food for an active, healthy life." Food insecurity is usually related to insufficient resources for food purchases, with the majority of food insecure households avoiding hunger by relying on a more narrow range of foods or acquiring food through private and public assistance programs (Missouri Hunger Atlas 2013).

The Missouri Hunger Atlas ranked Boone County as low need/low performance, citing the county as having a comparatively low percent of population with hunger needs, but also doing comparatively worse in meeting the requirements of these populations. However, the report states "although the percent in need is relatively low in these areas, in many cases the low percents denote relatively large numbers of people because the base populations are often quite high. In fact....Boone County falls into this category."

Figure 54 looks at the recently released data. Boone County consistently falls below the Missouri numbers except with the percent of households with children.

| NEED INDICATOR | BOONE COUNTY | MISSOURI |
|---|--------------|----------|
| % Households food uncertain | 13.7% | 13.9% |
| % Households with children food uncertain | 27.3% | 23.0% |
| % Households food uncertain with hunger | 5.1% | 5.7% |
| % Population income eligible for SNAP | 21.6% | 23.0% |
| % < 18 years income eligible for SNAP | 20.6% | 30.6% |
| % Students eligible for national school lunch program | 32.7% | 52.1% |
| % < 5 years income eligible for WIC | 33.5% | 50.9% |

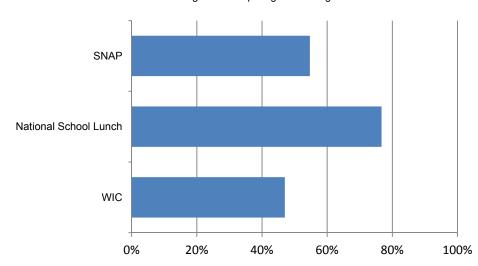
FIGURE 54: BOONE COUNTY DATA, MISSOURI FOOD ATLAS, 2013

(Missouri Hunger Atlas, 2013)

Food and Nutrition (continued)

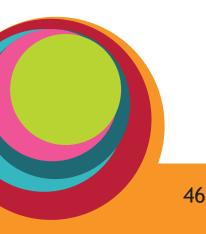
Figure 55 looks at percent of eligible participants that actually participate in a subsidy program. The National School Lunch Program (Free and Reduced Lunch) has the highest percentage that takes advantage of this.

FIGURE 55: PERCENT OF ELIGIBLE PARTICIPANTS PARTICIPATING IN FOOD PROGRAMS, BOONE COUNTY, 2013



■ % of Eligible Participating in the Program

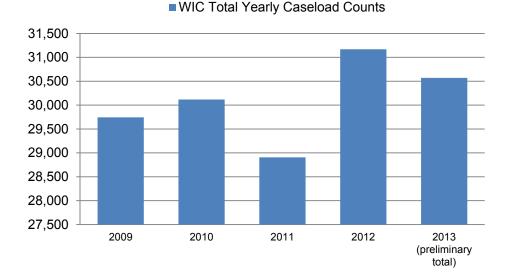
(Missouri Hunger Atlas, 2013)



Women, Infants, Children (WIC)

Women, Infants, and Children (WIC) is a supplemental nutrition program which provides federal grants to states for supplemental foods, health care referrals, and nutrition education for low-income pregnant, breast-feeding, and non-breast-feeding postpartum women, as well as infants and children up to age five who are found to be at nutritional risk. In Boone County, 47% of eligible participants are enrolled, with the state average at 68% (Missouri Hunger Atlas 2013).

FIGURE 56: FIVE-YEAR TREND OF WIC ENROLLMENT, BOONE COUNTY, 2009-2013



⁽Columbia/Boone County WIC, 2013)

Food Access

Boone County hosts at least five farmers markets, with SNAP benefits doubled at one. Lunch in the Park is a federal nutrition program located at Douglass Park that feeds approximately 110 children daily during the summer. This is particularly important for children that rely on the school lunch programs during the year which are not available during the summer. Other programs in Boone County include the Food Bank for Central & Northeast Missouri and the Buddy Pack Program which provides backpacks filled with kid-friendly nutritious food for at risk students to take home over weekends and holidays to supplement their meals.

Boone County has more fast food establishments per 100,000 than both Missouri and the U.S. There are 75.01 establishments per 100,000 in Boone County while in Missouri there are 66.79 per 100,000 and the U.S. 70.04 per 100,000. A fast food restaurant is defined as a limited service establishment primarily engaged in providing food services where patrons generally order or select items and pay before eating. In Boone County, there are 19.68 grocery stores per 100,000 residents. Even with the high number of establishments, Boone County has 15.58% of the population with low food access. These indicators are important because they are a measure of healthy food access, environmental influences, and dietary behaviors (Community Commons).

Tobacco Use

Tobacco use is a contributor in four out of the five leading causes of death in Boone County: cancer, heart disease, chronic lower respiratory disease, and stroke. County Health Rankings and Roadmaps identify almost 18% of Boone County adults over 18 years of age smoke and another 6 % report currently using other types of tobacco (Missouri Department of Health and Senior Services, 2013).

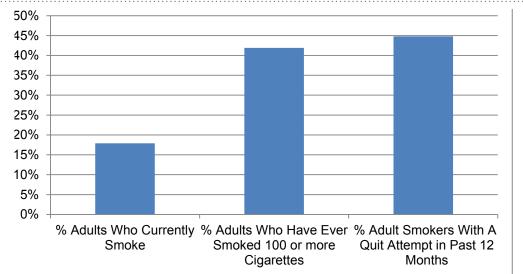


FIGURE 57: TOBACCO USE, BOONE COUNTY, 2005-2011

(Community Commons, 2013)

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The percentage of students in grades 6-12 who smoke is 10.6%, which is a decrease from the 13% reported last year. (Behavioral Health Profile, 2013) (Missouri Department of Mental Health, 2012) The average age of first cigarette use in Boone County is 12. Numbers are not available locally on the use of smokeless tobacco in those under the age of 18 years.



Physical Activity

There is a well-documented link between physical inactivity, obesity, and chronic illness. Boone County reports a lower percent of population with no leisure time physical activity (23.3%) than Missouri (26.6%). At the same time, 48% of the population live within a half mile of a park, which is also higher than the Missouri rate of 33 percent of other Missourians who live within a half mile of a park (Community Commons). The 2011 County Level Study performed by the Missouri Department of Health and Senior Services reports 58.1% of Boone County residents use walking trails and parks, 59.1% have sidewalks in their neighborhood, and 81.9% consider their neighborhood to be safe. Even with these statistics, the perception of a safe place to walk varies considerably by the neighborhood, and within the neighborhood by household.

Chronic Disease

In the U.S., life expectancy for both sexes combined has increased from 75.2 in 1990 to 78.2 in 2010. Over the same time period, healthy life expectancy rose from 65.8 to 68.1. Healthy life expectancy is the number of years that a person at a given age can expect to live in good health, taking into account mortality and disability (The State of the U.S. Health, 2013). Chronic disease extends financial and social impact on households, employers, and communities with the increased health care costs, loss of worker productivity and public policy concerns. Figure 58 looks at the top chronic disease hospitalizations for Boone County from 2007-2011. Heart disease is the leading cause of hospitalization due to chronic disease, with blacks being hospitalized over one and half times more often than whites. While the overall rate of hospitalization for diabetes is lower, there is a significant disparity between the rate of whites hospitalized due to diabetes and the rate of blacks hospitalized for diabetes.

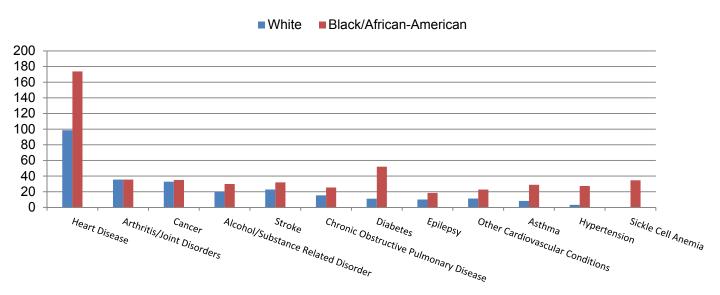


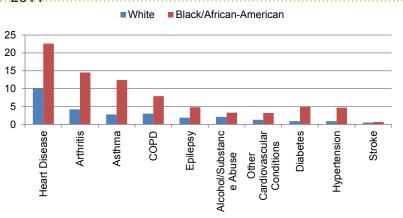
FIGURE 58: CHRONIC DISEASE HOSPITALIZATION RATES PER 10,000 BY RACE, BOONE COUNTY, 2007-2011

(Missouri Department of Health and Senior Services, 2013)

Figures 59 & 60 show the leading causes of emergency room visits and death from chronic disease in Boone County, and the disparity by race.

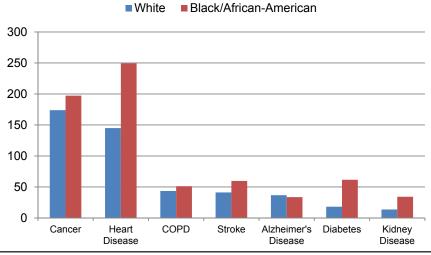
Chronic Disease (continued)

FIGURE 59: CHRONIC DISEASE EMERGENCY ROOM VISIT RATES PER 100,000 BY RACE, BOONE COUNTY, 2007-2011



(Missouri Department of Health and Senior Services, 2013)

FIGURE 60: CHRONIC DISEASE DEATH RATES PER 100,000 BY RACE, BOONE COUNTY, 2007-2011



(Missouri Department of Health and Senior Services, 2013)

Other Risk Factors

While 27.7% of adults in Boone County report having high blood pressure, 20% of those also report not taking their high blood pressure medication. Eighty-two percent of females over the age of 18 report having regular pap smears, while 73.85 of female Medicare enrollees age 67-69 report regular mammograms. Sixty-nine percent of males over the age of 50 report having had a screening for colon cancer.

Social and Mental Health

Boone County has one facility that offers inpatient hospitalizations for psychiatric needs, and several other communitybased outpatient programs and residential treatment centers. While data is available for those who receive treatment, data on mental health of the general population is very limited, especially at the local level.

Nationally, males are about four times more likely to commit suicide than females. Older males have higher rates of suicide than younger males. In 2011, 23 Boone County residents committed suicide, an almost 50% increase from 2007.

Adult Mental Health

In 2012, 1,798 Boone County residents received treatment for serious mental illness at publicly-funded facilities. That number was an increase from 1,439 reported in 2011 (Behavioral Health Profile, 2013).

Youth Mental Health

In the 2013 Behavioral Health Profile, the Missouri Department of Mental Health asked students (6th-12th grade) in the county about their mental health. Over 9% had considered suicide in the last year, 7.6% made a plan, and 1.3% actually attempted suicide, resulting in an injury.

Substance Use and Abuse in Boone County

The Behavioral Health Profile that reports the availability of county-level data on substance use and abuse, is limited. The Missouri Student Survey can provide estimates for youth in most Missouri counties (not all school districts participate).

In 2011, Boone County residents had a total of 315 alcohol-related and 253 drugrelated hospitalizations. In addition, there were 601 alcohol-related and 494 drug-related ER visits that did not include a hospital stay.

In 2012, 1,007 Boone County residents were admitted to substance abuse treatment at publicly-funded facilities. Of this number, 477 had alcohol listed as their primary substance of abuse and 264 listed marijuana.

Alcohol-related traffic crashes are more likely to produce fatalities and injuries compared to non-alcohol related crashes. The number of alcohol-related crashes in Boone County decreased from 190 in 2010 to 143 in 2011.

IN BOONE COUNTY:

- 57.1% of youth believe that it would be easy to get cigarettes
- 49.7% have friends who smoke
- 60.7% of youth believe that it would be easy to get alcohol
- 61.2% have friends who drink alcohol
- 36.5% of youth say marijuana is easy to get
- 40.8% have at least 1 friend that uses marijuana
- 8.8% say smoking marijuana is "no risk at all"
- 14.4% of youth believe it would be easy to get other drugs such as cocaine, methamphetamine, and ecstasy

Substance Use and Abuse in Boone County (continued)

FIGURE 61: NUMBER OF PEOPLE INJURED/KILLED IN ALCOHOL AND DRUG-RELATED CRASHES, BOONE COUNTY, 2011

| ALCOHOL FATALITIES | ALCOHOL INJURIES | DRUG FATALITIES | DRUG INJURIES |
|--------------------|------------------|-----------------|---------------|
| 8 | 85 | 3 | 15 |

(Behavioral Health Profile, 2013)

In figure 62, The 2012 Status Report on Missouri's Substance Abuse and Mental Health Problems outlines hospital and emergency room visits directly related to drug and alcohol abuse for Boone County residents. Hospitalizations and ER visits have seen large increases from 2008 to 2010.

FIGURE 62: HOSPITAL AND EMERGENCY ROOM VISITS RELATED TO DRUGS AND ALCOHOL, BOONE COUNTY, 2008-2010

| | 2008 | 2009 | 2010 |
|--|-------|-------|-------|
| Alcohol-related hospitalizations and ER visits TOTAL | 1,130 | 1,218 | 1,534 |
| Emergency room outpatient visits | 542 | 526 | 641 |
| Direct hospitalizations | 292 | 298 | 361 |
| Hospitalizations from the ER | 296 | 394 | 532 |
| Drug-related hospitalizations and ER visits TOTAL | 687 | 791 | 1,188 |
| Emergency room outpatient visits | 274 | 259 | 465 |
| Direct hospitalizations | 257 | 245 | 278 |
| Hospitalizations from the ER | 156 | 287 | 445 |

(Status Report on Missouri's Substance Abuse and Mental Health Problems, 2012)

FIGURE 63: POLICE REPORTS RELATED TO DRUGS AND ALCOHOL, BOONE COUNTY, 2008-2010

| | 2008 | 2009 | 2010 |
|-------------------------------|-------|-------|-------|
| DUI arrests | 1,132 | 1,207 | 1,639 |
| Liquor law arrests | 708 | 1,035 | 898 |
| Drug arrests | 1,083 | 1,115 | 1,135 |
| Methamphetamine lab incidents | 1 | 29 | 15 |
| Juvenile alcohol offenses | 38 | 26 | 27 |
| Juvenile drug offenses | 66 | 69 | 86 |

(Status Report on Missouri's Substance Abuse and Mental Health Problems, 2012)

Domestic Violence

The extent of domestic violence is often difficult to grasp in a community because of the lack of reporting by the abused partner for a variety of reasons. Of the domestic violence criminal cases pursued by the Columbia, MO Police Department, the majority of the victims are white females and the most common age group alternates between 18-25 and 24-40 years old. There is no clear race associated with the majority of domestic violence offenders, however, there are identifiable trends associated with relationship statuses. A partnership where individuals are permanately residing together is the most common scenario, followed by spousal relationships (Jacqueline Schumacher, Policy Analyst, 2013).

There has been no domestic violence related fatality since 2001. In looking at Boone County data from the Missouri State Highway Patrol Statistical Analysis Center, domestic violence has increased in Boone County in the last few years. Part of the reason for the increase may be due to a change in 2011 in types of arrests that are considered domestic violence. There was a re-classification of incidents that were previously a different category and are now considered domestic violence.

In 2011 there were 1,722 domestic violence offenses reported in Boone County, compared to the 1,738 reported in 2012. There have been considerable efforts by all community law enforcement agencies to support domestic violence reports, hoping the supportive environment will increase the reports and lead to a decrease in incidence. Most domestic violence reports in Boone County fit into two categories: 1) violence between persons who have a child in common regardless of whether or not they have been married or resided together and 2) between persons not married but presently residing together.

Domestic violence victims often do not have a safe place to go. There is one primary shelter for domestic violence victims in Boone County. That shelter, True North, also serves multiple other counties, and has 25 beds available. This number has remained the same since 2006. From 2006 to 2012, 338 individuals were turned away from True North due to lack of overnight beds. In 2010, True North turned away 202 women and children due to a full shelter (Jacqueline Schumacher, Policy Analyst, 2013).

Disabilities

In 2011, there were an estimated 8.6% or 14,379 individuals living with a disability in Boone County. Of those 18-64, the prevailing disability was cognitive, with ambulatory second. Most of those over 65 who reported a disability reported an ambulatory disability (American Community Survey, 2012).

Of those in Boone County that are disabled, 68% reside in Columbia. Increased access to healthcare services, shopping, social services and a public transportation system make it easier for many disabled to live within Columbia's city limits.

Maternal and Child Health

Looking at the maternal and child health of a community is one of the most important ways to monitor the health of a vulnerable population: infants and children. Because maternal health is correlated with birth outcomes, it is important to consider the health of the mother during pregnancy when looking at increased risk for both mother and child.

In Missouri, annual data from live birth and fetal death records are compiled from the birth and death certificates, which are filed with the Missouri Department of Health and Senior Services. These reports provide maternal and child data for a variety of characteristics.

Pregnancy and Birth Characteristics

The rate of live births for women in Boone County is slightly below the rate for Missouri women. In the past ten years, both Missouri and Boone County have seen a decline in live birth rates.

FIGURE 64: LIVE BIRTHS PER 100,000, BOONE COUNTY, MISSOURI, 2000, 2010

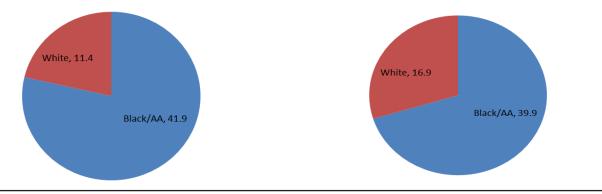
| | | 2000 LIVE BIRTHS | 2000 LIVE BIRTHS RATE/100,000 | 2010 LIVE BIRTHS | 2010 LIVE BIRTHS RATE/100,000 |
|--|--------------|------------------|----------------------------------|------------------|-------------------------------------|
| | Boone County | 1,784 | 1,317.1 | 2,003 | 1,231.5 |
| | Missouri | 76,329 | 1,364.2 | 76,718 | 1,281.0 |

(Missouri Department of Health and Senior Services, 2013)

The overall rate of pregnancy in Boone County adolescents (15-17 years) is lower than for Missouri. The Boone County rate is 16.2 per 1,000 compared to Missouri's 20.7 per 1,000. There is a significant difference in the pregnancy rate between white and black adolescents in Boone County. Figures 65 & 66 show the rates of adolescent pregnancy by race for Missouri and Boone County.

FIGURE 65: ADOLESCENT PREGNANCY RATE PER 1,000, BOONE COUNTY, 2002-2010





(Missouri Department of Health and Senior Services, 2013)

Pregnancy and Birth Characteristics (continued)

Of babies born in Boone County, 2.3% are born to mothers who are between the ages of 10-17 years. This is lower than the Missouri rate of 3.6%. However, 6.3% of all black/African-American live births in Boone County are born to adolescents compared to 1.7% of white live births in the same age group.

Eighty-five percent of women in Boone County who gave live birth sought prenatal care during their first trimester, and less than one percent had no prenatal care.

Eleven percent of live births were to Boone County mothers with less than 12 years of education. When comparing births to black/African-American mothers and white mothers both with less than 12 years of education, there is a significant difference. Births to black/African-American mothers with less than 12 years of education were 24.6%, compared to 8.8% of white mothers with the same characteristic.

Smoking rates during pregnancy are lower in Boone County compared to Missouri. Almost 16% of mothers in Boone County smoked while pregnant compared to Missouri's rate of 17.8%. However, in Boone County there was a greater chance of a black mother smoking during pregnancy than a white mother. In contrast, Missouri rates show a higher percentage of white mothers smoke during pregnancy than black.

Birth Outcomes

According to the Centers for Disease Control and Prevention (CDC), birth weight is the first weight of the newborn measured immediately after birth. Birth weight of less than 5 pounds, 8 ounces, or 2,500 grams, is considered low birth weight (LBW) while a birth weight of less than 3 pounds, 4 ounces, or 1,499 grams is considered very low birth weight (VLBW). A low birth weight infant can be born too small, too early, or both. This can happen for many different reasons which may or may not be related. Compared to infants of normal weight, low birth weight infants may be more at risk for many health problems. Some babies may become sick in the first six days of life (perinatal morbidity) or develop infections. Other babies may even suffer from longer-term problems such as delayed motor and social development or learning disabilities.

FIGURE 67: LOW AND VERY LOW BIRTH WEIGHT BIRTHS, BOONE COUNTY, MISSOURI, 2006-2010

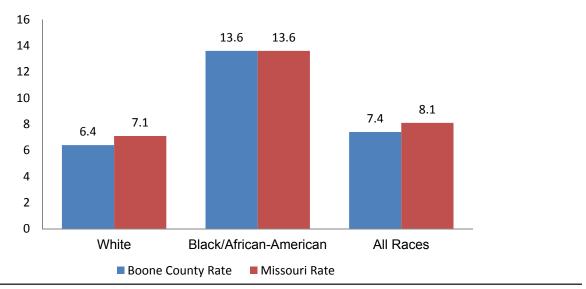
| | LOW BIRTH WEIGHT (LBW) | VERY LOW BIRTH WEIGHT (VLBW) |
|--------------|------------------------|---------------------------------|
| Boone County | 7.4% | 1.3% |
| Missouri | 8.1% | 1.5% |

(Missouri Department of Health and Senior Services, 2013)

In Boone County, the rate of babies born with LBW and VLBW is slightly lower than Missouri rates. For both LBW and VLBW, the rate for black infants is significantly higher than white infants, for both Boone County and Missouri (Figures 68 & 69). Low birth weight babies are primarily found among 15-17 year olds, while very low birth weights are found among women both 15-17 and over 40 years.

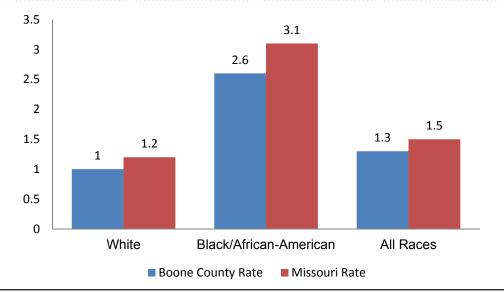
Birth Outcomes (continued)

FIGURE 68: LOW BIRTH WEIGHT INFANTS PER 100 LIVE BIRTHS, BOONE COUNTY, MISSOURI, 2006-2010



⁽Missouri Department of Health and Senior Services, 2013)

FIGURE 69: VERY LOW BIRTH WEIGHT INFANTS PER 100 LIVE BIRTHS, BOONE COUNTY, MISSOURI, 2006-2010



(Missouri Department of Health and Senior Services, 2013)

Infant Mortality

The death of a baby before his or her first birthday is called infant mortality. This rate is often used as an indicator to measure the health and well-being of a nation, because factors affecting the health of entire populations can also impact the mortality rate of infants (Centers For Disease Control and Prevention).

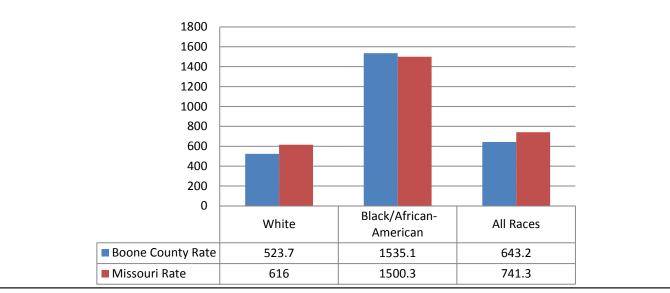
For every 1,000 babies that are born in the U.S., six die during their first year. According to the Centers for Disease Control and Prevention (CDC) most of these babies die because they are:

- Born with a serious birth defect
- Born too small and too early (i.e., preterm birth; birth before 37 weeks gestation).
- Victims of Sudden Infant Death Syndrome (SIDS)
- Affected by maternal complications of pregnancy
- Victims of injuries (e.g., suffocation)

These top five leading causes of infant mortality together accounted for 57% of all infant deaths in the United States in 2010.

In Boone County, 11.6% of births were considered preterm, which is less than 37 completed weeks gestation.

FIGURE 70: INFANT MORTALITY RATE PER 100,000, BOONE COUNTY, MISSOURI, 2000-2010



(Missouri Department of Health and Senior Services, 2013)

Death, Illness, and Injury

Leading Causes of Death

.....

Missouri Information for Community Assessment (MICA) provides county level information on all deaths of Missouri residents, including leading causes of death by age group. For deaths in residents less than 15 years, only the top two causes are listed. Although this table looks at ten years of data combined, the denominator for the other causes was less than 20, making the rate calculated unstable. Therefore, those causes were not listed.

| LEADING CAUSES OF DEATH | ALL AGES | AGE 15 AND UNDER | AGES 15 - 24 | AGES 25 - 44 | AGES 45 - 64 | AGE 65 AND OVER |
|-------------------------------|--|--|--|--|--|--|
| #1 | Cancer | Conditions of Perinatal Period (154 days before to 7 days after birth) | Motor Vehicle Accidents | Accidents (other than mo- tor vehicle) | Cancer | Heart Disease |
| #2 | Heart Disease | Birth defects | Accidents (other than mo- tor vehicle) | Cancer | Heart Disease | Cancer |
| # ₃ | Stroke | Ø | Suicide | Motor Vehicle Accidents | Accidents (other than mo- tor vehicle) | Stroke |
| #4 | Chronic Lower Respiratory Diseases | Ø | Homicide | Suicide | Chronic Lower Respiratory Diseases | Alzheimer's |
| #5 | Alzheimer's | a | Cancer | Heart Disease | Suicide | Chronic Lower Respiratory Diseases |

FIGURE 71: LEADING CAUSES OF DEATH BY AGE GROUP, BOONE COUNTY, 2002-2011

(Missouri Department of Health and Senior Services, 2013)

The five leading causes of death in Boone County are Cancer, Heart Disease, Stroke, Chronic Lower Respiratory Disease and Alzheimer's. The table above shows how these leading causes are spread through different age groups and highlights the top five leading death causes by age group.

| Leading Causes of Death (continued) | | |
|--|---------------------------------------|--|
| FIGURE 72: LEADING CAUSE OF DEATH IN BOONE COUNTY BY RACE, 2001-2011 | | |
| WHITE | BLACK/AFRICAN-AMERICAN | |
| 1. Cancer | 1. Heart Disease | |
| 2. Heart Disease | 2. Cancer | |
| 3. Stroke | 3. Stroke | |
| 4. Chronic Lower Respiratory Diseases | 4. Diabetes | |
| 5. Alzheimer's | 5. Chronic Lower Respiratory Diseases | |

(Missouri Department of Health and Senior Services, 2013)

While cancer is the leading cause of death in Boone County overall and for whites, heart disease rises to the top of the list for black/African-Americans. In Boone County, the death rate for heart disease in African-Americans is almost twice the rate for whites. The rate for death due to diabetes for blacks is over three times higher than the white demographic.

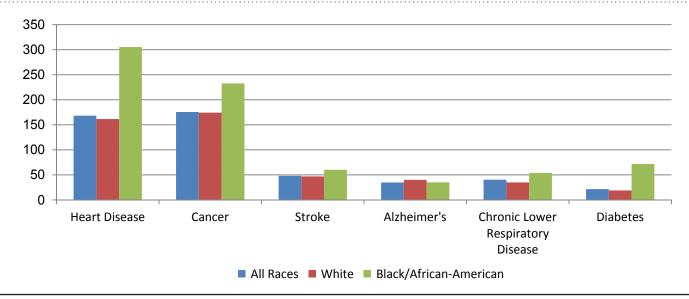


FIGURE 73: DEATH RATES PER 100,000 COMPARED BY RACE, BOONE COUNTY, 2002-2011

(Missouri Department of Health and Senior Services, 2013)

Suicide

The 2002 – 2011 suicide rate for Boone County is 11.9 per 100,000. There were 167 deaths attributed to suicide. Broken down by age group, there were 17 in the 15-24, 66 for the 25-44, and 61 for those aged 45-64.

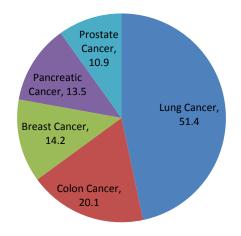
Accidental Deaths

Accidents, excluding motor vehicle accidents, were the cause of 386 deaths in Boone County from 2002-2011. Accidental poisonings and drowning were listed as the leading accidental cause of death (other than motor vehicle) for 15-24 year olds with accidental poisonings and falls for those in the 45-64 age group. Accidental poisonings include unintentional drug overdoses.

Cancer

Lung cancer is the most prominent type of cancer leading to death in Boone County. The rate of death due to lung cancer is over twice the rate of the second leading cancer, which is colon cancer.

FIGURE 74: DEATH RATE FROM CANCER BY TYPE, BOONE COUNTY, 2002-2011



(Missouri Department of Health and Senior Services, 2013)

Motor Vehicle Deaths

Between 2002 and 2011, the rate of death due to motor vehicle accidents was 12.7 per 100,000. While this rate is lower than Missouri's rate of 17.4/100,000, there were 203 deaths among Boone County residents attributed to motor vehicle accidents during that time period. The majority of the deaths were in persons between 15 and 44 years.

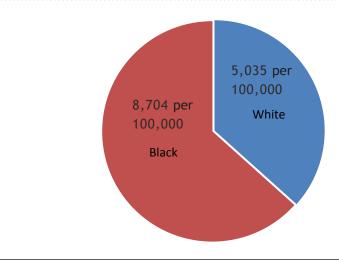
Homicide

Homicide is listed as the fourth leading cause of death for 15 to 24 year olds in Boone County. From 2002 to 2011 there were 42 homicide deaths. Of those 42 deaths, 33% were between the ages of 25-44 years and 26% were ages 15-24. Two deaths were under 15 years of age.

Years of Potential Life Lost

Years of potential life lost (YPLL) is a measurement which provides an estimate of the average time a person would have lived if he or she had not died prematurely. YPLL is a good public health measure because it can be an indicator of preventable deaths. Rates for residents of Boone County residents are considered more favorable than Missouri. The black/African-American rate is significantly higher than the white rate.

FIGURE 75: YEARS OF POTENTIAL LIFE LOST RATE PER 100,000, BOONE COUNTY, 2011



(Missouri Department of Health and Senior Services, 2013)

Injury

Injuries are reported by hospitals from emergency rooms and inpatient stays. They can be classified as accidental or intentional. In Boone County, the leading cause of unintentional injury are falls, with "struck by a blunt object" or "in a fight" as second. These two categories combined accounted for 53,328 injuries between 2002 and 2011.

For intentional injuries, fighting or assault with a blunt object is the leading cause for Boone County residents, followed by being cut or pierced. The third leading cause of assault/intentional injury in Boone County is injury due to a firearm. From 2002-2011, there were 76 intentional firearm injuries in Boone County, 19 of which resulted in death.

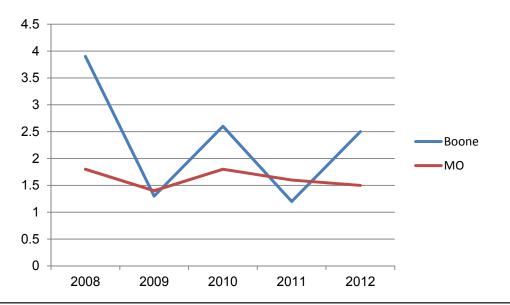
Communicable Diseases and Conditions

Communicable diseases have been a major cause of illness and sometimes death throughout the years. The Columbia/ Boone County Department of Public Health and Human Services works closely with both community and state partners to limit the spread of communicable diseases throughout the county. In 2012, there were almost 3,200 communicable diseases and conditions reported in Boone County.

Tuberculosis (TB)

In 2012, there were 9,945 (a rate of 3.2 cases per 100,000) cases of Tuberculosis (TB) reported in the United States. Overall, TB rates in the United States have declined, but TB remains a community problem. A single case can infect many contacts, and requires significant public health and healthcare resources. This is especially true in multi- drug resistant cases, which become more complicated and require more resources. In Boone County, although the rate of TB infection has decreased since 2008, new cases continue to be identified. The trend of decrease among cases in U.S. born residents may be responsible for the overall decrease, but the number of cases in Boone County among foreign-born has increased. This increase is seen among refugee populations and students born outside of the United States. Over the last five years, 75% of TB cases reported in Boone County have been in individuals born in another country.

FIGURE 76: RATE PER 100,000 POPULATION OF TUBERCULOSIS DISEASE, BOONE COUNTY, MISSOURI, 2008-2012



(Missouri Department of Health and Senior Services, 2013)

Rabies

There has not been a case of rabies diagnosed in a Boone County resident for over 50 years. In Boone County, the primary source of mammal infection for rabies has been in bats. Over the past five years, there has been an average of four cases of animal rabies per year in Boone County. From 2008 to 2012, 116 Boone County residents received rabies post exposure prophylaxis treatment.

Enteric Illness

Enteric illness (those which enter the body through the mouth and intestinal tract and are usually spread through contaminated food and water or by contact with vomit or feces) can be one of the most common illnesses seen in a community, and is the most common cause of outbreaks (CDC). In Boone County, Campylobacter and Salmonella were the most often reported enteric illnesses, with the number of cases of Shiga toxin-producing Escherichia coli increasing. Although a cause of illness is frequently not found, identified sources of these infections include person-to-person spread, animals, and foodborne. Enteric illness in a community is often underreported as many do not seek medical care and testing.

Vaccine-Preventable

The most common vaccine-preventable outbreaks occurring in Boone County are due to infection with pertussis or influenza. Nationally, pertussis rates have increased in the United States with many communities reporting large outbreaks. Over the past ten years, there have been two pertussis outbreaks in Boone County with several schools, day cares and employers impacted. Recently, the number of pertussis cases in Boone County has declined from the 50 cases reported in 2009 to 16 in 2012.

Varicella (chickenpox) continues to infect all ages of Boone County residents. However, changes in vaccination recommendations have impacted this, and few cases and school outbreaks of chickenpox have been seen since 2008.

Outbreaks

In Boone County, approximately 75% of outbreaks are due to an enteric illness with the majority of those due to norovirus. Highly contagious, norovirus is the most common cause of acute gastroenteritis in the United States and the source of many outbreaks, both foodborne and person-to-person. Other gastrointestinal illness, pertussis, chickenpox and influenza have also caused outbreaks in Boone County.

Influenza

Weekly aggregate numbers of influenza are reported to the local health department by local health care providers during influenza seasons, typically from October 1 to the end of May. This number is tracked, watching for trends and outbreaks. In Boone County, the severity as well as the peaks of illness varies from year to year. The highest number of influenza cases tends to be found in school-age children (5-14 years) and adults ages 25-49.

In April of 2009, H1N1, a novel influenza virus, was identified in the United States causing a pandemic. There were hundreds of cases identified in Boone County residents, with many more undiagnosed. In October 2009, a mass vaccination effort began with the Columbia/Boone County Department of Public Health and Human Services working closely with school, community and healthcare partners to vaccinate the community. Since 2009, the effort to vaccinate Boone County school-age children has continued with this partnership, and annually PHHS goes to Boone County schools to give influenza vaccine. This age group sees the highest percentage of influenza infection with the likelihood of spreading flu to high-risk family and community members.

Figure 77 shows the number of influenza cases reported in Boone County by season. These case counts reflect a trend more than an absolute case count since many ill with influenza do not seek medical care, and often those that do are not tested and confirmed. H1N1 was divided between two flu seasons, the 2008-2009 and the 2009-2010. Many diagnosed by a medical provider with H1N1 were not confirmed with a positive lab result due to the lack of available testing, and therefore, are not reflected in the case counts.

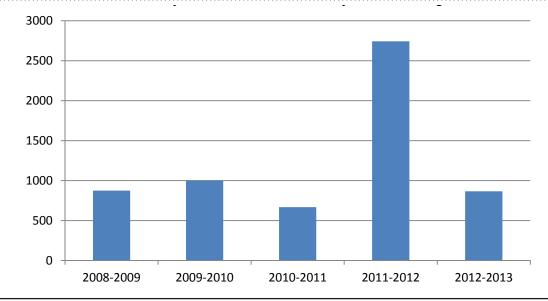
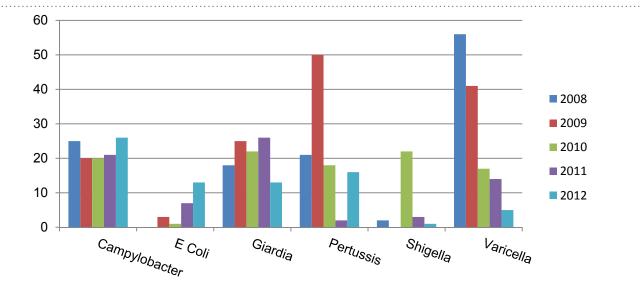


FIGURE 77: INFLUENZA CASES BY SEASON, BOONE COUNTY, 2008-2012

(Missouri Department of Health and Senior Services)

FIGURE 78: CASE COUNTS FOR SELECTED DISEASES BY YEAR, BOONE COUNTY, 2008-2012



⁽Missouri Department of Health and Senior Services)

The number of animal bites reported has remained relatively static from 2008 - 2012.

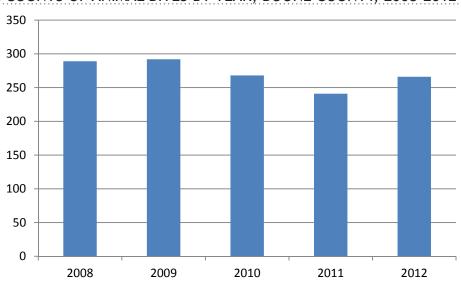


FIGURE 79: CASE COUNTS OF ANIMAL BITES BY YEAR, BOONE COUNTY, 2008-2012

(Missouri Department of Health and Senior Services)

Sexually Transmitted Diseases

In Boone County, sexually transmitted diseases (STD) remain the most common reported of all the reportable diseases and conditions. Of these diseases, Chlamydia is the most commonly reported with gonorrhea second. In 2012, there were 1,106 cases of chlamydia and 207 cases of gonorrhea reported in Boone County residents. The number of syphilis cases was less than 10.

FIGURE 80: STD BY CASE COUNT AND RATE PER 100,000, BOONE COUNTY, 2012

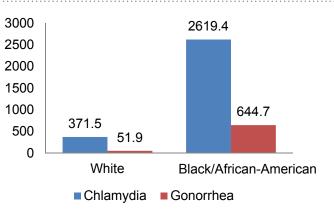
| CONDITION | CASE COUNT | CASE RATE |
|-----------|------------|---------------|
| Chlamydia | 1,106 | 667.8/100,000 |
| Gonorrhea | 207 | 125.0/100,000 |

(Missouri Department of Health and Senior Services)

Boone County has the third highest chlamydia rate among all local public health jurisdictions in Missouri and the tenth highest rate of gonorrhea.

Infections from sexually transmitted disease in Boone County are not distributed uniformly across sex, racial, and age groups. In 2012, the rate of chlamydia infections among non-Hispanic blacks was seven times the rate seen in whites and the rate of gonorrhea infection was 12 times greater in blacks than in whites.

FIGURE 81: STD RATES PER 100,000 BY RACE, BOONE COUNTY, 2012

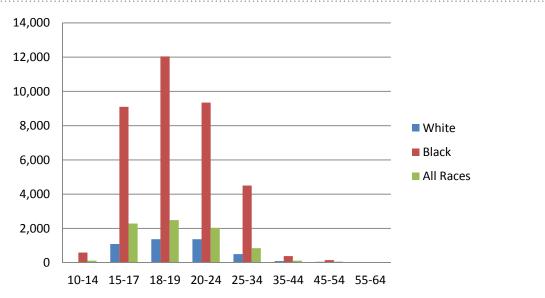


(Missouri Department of Health and Senior Services)

Both black and white females were twice as likely to be diagnosed with chlamydia as males. The most common age of diagnosis in Boone County is 18-19 years, with the case rate for blacks over eight times greater than whites.

Sexually Transmitted Diseases (continued)

FIGURE 82: STD RATES BY AGE GROUP AND RACE, BOONE COUNTY, 2012



(Missouri Department of Health and Senior Services)

Assessment Limitations

Pre-existing databases containing local, state, and national data were used for comparisons and was analyzed according to age, sex, and gender when possible. However, with some data it was difficult to compare according to these categories because of insufficient population or health data. In some categories, not all data was available at the county or local level, so state or national data was presented.

Assessment Data Dissemination

CHAMP members were presented with preliminary data findings at an August 2013 CHAMP meeting. A fact sheet summary (Appendix) was also distributed during that time and posted on the City of Columbia website, www.GoColumbiaMo.com/ Health/MAPP.php

Acknowledgements

Subcommittee Members: Cherri Baysinger (Missouri Department of Health and Senior Services), Erin Barbaro (University of Missouri Center for Applied Research and Environmental Systems), Kevin Everett (University of Missouri Department of Family & Community Medicine), Andrew Hunter (Missouri Department of Health and Senior Services), Sarah Rainey (Columbia/Boone County Public Health & Human Services), Jacqueline Schumacher (University of Missouri Institute of Public Policy), Carol Toliver (University of Missouri Health Care), Kathryn Wright (Lutheran Family & Children's Services)

Works Cited

Affordable Housing Policy Committee of 2008. (n.d.). *Affordable Housing Policy Committee Report to the City Council, Mayor and City Manager*. Columbia, Missouri.

American Community Survey. (2011). Retrieved September 16, 2013, from U.S. Census: www.factfinder2census.gov

American Community Survey. (2012). Retrieved September 19, 2013, from www.factfinder2.census.gov

American Community Survey, 2.-2. (2007-2011). *American Community Survey*. Retrieved June 13, 2013, from U.S.Census. gov: http://www.census.gov/acs/

Behavioral Health Profile. (2013). Retrieved September 27, 2013, from Missouri Department of Mental Health: www.dmh. mo.gov

Boone Hospital Center. (2013). Retrieved September 21, 2013, from www.boone.org

CDC-Overweight and Obesity. (n.d.). Retrieved September 27, 2013, from Centers for Disease Control and Prevention: www.cdc.gov/obesity/data

Centers For Disease Control and Prevention. (n.d.). Retrieved October 1, 2013, from CDC: www.cdc.gov

Chatterjee, A. (2012). Best Cities for Successful Aging. Milken Institute.

City of Columbia. (2013). Retrieved September 21, 2013, from Go Columbia Mo: www.gocolumbiamo.com

Columbia College. (2013). Retrieved September 21, 2013, from Columbia College: www.ccis.edu

Columbia Regional Economic Development Inc (REDI) (2013). Retrived March 4, 2014, from Area Live and Work Profile: www.columbiaredi.com

Community Commons. (n.d.). Retrieved September 27, 2013, from Community Commons: www.communitycommons.org

County Health Rankings and Roadmaps. (2013). Retrieved September 21, 2012, from County Health Rankings and Roadmaps, A healthier Nation, County by County: www.countyhealthrankings.org

Harry S. Truman Veterans' Memorial Hospital. (2013). Retrieved September 21, 2013, from www.columbiamo.va.gov

HRSA. (n.d.). Retrieved September 21, 2013, from Health Resources and Services Administration: www.hrsa.gov

Jacqueline Schumacher, Policy Analyst. (2012). *Boone County Issues Analysis: Economic Opportunity*. Columbia, Missouri: MU Institute of Public Policy.

Jacqueline Schumacher, Policy Analyst. (2013). *Boone County Issues Analysis, Basic Needs and Emergency Services*. Columbia, Missouri: MU Institute of Public Policy.

Landmark Hospitals. (2013). Retrieved September 21, 2013, from Landmarkhospitals.com: www.landmarkhospitals.com

MERIC. (n.d.). Retrieved September 13, 2013, from Missouri Department of Economic Development: http:// www.missourieconomy.org

Missouri Department of Elementary and Secondary Education. (n.d.). Retrieved September 17, 2013, from www.dese.mo.gov

Missouri Department of Health and Senior Services. (2013). Retrieved July 2013, from MICA: http://www.health.mo.gov

Missouri Department of Mental Health. (2012). Retrieved July 14, 2013, from Behavioral Health Profile: www.dmh.mo.gov

Missouri Highway Patrol Statistical Analysis Center. (n.d.). Retrieved October 2, 2013, from Missouri Uniform Crime Reporting Program: www.mshp.dps.missouri.gov

(n.d.). *Missouri Hunger Atlas 2013*. MU Interdisciplinary Center for Food Security.

Missouri Department of Health and Senior Services. (n.d.). Retrieved July 12, 2013, from Senior and Disability Services: www.health.mo.gov

MO Dept. of Labor. (n.d.). Retrieved from Missouri Department of Labor and Relations: http://www.labor.mo.gov

National Association of City and County Health Officials (NACCHO). (2013). MAPP User's Handbook. NACCHO.

Profile of General Population and Housing Characteristics: 2010. (n.d.). Retrieved July 25, 2013, from U.S.Census.gov.

Rusk Rehabilitation Center. (2013). Retrieved September 21, 2013, from RuskRehab.com: www.ruskrehab.com

SAHIE. (n.d.). Retrieved September 20, 2013, from Small Area Health Insurance Estimates: www.census.gov/sahie

SAIPE. (n.d.). *Small Area Income and Poverty Estimate*. Retrieved September 16, 2013, from SAIPE: www.census.gov/ saipe

Status Report on Missouri's Substance Abuse and Mental Health Problems. (2012). Retrieved September 27, 2013, from Missouri Department of Mental Health: www.dmh.mo.gov

Stephens College. (n.d.). Retrieved September 21, 2013, from www.stephens.edu

(2013). *The State of the US Health*. Seattle: Institute for Health Metrics and Evaluation.

U.S. Bureau of Labor Statistics. (n.d.). Retrieved September 16, 2013, from U.S. Bureau of Labor Statistic: www.bls.gov

U.S. Census, 2. (2010). United States Census Bureau. Retrieved July 25, 2013, from U.S.Census.gov: http://www.census.gov/

U.S. Department of Health and Human Services. (n.d.). Retrieved September 17, 2013

U.S. Department of Housing and Urban Development. (n.d.). Retrieved September 20, 2013, from Affordable Housing: www.hud.gov

U.S. Census Bureau. (n.d.). Retrieved September 3, 2013, from State and County Quick Facts: http://quickfacts.census. gov/qfd/states/29/29019.html

U.S. Census Bureau. (n.d.). Retrieved September 19, 2013, from U.S. Census Bureau.

U.S. Census, 1. (1990). *Profile of General Population and Housing Characteristics: 1990*. Retrieved September 3, 2013, from U.S.Census.gov: http://www.census.gov

U.S. Census, 2. (2000). *Profile of General Population and Housing Characteristics:2000*. Retrieved 2013, from U.S.Census. Gov: http://www.census.gov/main/www/cen2000.html

U.S. News and World Report. (n.d.). Retrieved September 21, 2013, from High School Rankings: www.usnews.com/ education/best-high-schools/national-rankings

University Of Missouri. (n.d.). Retrieved September 21, 2013, from About Mizzou: www.missouri.edu

University of Missouri Health Care. (2013). Retrieved September 21, 2013, from Muhealth.org: www.muhealth.org

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Appendices

Community Health Status Assessment Fact Sheet

COMMUNITY HEALTH STATUS ASSESSMENT

PROCESS

The Community Health Status Assessment (CHSA) subcommittee was formed to answer the question of "How healthy are our residents?" and "What does the health status of our community look like?" The group focused on the identifying and analyzing key issues from a broad set of core indicators. Due to the short time frame and the voluntary efforts of the subcommittee, data from existing sources was used when appropriate. The subcommittee was careful to only select and approve data from credible sources.

COMMUNITY CHARACTARISTICS

| Disparities in Boone County: ✓ 17.76% of children under 18 live in poverty | With a population of 162,642, Boone County is the 7th most populous county in Missouri and enjoys a fairly young population, with a median age of 29.7, compared to Missouri's 37.9. <i>Growth</i> Boone County saw a 20.07% increase in population between the 2000 census and 2010 census The 18-24 age group is the fastest-growing age group The over-65 age group saw a slight increase (0.7%) from the 2000 census to 2010 census |
|--|---|
| Racial and ethnic groups are disproportionately affected by poverty. ✓ 38.8% of AA/Black live in poverty ✓ 27.3% of Hispanic live in poverty ✓ 16.3% of White live in poverty | Aging Columbia was ranked 4th Best Small City to Age In according to the 2010 Milken Institutes' Best Cities for Successful Aging Boone County has the 4th longest life expectancy in Missouri Boone County seniors, age 65-69, tend to be more active in the labor force than those of the same age in Missouri and the U.S. In 2010, approximately 2,428 (16%) of Boone County seniors (65 and over) relied on friends, family or public transit for their transportation needs |
| • 10.5% of white five in poverty | Diversity Boone County (2010 Census) 82.5% White 8.9% AA/Black 8.6% Other races 79% of Columbia's population is White Other Boone County communities range from 91.2-96.8% White 6.1% in Boone County are foreign born compared to the Missouri rate of 3.8% 3% of the population are Hispanic 2.1% of the Boone County residents are linguistically isolated, meaning no one over the age of 14 within the household speak English. (Missouri rate 1.33% and U.S. rate is 5%) |



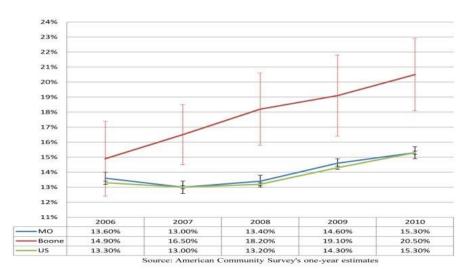
COMMUNITY CHARACTARISTICS (continued)

Disparities in Boone County:

- ✓ 9.5% of families live in poverty
- ✓ 35.6% of Boone County children are eligible for free/reduced lunch
- ✓ Between 2006-2010, Median household income for Blackonly families is almost 53% less than White-only families
- ✓ 53.5% of renters in Boone County are cost burdened
- ✓ 13.6% of homeowners with mortgages are cost burdened
- ✓ Median annual housing costs have risen 12.2% in Boone County from 2005-2011
- ✓ The number of individuals on the waiting list for Section 8 Public Housing increased 21.5% from 2010 to 2012
- ✓ The number of WIC participants increased almost 10% between 2008 and 2010

Poverty

- The poverty rate for Boone County in 2010 was 20.5% (American Community Survey 1 year estimate)
- The poverty trend line for Boone County sits well above the almost identical U.S. and Missouri poverty rates



Income/Poverty

While the median income in Boone County is slightly above the Missouri median income, it remains below the U.S. median income.

- 2011 median household income in Boone County was \$46,596
- White-only median household income \$49,856/year between 2006 and 2010
- Black-only median household income \$26,402/year between 2006 and 2010
- 12.8% of Boone County residents receive SNAP benefits, which is lower than both Missouri and U.S.

Housing

- Boone County housing costs have risen 12.2 % from 2005-2011, but remain lower than average compared to Missouri and the U.S.
- Boone County consistently has more cost burdened renters (those who spend 30% or more of their income on renting costs) than the state or the nation. This may be explained by the student sub-population along with the increase in the poverty level and unemployment rates

Homeless

- Homeless counts between July 2008 and July 2012 revealed 48% more homeless individuals in Boone County, compared to the state increase of 22%
- The largest sub-populations of homeless in Boone County are Veterans and the severely mentally ill



COMMUNITY CHARACTARISTICS (continued)

Disparities in Boone County:

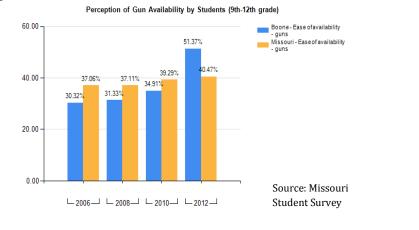
- ✓ From 2005 to 2010, the unemployment rate in Boone County nearly doubled, reflecting the nationwide impact of the Recession, but have recently decreased
- ✓ While unemployment numbers are improving, they still represent a strong demand for the county's social services
- ✓ Although unemployment statistics on gender, age and ethnicity are not collected at the county level, Black/African Americans, Latinos, and youth and adults with less than a high school diploma were more likely to be unemployed in 2011
- ✓ A Hispanic or AA/Black is 3 times more likely to not have graduated from high school compared to a white individual
- ✓ From 2006 to 2012, 338 individuals have been turned away from True North, the Domestic Violence Shelter, due to lack of overnight beds
- ✓ In 2010, True North turned away 202 women and children due to full shelter

Employment and Education

- April 2013 unemployment rates:
- o Columbia 4.2%
- Boone County 4.4%
- Missouri 6.6%
- The overall graduation rate in 2012 for Boone County schools was 91.5%. This is above the Missouri 2012 rate of 88.2%
 - o Centralia 95.3%
 - o Harrisburg 94.7%
 - o Sturgeon 93.5%
 - o Southern Boone 90.4%
 - Hallsville 88.8%
 - o Columbia 86.5%
 - o Missouri 88.2%
- 52% of Boone County residents 25 years and older have an Associate's Degree or higher (Mo rate 32%, U.S. Rate 36%)
- 7.61% of the population age 25+ have no high school diploma

Quality of Life

- According to the FBI's Uniform Crime Report (UCR),Boone County has traditionally had low crime rates, especially for violent crimes
- Between 2005 and 2011 the number of domestic violence incidents rose from 95.2 to 103.96 per 10,000
- Since 2001, there have been no domestic violence related fatalities in Boone County
- Of the reported domestic violence incidences reported, the victims are usually female, White, and between 18-40 years old
- Since 2006, there have been 25 shelter beds at the True North Domestic Violence Shelter, the primary shelter for this county
- True North serves multiple counties
- Between 2006 and 2012, high schooler's perception of gun access as "easy" or "somewhat easy to obtain" increased by 21.05% in Boone County. Missouri saw just a 3.41% increase during this same time period





COMMUNITY HEALTHCARE AND RESOURCES

| Di | sparities in Boone County: | Boone County is rich in health care resources, including the number of hospitals and providers. This provides many jobs and contributes to the |
|----|---|---|
| ✓ | Low income population in Boone county are classified by | lower unemployment rate for the county. |
| | HRSA (Health Resources and | Hospitals |
| | Services Administration) in July 2013 as having a shortage of | Boone County is home to 5 hospitals with 1100 acute care beds and 226 intensive care beds |
| | access to health professionals | • The medical and hospital services in Boone County are utilized by the entire Mid-Missouri population |
| ~ | While Boone County has a high rate of providers per population, it is unknown how | Boone County is home to the only Level 1 trauma center in Mid- Missouri, and a technologically advanced Newborn ICU |
| | many accept MO HealthNet | Resources |
| | | • Boone County is home to multiple clinics, providers, one Federal |
| ~ | 14% of residents in Boone County are uninsured | Qualified Health Center, and one volunteer clinic serving only indigent population |
| ~ | Very few clinics offer a no-fee | • There are 172 primary care providers in Boone County. |
| | or reduced fee health service, | The ratio of population to providers is 949:1 The Missouri ratio is 1495:1 |
| | making it difficult for those | The Missouri ratio is 1495:1 While several providers accept MO HealthNet, the overall |
| | without any insurance or resources to access health care | participation may be inadequate to meet growing demand |
| | | Health Insurance Coverage |
| ~ | Only 7 of the 21 LTC/ALF facilities in Boone County have | • Residents of Boone County are slightly more likely to have health insurance than Missouri residents |
| | Alzheimer's Units | In 2013, there were 19,518 Boone County residents eligible for MO HealthNet |
| | | • The largest percentage of eligible residents was in the 5-14 age group |
| | | Long-Term Care (LTC) & Assisted Living Facilities (ALF) |
| | | Boone County has 21 LTC and ALF facilities with a total of 1493 beds LTC & ALF occupancy rates are relatively high |



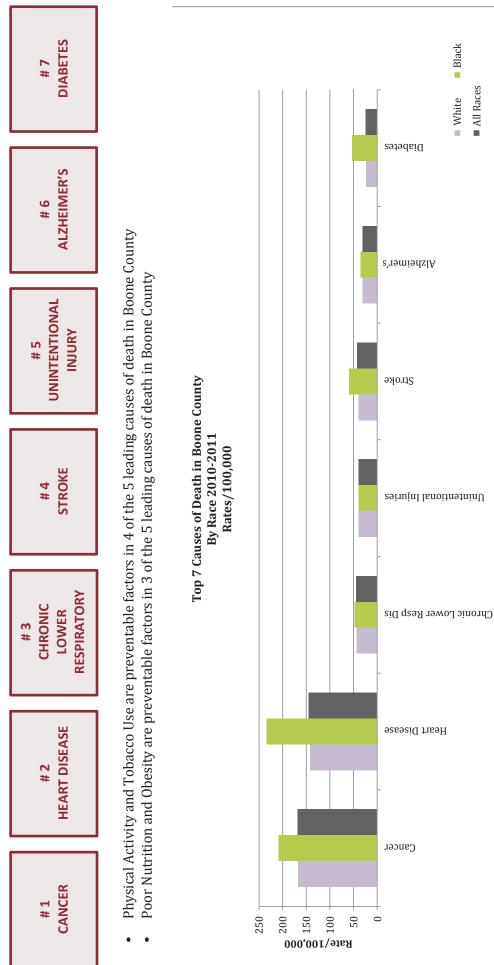
COMMUNICABLE DISEASE

| Disparities in Boone County: | Although communicable disease rates, for the most part, are similar to or | | |
|---|---|--|--|
| ✓ Boone County ranks 3 rd in Missouri for Chlamydia rates | lower than state and national rates, they remain a significant cause of illness and disability. In some cases, as with tuberculosis, a single case may represent many hours of investigation and case management. | | |
| Boone County ranks 10th in Missouri for Gonorrhea rates Chlamudia rates for AA (Plack | <i>Tuberculosis (TB)</i> Approximately 75% of TB cases reported in Boone County between 2008 and 2012 have been individuals born in another country | | |
| Chlamydia rates for AA/Black residents are at least seven times higher than for White residents | • The TB incidence rate has remained relatively stable for the last several years, with some years slightly above the state rate, and others slightly below | | |
| | Sexually Transmitted Diseases | | |
| ✓ In Boone County, the chlamydia | • In 2012, there were 1106 cases of Chlamydia and 207 cases of | | |
| rate for a female is twice as | Gonorrhea reported in Boone County | | |
| high as for a male | Based on 2011 Boone County population estimates, this means | | |
| | 667.8/100,000 have been diagnosed with Chlamydia and | | |
| | 125.0/100,000 with Gonorrhea | | |
| | • By gender: | | |
| | o Chlamydia – | | |
| | 750 female cases reported | | |
| | 356 male cases reported | | |
| | o Gonorrhea – | | |
| | 127 female cases reported | | |
| | 80 male cases reported | | |

Page **6** of **9**

CAUSES OF DEATH AND CHRONIC DISEASE

The Leading Causes of Death in the Boone County: All Races, Rate per 100,000 (2010, 2011)



*Chronic Lower Respiratory Disease refers to a group of diseases that cause breathing-related problems and airflow blockage that is not fully reversible. It includes emphysema, chronic bronchitis, and in some cases asthma.

Black

 All Races White



Page **7** of **9**

CAUSES OF DEATH AND CHRONIC DISEASE (continued)

| Disparities in Boone County: | Risk Factors for Premature Death and Chronic Disease in Boone County |
|--|---|
| The death rate for AA/Blacks is almost twice as high as Whites for heart disease and stroke, and even greater for diabetes | 21% report no leisure time physical activity 28% obesity 20.7% of adults smoke 27.7% have high blood pressure 45.1% of adults > 35 have elevated cholesterol |
| ✓ 2011 Years of Life Lost ○ White = 5035 ○ AA/Black = 8704 | 7.5% diagnosed with diabetes 86.8% eat less than 5 fruits and vegetables a day |

NUTRITION, FOOD AND PHYSICAL ACTIVITY

| ✓ In Boone County in 2011, 4.35% of total household expenditures were for fruit/vegetable consumption versus 5.22% for soda consumption | Diet and Exercise barriers may increase risk for diabetes, high blood pressure and elevated cholesterol. Food and Nutrition 12.3% of households were food uncertain in 2010 19.1% of households with children were food uncertain in 2010 4.6% of food uncertain with hunger in 2010 77.6% have inadequate fruit/vegetable consumption (2005-2009 BRFSS) Boone County hosts at least 5 Farmer's Markets SNAP benefits are doubled at one of Columbia Farmer's Market In 2011, 81.5% strongly agree or agree that it is easy to purchase healthy food in their neighborhood 12% report being low income and not living close to a grocery store 110 children are fed daily during the summer at Douglass Park with the Lunch In The Park program |
|---|---|
| | <i>Physical Activity</i> 58.1% of Boone County residents use walking trails and parks 59.1% have sidewalks in their neighborhood 81.9% consider their neighborhood to be safe With Columbia's 3040 city-owned acres of parks and green space and 50.03 miles of trails, the ratio of developed open space/1000 is above The National Park Association's recommendation |



MATERNAL AND CHILD HEALTH

| Disparities in Boone County: | Babies born weighing less than 5 pounds, 8 ounces are considered low birth weight (LBW). Babies considered very low birth rate (VLBW) are |
|---|--|
| ✓ The AA/Black low birth rate for Boone County, 2009-2010, is over double the White rate (14.0 versus 6.8) | born weighing less than 3 pounds, 4 ounces. Both LBW and VLBW pose serious health risks to newborns and can lead to long-term disabilities. The health care costs for these children are high. |
| | Low Birth Weight and Very Low Birth Weight in Boone County: |
| ✓ For 2008-2010, the AA/Black very low birth rate of 2.7 per | • The low birth rate for Boone County in 2008-2010 is 8.1 per 100 live births |
| 100 live births is over double the White rate of 1.2 | The 2008-2010 Boone County rate of very low birth weight is 1.4 per 100 live births |
| ✓ More Whites than AA/Blacks | Teenage Pregnancy and Births |
| receive prenatal care in the first trimester in Boone County | 2.29% of all live births in Boone County are born to moms between the ages of 10-17, which is below the Missouri rate of 3.26% |
| ✓ Infant mortality rates for | Maternal/Child Health |
| whites are below the Missouri rate, but the rates for black infants are above the Missouri | • In Boone County, 70.8% of WIC mothers initiate breastfeeding and 20% of those mothers are still breastfeeding at 6 months compared to 63.5% and 14.7% respectively for Missouri |
| rate | • 93.4% of pregnant women enrolled in WIC in Boone County seek prenatal care in the first trimester of pregnancy |

DISABILITIES

| ✓ Between 2008 & 2010, people with a disability in Boone County make an average of 37% less than those without a disability ✓ Between 2005 & 2010, 26% of Boone County residents aged 18-64, who were disabled, lived in poverty versus 13% of disabled seniors (≥65+) |
|---|
|---|



BEHAVIORIAL HEALTH AND SUBSTANCE ABUSE

| Rates for self-inflicted injuries are 3 times higher for whites than blacks in 2011 Alcohol usage and binge drinking reported in 2012 for 6-12th graders in Boone County is higher than the Missouri average | Both the number of hospital discharges and days of care for mental disorders has almost doubled from 2007-2011 One quarter of all Boone County hospitalizations with mental health diagnoses are attributed to alcohol and substance abuse Half of all Boone County admissions to treatment report alcohol as the primary substance of abuse In 2011, Boone County residents had a total of 315 alcohol and 253 drug related hospitalizations In 2011, there were 601 alcohol related and 494 drug related ER visits that did not include a hospital stay 21.3% of 6-12 graders in Boone County report having used alcohol for 30 days or more 10.8 % report binge drinking 7.1% report marijuana usage 10.6% report cigarette use 54.7% of those over 18 report alcohol usage and 26.8% report binge drinking In 2011, there were over 235 retail outlets with "on premise" drink licenses, and 110 alcohol "package carry out" licenses |
|--|---|
|--|---|

ACKNOWLEDGEMENTS

Subcommittee Members: Erin Barbaro- Center for Applied Research and Environmental Systems, Cherri Baysinger- Missouri Department of Health and Senior Services, Kevin Everett- University of Missouri Department of Family Medicine, Andrew Hunter- Missouri Department of Health and Senior Services, Sarah Rainey-Columbia/Boone County Department of Public Health and Human Services, Jacqueline Schumacker- University of Missouri Institute of Public Policy, Carol Toliver- University of Missouri Healthcare, Kathryn Wright- Lutheran Family and Children's Services





Community Themes and Strengths Assessment

Boone County, Missouri

Prepared August 2013 by: Rebecca Roesslet, MPH, Senior Planner Columbia/Boone County Department of Public Health and Human Services 1005 West Worley, Columbia, MO 65203 T: 573-874-7355 E: health@GoColumbiaMO.com



Columbia/Boone County Public Health & Human Services This page intentionally left blank.

Executive Summary

The Community Themes and Strengths Assessment (CTSA) is one of four assessments in Phase Three of the MAPP Process. The CTSA focused on gathering the thoughts, opinions, and perceptions of the community members in order to understand which issues are important to the community.

The CTSA was conducted between May 2013 and July 2013 by a diverse group of community public health stakeholders. These stakeholders formed as a subcommittee of the larger CHAMP group. CHAMP, which stands for Community Health Assessment Mobilization Partnership, consists of leaders from throughout the local public health system who shared their knowledge and expertise to guide the creation of county-wide health priorities and goals. The CTSA used two methods of data collection to gather community input: community survey and focus groups. A community survey was distributed from June 1 to June 30 with 1,653 surveys completed. Subcommittee members facilitated eight focus groups, which were held between June 24th and July 17th. A total of 72 Boone county residents participated in focus groups. Upon completion of data collection, a presentation of preliminary results were provided to members of CHAMP, along with a summary page of initial results. The subcommittee process was evaluated with an online survey. Preliminary results were also shared with focus group participants.



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Community Health Survey

Surveys are a traditional approach to gathering community input. They are a useful method for reaching large numbers of people and capturing measurable data. The survey methodology has some limitations. Surveys do not allow for in-depth feedback on issues and hard-to-reach populations often do not respond. Survey formats can include written, telephone, or in-person. For the purposes of this assessment, the community health survey was available in written format, both electronically and on paper.

Process

The Community Themes and Strengths subcommittee reviewed community health surveys from other communities and drafted a five question survey tailored for residents of Boone County. The survey was administered to 5-10 individuals for pretest purposes and adjustments were made based upon feedback provided. The survey questions were as follows:

- What do you think are the **five** most important factors for a "Healthy Community?" (i.e. Those factors which most improve the quality of life in a community.)
- 2. Among adults, which five health conditions or behaviors have the greatest impact on overall community health?
- **3.** Among youth (age 0-18), which five health conditions or behaviors have the greatest impact on overall community health?
- 4. How satisfied are you with the health of Boone County adults?
- 5. How satisfied are you with the health of Boone County Youth (age 0-18)?

Eight optional demographic questions were also asked: zip code, age, gender, ethnic group, marital status, education, household income, and health care coverage.

A copy of the survey is included in the Appendix.

The Boone County Community Health Survey was distributed in June 2013. Paper copies were made available to community partners for distribution. The survey was available electronically on SurveyMonkey.com. Community partners shared the electronic survey link with their email contact lists and constituents. Key community locations were provided paper surveys and collection envelopes in an effort to expand survey distribution. A gift card drawing was used as an incentive for survey participants. Two survey

SURVEY FOR BOONE COUNTY RESIDENTS

FOR A NOMINAL FEE, THE ELECTRONIC SURVEY WAS INCLUDED IN A MASS EMAIL SENT TO UNIVERSITY OF MISSOURI CAMPUS EMPLOYEES AND STUDENTS. THIS MASS EMAIL REACHED OVER 10,000 POTENTIAL RESPONDENTS:

Share your opinion about community health issues in Boone County by taking less than five minutes to complete our survey here: https://www.surveymonkey.com/s/CPW8K6N

You will have the chance to win a \$25 Wal-Mart gift card. The Boone County Community Health Assessment Mobilization Partnership (CHAMP) wants to know your opinion about community health issues and will use the results of this survey and other information to identify the most pressing issues facing our community which can be addressed through community action.

If you have questions or would like more information about this community project, please contact Rebecca Roesslet at Columbia/Boone County Public Health & Human Services (<u>champ@</u><u>gocolumbiamo.com</u>) Thank you!

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participants received one gift card, \$25 in value. Paper surveys included a removable piece of paper for capturing name, phone number, address, and email address. This information was completed by those who wished to be included in the gift card drawing.

The survey was widely distributed for a 30-day period. Participants who, based on their zip code, were not a Boone County resident were discarded prior to survey analysis. After out-of-county surveys were removed, 1,653 surveys remained.

Overall Survey Results

QUESTION 1: THE TOP FIVE MOST IMPORTANT FACTORS FOR A HEALTHY COMMUNITY:

| LOW CRIME/SAFE NEIGHBORHOODS | 70.5% |
|---------------------------------|-------|
| ACCESS TO HEALTH CARE | 66.7% |
| GOOD SCHOOLS | 60.3% |
| GOOD JOBS/HEALTHY ECONOMY | 60.3% |
| SAFE AND AFFORDABLE HOUSING | 39.9% |
| | |

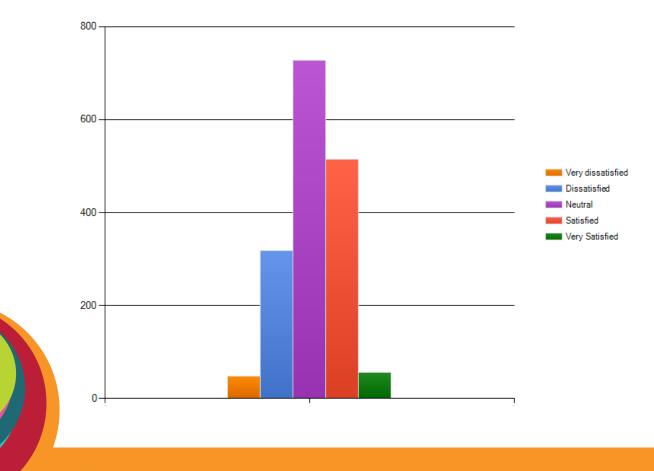
QUESTION 2: AMONG ADULTS, WHICH FIVE HEALTH CONDITIONS OR BEHAVIORS HAVE THE GREATEST IMPACT ON OVERALL COMMUNITY HEALTH? THE TOP FIVE RESPONSES WERE:

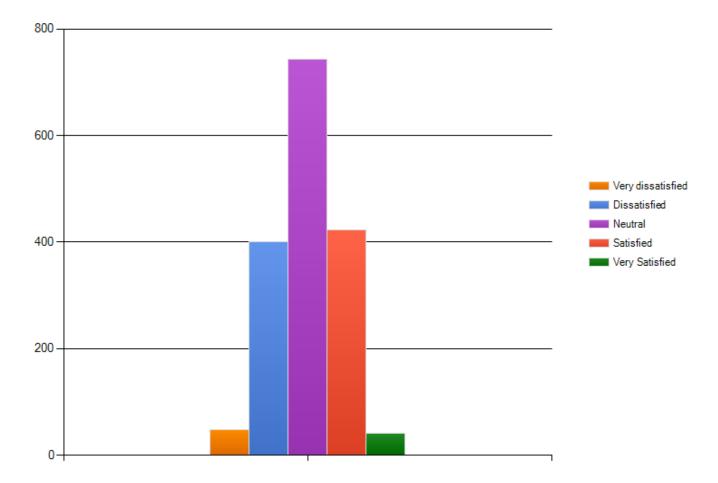
| OBESITY | 43.6% |
|---------------------|-------|
| DRUG ABUSE | 42.4% |
| MENTAL HEALTH | 42.4% |
| ALCOHOL ABUSE | 36.1% |
| POOR EATING HABITS/ | 29.6% |
| CHOICES | 29.0% |

QUESTION 3: AMONG YOUTH (AGE 0-18 YEARS), WHICH FIVE HEALTH CONDITIONS OR BEHAVIORS HAVE THE GREATEST IMPACT ON OVERALL COMMUNITY HEALTH? THE TOP FIVE RESPONSES WERE:

| DRUG ABUSE | 39.6% |
|-----------------|--------|
| BULLYING | 36.3% |
| DROPPING OUT OF | 25 204 |
| SCHOOL | 35.0% |
| OBESITY | 35.0% |
| MENTAL HEALTH | 34.4% |
| | |

QUESTION 4: HOW SATISFIED ARE YOU WITH THE HEALTH OF BOONE COUNTY ADULTS?



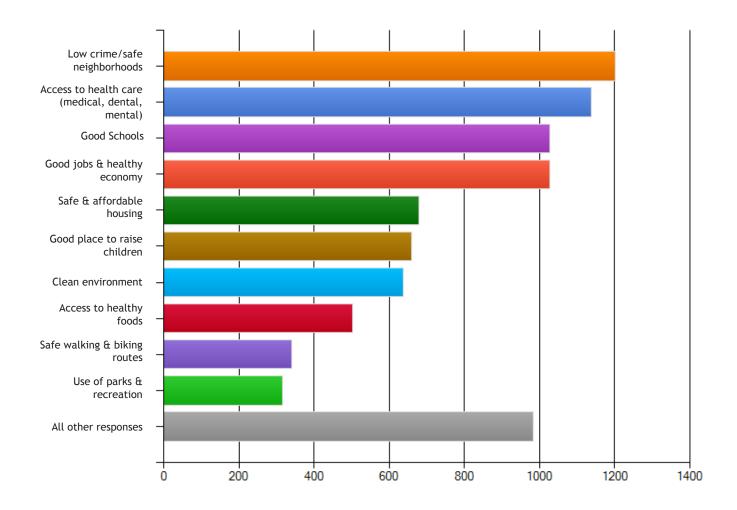


QUESTION 5: HOW SATISFIED ARE YOU WITH THE HEALTH OF BOONE COUNTY YOUTH (AGE 0-18)?

. . . .

Comprehensive Results for Questions 1-3

QUESTION 1: WHAT DO YOU THINK ARE THE FIVE MOST IMPORTANT FACTORS FOR A "HEALTHY COMMUNITY?" THOSE FACTORS WHICH MOST IMPROVE THE QUALITY OF LIFE IN A COMMUNITY. (CHECK FIVE)

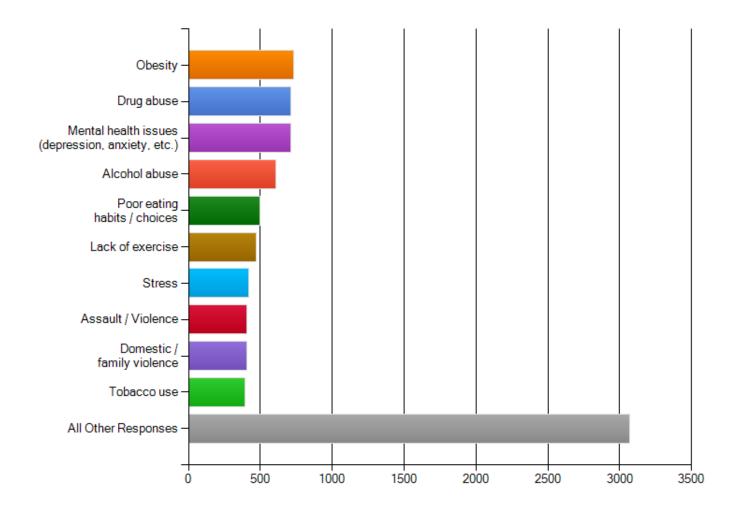




| ANSWER OPTIONS | RESPONSE PERCENT | RESPONSE COUNT |
|---|-------------------|-----------------------|
| Good place to raise children | 38.7% | 660 |
| Low crime/safe neighborhoods | 70.5% | 1201 |
| Low level of child abuse | 10.2% | 173 |
| Good schools | 60.3% | 1028 |
| Access to health care (e.g., medical, mental, dental) | 66.7% | 1137 |
| Use of parks and recreation | 18.6% | 317 |
| Clean environment | 37.4% | 637 |
| Safe and affordable housing | 39.9% | 680 |
| Community and cultural events | 10.4% | 177 |
| Excellent race relations | 7.5% | 128 |
| Good jobs and healthy economy | 60.3% | 1027 |
| Public transportation | 12.8% | 218 |
| Access to healthy foods | 29.5% | 503 |
| Religious or spiritual values | 14.6% | 249 |
| Safe walking and biking routes | 20.0% | 341 |
| Other | 2.2% | 37 |
| Other (please specify) | 2.8% | 48 |
| | answered question | 1704 |
| | skipped question | 1 |

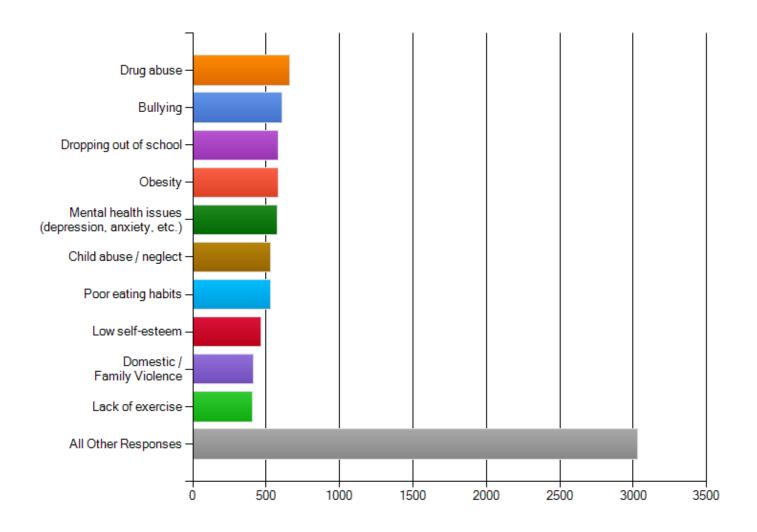
* The top five choices are noted in bold

QUESTION 2: AMONG **ADULTS**, WHICH **FIVE** HEALTH CONDITIONS OR BEHAVIORS HAVE THE GREATEST IMPACT ON OVERALL COMMUNITY HEALTH? (CHECK FIVE)



| ANSWER OPTIONS | RESPONSE PERCENT | RESPONSE COUNT |
|---|-------------------|----------------|
| Arthritis | 1.9% | 32 |
| Hearing and visioning impairments or loss | 2.1% | 36 |
| Cancers | 21.0% | 353 |
| Dental problems | 7.2% | 122 |
| Diabetes | 20.3% | 341 |
| Heart disease and stroke | 19.5% | 328 |
| High blood pressure | 10.8% | 181 |
| Lung disease (COPD, emphysema) | 2.3% | 39 |
| Mental health issues (depression, anxiety, etc.) | 42.2% | 710 |
| Stress | 25.0% | 420 |
| Obesity | 43.6% | 734 |
| Self-harm (cutting) | 0.8% | 14 |
| Anorexia/Bulimia | 0.4% | 7 |
| Alcohol abuse | 36.1% | 607 |
| Drug abuse | 42.4% | 713 |
| Sexually Transmitted Disease (STDs) | 9.0% | 151 |
| HIV/AIDS | 3.9% | 65 |
| Suicide | 3.7% | 63 |
| Homicide | 13.0% | 218 |
| Assault/violence | 24.2% | 408 |
| Domestic/family violence | 23.9% | 403 |
| Adult abuse/neglect | 3.8% | 64 |
| Rape/sexual assault | 12.4% | 208 |
| Senior falls (falling at home) | 1.7% | 28 |
| Worksite injuries | 1.1% | 18 |
| Motor vehicle crash injuries (including motorcycles and ATVs) | 6.6% | 111 |
| Lack of exercise | 27.9% | 470 |
| Poor eating habits/choices | 29.6% | 498 |
| Homelessness | 15.3% | 257 |
| Regular check-ups and shots/vaccinations | 10.6% | 178 |
| Racism/discrimination | 11.3% | 191 |
| Tobacco use | 23.5% | 395 |
| Not using seat belts | 2.4% | 41 |
| Other | 1.5% | 26 |
| Other (please specify) | 1.8% | 30 |
| | answered question | 1683 |
| | skipped question | 22 |

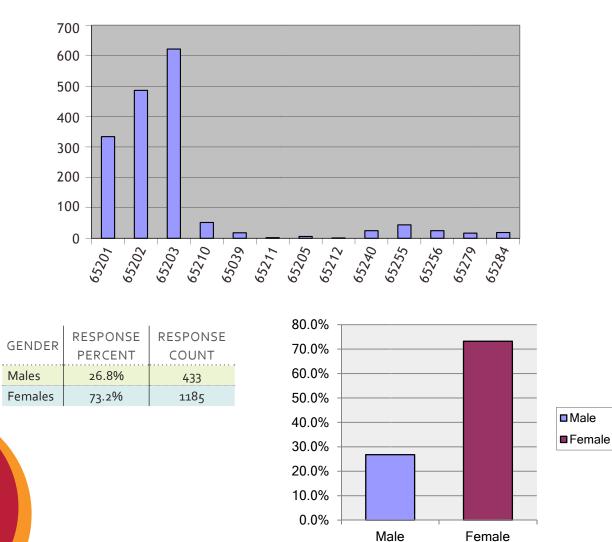
QUESTION 3: AMONG YOUTH (AGE 0-18), WHICH FIVE HEALTH CONDITIONS OR BEHAVIORS HAVE THE GREATEST IMPACT ON OVERALL COMMUNITY HEALTH? (CHECK FIVE)



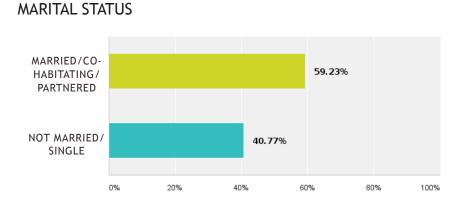
| ANSWER OPTIONS | RESPONSE PERCENT | RESPONSE COUN |
|---|-------------------|---------------|
| Cancers | 2.8% | 46 |
| Dental problems | 6.1% | 102 |
| Diabetes | 4.0% | 67 |
| Asthma | 5.0% | 83 |
| Obesity | 35.0% | 583 |
| Mental health issues (depression, anxiety, etc.) | 34.4% | 573 |
| Autism | 4.2% | 70 |
| ADD/ADHD | 7.7% | 128 |
| Stress | 11.2% | 187 |
| Low self-esteem | 27.9% | 465 |
| Alcohol abuse | 23.5% | 392 |
| Self-harm (cutting) | 4.0% | 67 |
| Anorexia/Bulimia | 3.8% | 64 |
| Drug abuse | 39.6% | 660 |
| Sexually Transmitted Diseases (STDs) | 13.6% | 226 |
| HIV/AIDS | 3.4% | 56 |
| Suicide | 9.8% | 163 |
| Homicide | 3.5% | 59 |
| Assault/violence | 12.2% | 204 |
| Domestic/family violence | 24.9% | 415 |
| Child abuse/neglect | 31.7% | 529 |
| Rape/sexual assault | 9.0% | 150 |
| Fighting | 7.4% | 124 |
| Bullying | 36.3% | 605 |
| Dropping out of school | 35.0% | 584 |
| Motor vehicle crash injuries (including motorcycles and ATVs) | 7.1% | 118 |
| Lack of exercise | 24.4% | 407 |
| Poor eating habits | 31.7% | 529 |
| Homelessness | 7.0% | 117 |
| Regular check-ups and shots/vaccinations | 11.2% | 186 |
| Racism/discrimination | 6.1% | 102 |
| Tobacco use | 12.0% | 200 |
| Not using seat belts/child safety seats | 4.9% | 82 |
| Other | 2.2% | 37 |
| Other (please specify) | 2.5% | 41 |
| | answered question | 1667 |

Demographic Analysis of Survey Participants

The majority of the survey respondents were: residents of the 65203 zip code, females, married/cohabitating/partnered, aged 26-39, white/Caucasian, college degree or higher, and privately insured with a household income between \$30,000 and \$59,999. Our survey sample is a representative sample for Boone County based on ethnicity. We are below our county demographics in male, youth and senior respondents. According to 2011 U.S. Census data, the average household income in Boone County was \$46,769. We are unable to compare the income data from survey respondents to County level data for reasons stated in the Discussion section of this report. Some demographic information is incomplete due to respondents exiting the survey before answering all demographic questions, which can explain the discrepancies between the response totals listed in the Process section and those represented in the tables and graphs. The final tally of responses noted in the Process section, was ultimately impacted by those who exited the survey before answering all questions, as well as those who skipped questions.

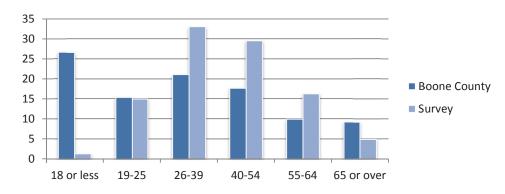


NUMBER OF PARTICIPANTS BY ZIP CODE

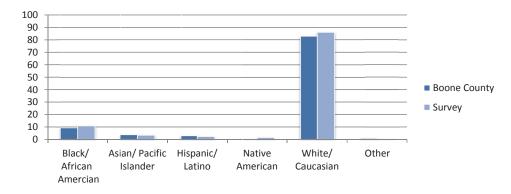


| | RESPONSE | RESPONSE |
|----------------|----------|----------|
| | PERCENT | COUNT |
| Married/ | | |
| Co-Habitating/ | 59.2% | 972 |
| Partnered | | |
| Not married/ | (o 904 | 66.0 |
| Single | 40.8% | 009 |
| | | |

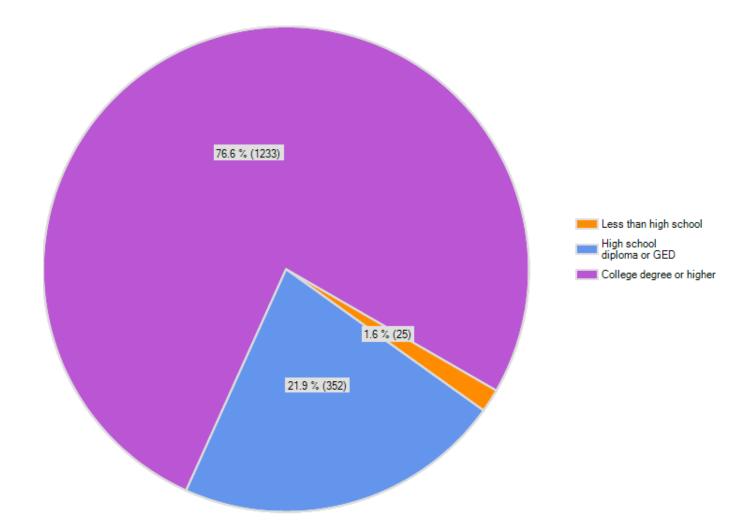
AGE: SURVEY VS BOONE COUNTY (%)



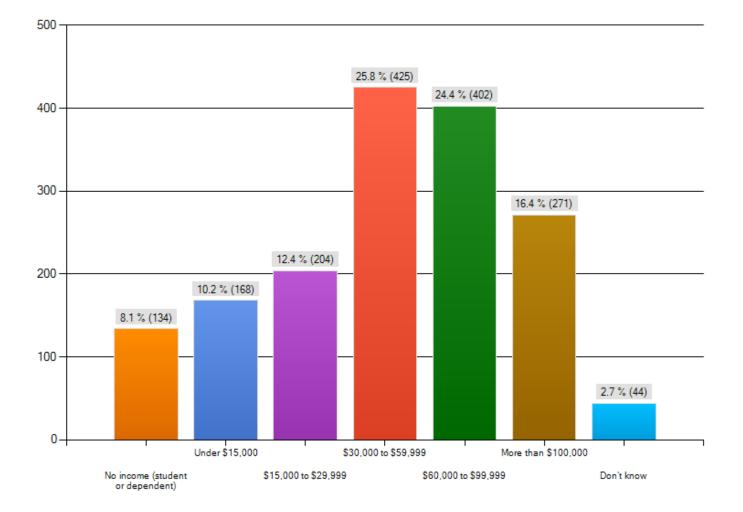
ETHNICITIES: SURVEY VS BOONE COUNTY (%)

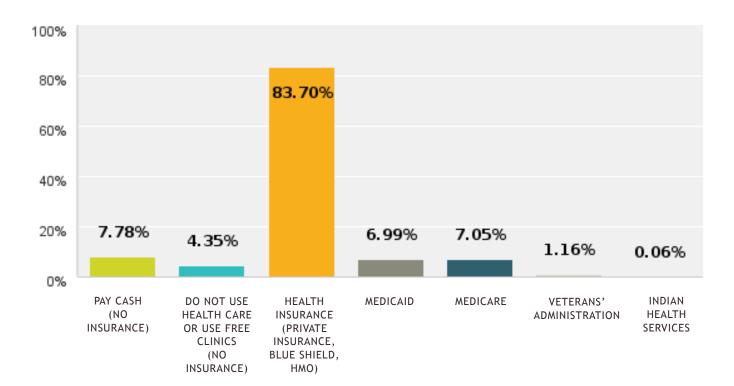


EDUCATION



HOUSEHOLD INCOME





HOW DO YOU PAY FOR HEALTH CARE? (CHECK ALL THAT APPLY)

DEMOGRAPHIC PRIORITIES

Survey question #1, "What do you think are the five most important factors for a 'Healthy Community'?" was further analyzed by the demographic categories of age, income, education level, gender, and ethnicity. Overall, there were more similarities than differences among different populations.

Priorities by age group had some differing answers. Responders aged 18 and under and between 26-39 listed "good place to raise children" as a priority. Those aged 25 and under prioritized a clean environment. Respondents aged 40 and older valued safe and affordable housing. All age categories were in agreement with low crime/safe neighborhoods, good schools, and good jobs/healthy economy as important factors for a healthy community. Males and females were in agreement on four of the five categories. They diverged on the issue of clean environment for males and safe and affordable housing for females.

Some minor differences among ethnic groups exist. The majority group, White/Caucasian, were the only ethnicity which had safe and affordable housing in their top five choices. A clean environment was within the top five choices for Asian/Pacific Islander, Native American, and Other. Black/African-American, Asian/ Pacific Islander, and Hispanic/Latino respondents listed "good place to raise children" as an important

factor. Participants were able to self-identify with multiple ethnic categories, as well as leave the ethnicity question blank, which may have an impact when analyzing data by ethnicity.

There is only one difference when looking at the five most important factors by respondent education level. Those with the highest level of education (the highest respondents category) listed "safe and affordable housing" whereas the remaining respondents listed "good place to raise children."

There were seven options for income level on the survey. The top five choices were largely consistent among all income levels with a few exceptions. Those without income and unknown income chose a "clean environment" over "safe and affordable housing." Those with income at both extremes, under \$15,000 and over \$100,000, placed emphasis on a "good place to raise children" over "safe and affordable housing."

| MOST FREQUE | NT PRIORITIE | S BY GENDER | | |
|---|--------------|-------------|------------------------------|----------------------------|
| ANSWER OPTIONS | MALE | FEMALE | TOTAL RESPONSE PERCENT | TOTAL RESPONSE COUNT |
| Good place to raise children | 163 | 465 | 38.8% | 628 |
| Low crime/safe neighborhoods | 309 | 833 | 70.6% | 1142 |
| Low level of child abuse | 29 | 127 | 9.6% | 156 |
| Good schools | 291 | 694 | 60.9% | 985 |
| Access to health care (e.g., medical, mental, dental) | 257 | 825 | 66.9% | 1082 |
| Use of parks and recreation | 94 | 206 | 18.5% | 300 |
| Clean environment | 169 | 435 | 37.3% | 604 |
| Safe and affordable housing | 150 | 495 | 39.9% | 645 |
| Community and cultural events | 44 | 128 | 10.6% | 172 |
| Excellent race relations | 38 | 82 | 7.4% | 120 |
| Good jobs and healthy economy | 280 | 702 | 60.7% | 982 |
| Public transportation | 48 | 158 | 12.7% | 206 |
| Access to healthy foods | 98 | 381 | 29.6% | 479 |
| Religious or spiritual values | 77 | 159 | 14.6% | 236 |
| Safe walking and biking routes | 90 | 230 | 19.8% | 320 |
| Other | 14 | 21 | 2.2% | 35 |
| TOTAL | 433 | 1185 | | |
| | | ar | nswered question | 1618 |

skipped question

| | | TOP FIVE P | RIORITIES B | Υ ΕΤΗΝΙΟΙΤΥ | , | | |
|------------------------------|---------------------------------|--------------------------------|----------------------|--------------------|----------------------|--------|--------------------|
| | AFRICAN- AMERICAN / BLACK | ASIAN / PACIFIC ISLANDER | HISPANIC / LATINO | NATIVE AMERICAN | WHITE / CAUCASIAN | OTHER | TOTAL RESPONSES |
| Access to health care (e.g., | 63.69% | 64.29% | 67.50% | 38.46% | 67.35% | 65.22% | 13% |
| medical, mental, dental) | 114 | 36 | 27 | 10 | 953 | 15 | 1114 |
| Access to healthy foods | 21.23% | 23.21% | 32.50% | 30.77% | 30.39% | 21.74% | 6% |
| | 38 | 13 | 13 | 8 | 430 | 5 | 491 |
| Clean environment | 30.17% | 50.00% | 37.50% | 46.15% | 37.74% | 39.13% | 7% |
| | 54 | 28 | 15 | 12 | 534 | 9 | 623 |
| Community and cul- | 6.70% | 3.57% | 20.00% | 11.54% | 10.95% | 8.70% | 2% |
| tural events | 12 | 2 | 8 | 3 | 83 | 6 | 128 |
| Excellent race relations | 18.44% | 12.50% | 17.50% | 11.54% | 5.87% | 26.09% | 2% |
| | 33 | 7 | 7 | 3 | 83 | 6 | 128 |
| Good jobs and healthy | 57.54% | 46.43% | 50.00% | 46.15% | 61.48% | 56.52% | 12% |
| economy | 103 | 26 | 20 | 12 | 870 | 13 | 1009 |
| Good place to raise | 53.07% | 46.43% | 45.00% | 30.77% | 36.82% | 34.78% | 8% |
| children | 95 | 26 | 18 | 8 | 521 | 8 | 651 |
| Good schools | 60.34% | 76.79% | 52.50% | 61.54% | 60.28% | 52.17% | 12% |
| | 108 | 43 | 21 | 16 | 853 | 12 | 1012 |
| Low crime/safe neigh- | 66.48% | 80.36% | 75.00% | 69.23% | 70.53% | 73.91% | 14% |
| borhoods | 119 | 45 | 30 | 18 | 998 | 17 | 1175 |
| Low level of child abuse | 14.53% | 8.93% | 15.00% | 19.23% | 9.33% | 17.39% | 2% |
| | 26 | 5 | 6 | 5 | 132 | 4 | 169 |
| Other | 0.56% | 1.79% | 0.00% | 11.54% | 2.40% | 8.70% | 0% |
| Other | 1 | 1 | 0 | 3 | 34 | 2 | 37 |
| Dublic transportation | 19.55% | 14.29% | 17.50% | 19.23% | 11.94% | 8.70% | 3% |
| Public transportation | 35 | 8 | 7 | 5 | 169 | 2 | 214 |
| Religious and/or | 18.44% | 16.07% | 15.00% | 26.92% | 14.35% | 21.74% | 3% |
| spiritual values | 33 | 9 | 6 | 7 | 203 | 5 | 245 |
| Safe and affordable | 50.84% | 33.93% | 30.00% | 34.62% | 39.51% | 30.43% | 8% |
| housing | 91 | 19 | 12 | 9 | 559 | 7 | 669 |
| Safe walking and biking | 8.38% | 16.07% | 15.00% | 30.77% | 20.99% | 34.78% | 4% |
| routes | 15 | 9 | 6 | 8 | 297 | 8 | 333 |
| Use of parks and recre- | 12.29% | 7.14% | 15.00% | 11.54% | 19.72% | 13.04% | 4% |
| ation | 22 | 4 | 6 | 3 | 279 | 3 | 309 |
| TOTAL RESPONDENTS | 179 | 56 | 40 | 26 | 1415 | 23 | 1739 |

skipped question 58

| | | BY EDUCATIO | | | |
|--|---------------------------------------|-------------------------------------|--------------------------------|------------------------------|----------------------------|
| ANSWER OPTIONS | LESSTHAN HIGH SCHOOL DIPLOMA | HIGH SCHOOL DIPLOMA OR GED | COLLEGE DEGREE OR HIGHER | TOTAL RESPONSE PERCENT | TOTAL RESPONSE COUNT |
| Good place to raise children | 19 | 159 | 440 | 38.4% | 628 |
| Low crime/safe neighborhoods | 19 | 258 | 855 | 70.3% | 1132 |
| Low level of child abuse | 7 | 58 | 89 | 9.6% | 154 |
| Good schools | 23 | 226 | 728 | 60.7% | 977 |
| Access to health care (e.g., medical, mental, dental) | 13 | 233 | 835 | 67.1% | 1081 |
| Use of parks and recreation | 2 | 58 | 240 | 18.6% | 300 |
| Clean environment | 10 | 121 | 470 | 37.3% | 601 |
| Safe and affordable housing | 9 | 153 | 482 | 40.0% | 644 |
| Community and cultural events | 0 | 22 | 147 | 10.5% | 169 |
| Excellent race relations | 2 | 22 | 95 | 7.4% | 119 |
| Good jobs and healthy economy | 12 | 214 | 748 | 60.5% | 974 |
| Public transportation | 3 | 33 | 172 | 12.9% | 208 |
| Access to healthy foods | 7 | 82 | 388 | 29.6% | 477 |
| Religious or spiritual values | 1 | 59 | 172 | 14.4% | 232 |
| Safe walking and biking routes | 1 | 49 | 271 | 19.9% | 321 |
| Other | 0 | 5 | 28 | 2.0% | 33 |
| | | | ans | wered question | 1610 |

skipped question o

| | | TOP | PRIORITIES | TOP PRIORITIES BY HOUSEHOLD INCOME | HOLD INCO | ME | | | |
|---|---------------|--|-------------------|------------------------------------|----------------------------|--------------------------|---------------------------|------------------------------|----------------------------|
| ANSWER OPTIONS | DON'T KNOW | NO INCOME- STUDENT OR DEPENDENT | UNDER \$15,000 | \$15,000 TO \$29,999 | \$30,000 TO \$59,999 | \$60,000 T 999,999 | MORE THAN \$100,000 | TOTAL RESPONSE PERCENT | TOTAL RESPONSE COUNT |
| Good place to raise children | 19 | 51 | 92 | т | 159 | 150 | 102 | 7.8% | 644 |
| Low crime/safe neigh- borhoods | 33 | 92 | 112 | 135 | 310 | 287 | 189 | 34.1% | 1158 |
| Low level of child abuse | 4 | 20 | 27 | 24 | 45 | 33 | 13 | 2.0% | 166 |
| Good schools | 30 | 84 | 104 | 107 | 239 | 253 | 183 | 12.1% | 1000 |
| Access to health care (e.g., medical, mental, dental) | 27 | 76 | 102 | 145 | 288 | 267 | 196 | 13.4% | 1101 |
| Use of parks and recre- ation | 11 | 20 | 27 | 44 | 76 | 62 | 64 | 3.7% | 306 |
| Clean environment | 21 | 64 | 74 | 76 | 146 | 135 | 97 | 7.4% | 613 |
| Safe and affordable housing | 14 | 46 | 69 | 107 | 181 | 157 | 85 | 8.0% | 659 |
| Community and cul- tural events | e | 16 | 11 | 22 | 50 | 04 | 31 | 2.1% | 173 |
| Excellent race relations | 4 | 6 | 14 | 22 | 34 | 27 | 12 | 1.5% | 122 |
| Good jobs and healthy economy | 23 | 71 | 83 | 106 | 264 | 160 | 189 | 12.1% | 966 |
| Public transportation | 7 | 20 | 24 | 38 | 52 | 42 | 29 | 2.6% | 212 |
| Access to healthy foods | 8 | 39 | 53 | 66 | 126 | 122 | 72 | 5.9% | 486 |
| Religious or spiritual values | 8 | 20 | 19 | 16 | 70 | 60 | 48 | 2.9% | 241 |
| Safe walking and biking routes | 4 | 41 | 28 | 35 | 80 | 84 | 51 | 3.9% | 323 |
| Other | Э | н | 2 | 4 | 9 | 6 | 6 | 0.4% | 34 |
| | | | | | | | | | 8234 |
| | | | | | | | answe | answered question | 1648 |
| | | | | | | | skip | skipped question | o |

| | | TOP | TOP PRIORITIES BY AGE | 3Y AGE | | | | |
|---|---------------|-------|-----------------------|--------|-------|---------------|------------------------------|----------------------------|
| ANSWER OPTIONS | 18 OR LESS | 19-25 | 26-39 | 40-54 | 55-64 | 65 OR OVER | TOTAL RESPONSE PERCENT | TOTAL RESPONSE COUNT |
| Good place to raise children | 13 | 93 | 231 | 191 | 88 | 25 | 7.8% | 641 |
| Low crime/safe neighborhoods | 18 | 163 | 399 | 347 | 184 | 48 | 14.1% | 1159 |
| Low level of child abuse | 9 | 34 | 61 | 32 | 22 | 10 | 2.0% | 165 |
| Good schools | 15 | 152 | 334 | 291 | 157 | 51 | 12.2% | 1000 |
| Access to health care (e.g., medical, mental, dental) | ω | 140 | 346 | 343 | 199 | 63 | 13.4% | 1099 |
| Use of parks and recreation | 5 | 48 | 118 | 69 | 48 | 16 | 3.7% | 304 |
| Clean environment | 10 | 125 | 195 | 16 | 76 | 30 | 7.4% | 612 |
| Safe and affordable housing | 4 | 91 | 198 | 214 | 117 | 34 | 8.0% | 658 |
| Community and cultural events | Ч | 29 | 57 | 43 | 34 | 6 | 2.1% | 173 |
| Excellent race relations | 2 | 14 | 24 | 40 | 30 | 12 | 1.5% | 122 |
| Good jobs and healthy economy | 10 | 124 | 315 | 324 | 170 | 53 | 12.1% | 966 |
| Public transportation | 2 | 35 | 63 | 57 | 39 | 15 | 2.6% | 211 |
| Access to healthy foods | 9 | 87 | 188 | 138 | 51 | 16 | 5.9% | 486 |
| Religious or spiritual values | 0 | 26 | 78 | λo | 57 | 6 | 2.9% | 240 |
| Safe walking and biking routes | 5 | λo | 117 | 76 | 45 | 11 | 3.9% | 324 |
| Other | 7 | Ч | 5 | 12 | 6 | 9 | 0.4% | 34 |
| | | | | | | | | 8224 |
| | | | | | | answ | answered question | 1646 |
| | | | | | | skij | skipped question | 0 |

Focus Groups

A focus group is a small group of participants, usually 8-10, that responds to a set number of questions. Questions are open ended, leading to group discussion around topics of importance. Participants react to ideas together and can build off of each other's comments. Only a small number of people can participate in focus groups. There is a risk of the group atmosphere hindering honest opinions. This methodology is a good complement to the data acquired from the community survey.

Process

At the request of the MAPP Steering Committee, focus groups were organized geographically. Eight groups were planned, one in Northern Boone, one in Southern Boone, and one in each of Columbia's six political wards. Subcommittee members volunteered to find suitable locations to host the focus groups and facilitate the discussion. A staff liaison provided logistical support for each of the focus groups.

Facilitator training was provided by the external consultant. The training was video recorded for facilitators who were unable to attend. Electronic facilitator training evaluations were emailed to training participants shortly after the training was held.

Whenever possible, focus groups were held in public locations with ample parking, close to public transportation, ADA accessible, and had appropriate space for children. Focus group participants were provided child care, dinner, and a \$20 gift card to a local grocery store. Potential participants were identified by members of the CHAMP group. Invitations were sent to participants via email and mail (Appendix). Approximately twenty individuals were invited to each focus group with the goal of eight to twelve participants per group. In order to plan for child care and dietary needs, participants were asked to RSVP. Focus groups were scheduled in the evening with 30 minutes for the meal and 90 minutes for discussion. Each focus group was opened with an introduction from a PHHS staff member and an explanation of the MAPP Process. Ground rules were agreed upon for each session and posted in the room for participants to reference.

Each question was presented to the group, followed by three minutes of "brain writing" and 17 minutes of discussion. Each focus group had a staff

THREE QUESTIONS WERE POSED TO EACH FOCUS GROUP. THE QUESTIONS WERE DEVELOPED BY THE MAPP CORE TEAM.

THE QUESTIONS WERE:

- When thinking about health, what are the greatest strengths in our community?
- 2. What are the most important health related issues in our community?
- What would help us achieve optimum physical, mental, cultural, social, spiritual, and economic health?

liaison/student intern who served as a recorder. The role of the recorder was to write down the discussion answers on a flip chart. The flip chart pages were posted around the room for participants to review. At the focus group conclusion, participants completed a focus group evaluation and a demographic questionnaire (Appendix). Participants' contact information was collected, allowing for future communications to occur.

Data Analysis

Comments captured on the flip chart were entered into a spreadsheet and coded categorically. The categories were formed around similar subjects, such as parks, health education, vulnerable populations, obesity, substance use, and transportation. The complete list of categories is included in the Appendix. Focus group questions were analyzed independently of one another. After the qualitative data was categorized, the frequency of each category was counted. The categories with the greatest frequency were then listed as the priority categories from the focus groups. Limitations to the data analysis are explored in the Discussion section.

Overall Results:

Results were analyzed by each focus group and also combined for an overall analysis. Focus group participants expressed an interest in developing a community feel to their environment, revitalizing neighborhood associations, safety, good nutrition and a strong economy. An advantage to hosting the focus groups based upon geography was the place-specific needs and wants that came from each location. Those issues are not necessarily significant to the community as a whole, and, therefore, are not always identified as a priority in the data analysis. Geographic Focus Group responses (pages 26-33) highlight the interest of each location.

COLLECTIVE FOCUS GROUP RESPONSES:

1. WHEN THINKING ABOUT HEALTH, WHAT ARE THE GREATEST STRENGTHS IN OUR COMMUNITY?

Health Care: Many medical providers, hospitals, clinics, options for uninsured

Community: People care for one another, friendly, involved Food and Nutrition: Community gardens, farmers markets, "Buddy Packs" Infrastructure: Walkable/bikeable community

2. WHAT ARE THE MOST IMPORTANT HEALTH RELATED ISSUES IN OUR COMMUNITY?

Public Safety: bicyclist safety, increasing violence, gun violence, unsafe driving habits

Substance Use: Excessive alcohol consumption, youth drug use Vulnerable Populations: Aging populations, homeless, veterans, disabled Economy: Increasing unemployment for minorities, high cost of living, "fast cash" stores, growing poverty, reduction in funding for programs

 WHAT WOULD HELP US ACHIEVE OPTIMUM PHYSICAL, MENTAL, CULTURAL, SOCIAL, SPIRITUAL, AND ECONOMIC HEALTH?
 Community: More engaged community, community-based events, get to know your neighbor, revitalize neighborhood associations
 Economy: More economic opportunities, living wage jobs, funding to address issues, financial education

Geographic Focus Group Responses

NORTHERN BOONE COUNTY

WHEN THINKING ABOUT HEALTH, WHAT ARE THE GREATEST STRENGTHS IN OUR COMMUNITY?

Physical Activity- activities for the kids, physical fitness in the schools, Harrisburg has a strong athletic program, residents can walk on the school track for exercise, many families participate in children's athletics

Community- this community has a strong history in Boone County, residents help each other, there is a small community feel, community members help one another to solve problems, high quality of living, multigenerational community, active Optimist Club, sorority, and historical society

Health Care-medical clinic, University Health clinic, and hospitals provide quality medical care

Public Safety- first responder system with the fire district, CERT team, and local police department ensure public safety

Columbia (17) Ashland

Northern Boone County

WHAT ARE THE MOST IMPORTANT HEALTH RELATED ISSUES IN OUR COMMUNITY?

Physical Health- inadequate dental care for the uninsured, medical field is understaffed, no local clinic, low-income residents don't have health benefits, lack of affordable health care

Vulnerable Populations- not enough social activity for seniors, residents are aging, no senior housing in Harrisburg, rural residents are physically isolated with little to no supports

Public Safety- ambulance response time is lengthy, faster to drive a patient to the hospital, ambulance has difficulty finding homes in an emergency, no storm shelter in Harrisburg

WHAT WOULD HELP US ACHIEVE OPTIMUM PHYSICAL, MENTAL, CULTURAL, SOCIAL, SPIRITUAL, AND ECONOMIC HEALTH?

Communication- participants want a way for information about community events and community concerns to be shared *Community*- participants want a central location in each town for adults/seniors to gather and socialize and a focus on pulling the small towns together to centralize resources and put resources to work in order to accomplish goals *Public Safety*- participants want funding for a storm shelter in Harrisburg and improvements made to the rural GPS systems to improve emergency response times

SOUTHERN BOONE COUNTY

WHEN THINKING ABOUT HEALTH, WHAT ARE THE GREATEST STRENGTHS IN OUR COMMUNITY?

Community- strong sense of community, people take care of one another, friendly area where it is easy to get to know one another, many volunteers and local experts in the community, towns in Southern Boone connect to one another

Health Care- excellent health care in close proximity, local ambulance, local pharmacy that delivers, many options for health care

Health Education-Optimist Club and Southern Boone Learning Garden improve health and wellness in kids, locals advocate for health improvement and try to influence young people to lead a healthy lifestyle

WHAT ARE THE MOST IMPORTANT HEALTH RELATED ISSUES IN OUR COMMUNITY?

Substance Use- excessive alcohol consumption is a cultural norm that is socially acceptable, drug use among the youth is a concern, youth have "bowl parties" where multiple drugs are placed in a bowl and everyone chooses one, parental drug use is influencing the youth

Physical Activity- there is a lack of recreational and after school programs outside of organized athletic teams, no adult recreation classes, exercise is viewed as a chore

Food and Nutrition- no slow food options but multiple fast food options, fast food and fattening food is more affordable, cooking in the home is harder if you are only one person or if you are cooking just for children, planning for healthy meals is a challenge, cultural norm to eat a "farm-hand" meal

WHAT WOULD HELP US ACHIEVE OPTIMUM PHYSICAL, MENTAL, CULTURAL, SOCIAL, SPIRITUAL, AND ECONOMIC HEALTH?

Community- participants want to get seniors more involved, coordinate community efforts with city offices and Chamber, improve resources in area for seniors and low-income residents, help homebound residents with personal errands, have a community calendar of events and resources

Education- participants want educational opportunities beyond schools, adult education is needed in all areas from recreation to mental health awareness, parents need guided education on healthy meal preparation and talking to their children about substance use

Transportation- participants want public transportation to allow lower income residents opportunities to get to outside resources, weekly bus to travel outside rural area, increasing access to health care and shopping in Jefferson City and Columbia

Food and Nutrition- Residents want access to healthy food, more healthy restaurants, more healthy food offered at community events



Southern Boone County

CITY OF COLUMBIA, WARD 1

WHEN THINKING ABOUT HEALTH, WHAT ARE THE GREATEST STRENGTHS IN OUR COMMUNITY?

Health Care- many resources for health care: public health department, Family Health Center, Boone Convenience Clinic, MedZou, teaching hospital gives the community access to new medical procedures; neighborhood pharmacy delivers to the homebound

Food and Nutrition- many access points for food: Ward 1 has highest number of community gardens, urban farms, multiple farmers markets, WIC program, Buddy Packs at school Infrastructure- walkable/ bikeable area, PedNet walking path with foot prints on sidewalk, bike lanes Mental Health- many access points for mental health: Family Counseling Center, New Horizons, Burrell Behavioral Health

WHAT ARE THE MOST IMPORTANT HEALTH RELATED ISSUES IN OUR COMMUNITY?

Food and Nutrition- nutrition deficiencies in school children, poor quality of food, increasing hunger and food insecurity, malnutrition, paradox of supporting

programs that harm instead of increase health, food supplemental programs for low-income are providing high calorie/ low nutrient foods

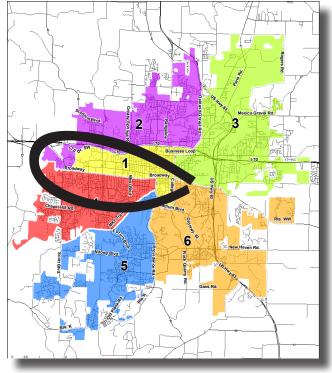
Economy- increasing unemployment of minorities, high cost of living, high number of "fast cash" stores in area, growing poverty

Public Safety- bicyclists are uneducated about bike safety and traffic rules, violence is increasing, gun violence **Substance Use**- availability of illegal drugs and alcohol, drug use increasing and visible, high number of liquor stores in area

WHAT WOULD HELP US ACHIEVE OPTIMUM PHYSICAL, MENTAL, CULTURAL, SOCIAL, SPIRITUAL, AND ECONOMIC HEALTH?

Community- participants have a responsibility to ensuring that their voices are heard, addressing issues together as they are all connected, residents need to get to know one another and be friendly with neighbors, treat each other with respect, support your community, revitalize neighborhood associations, hold community-based events at Douglass and other parks, this is a team effort with respect from the top down, respect diverse groups

Economy- participants desire more economic opportunities, living wages, and funding to address the issues



CITY OF COLUMBIA, WARD 2

WHEN THINKING ABOUT HEALTH, WHAT ARE THE GREATEST STRENGTHS IN OUR COMMUNITY?

Health Care- public health department addresses issues such as sewage and restaurant inspections, immunizations, school-based flu clinics, preventive health, lots of doctors, dental clinic, urgent care, more hospital beds than other communities

Environment- clean industry, non-polluting workplaces, healthy workplaces

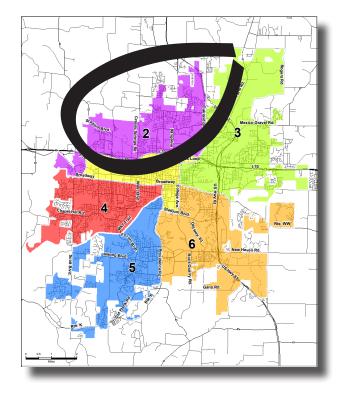
Infrastructure- walking trails, bike lanes, Walking School Bus program, bike friendly community

WHAT ARE THE MOST IMPORTANT HEALTH RELATED ISSUES IN OUR COMMUNITY?

Vulnerable Populations- veterans issues, working poor, homeless population, disabled, youth, aging population, many unable to afford services, people come here for health care and burden the system

Economy- growing gap between rich and poor, reduction of funding causes diminishing resources, poverty, not enough affordable housing

Transportation- no public transportation to the county, schools, on Sunday, or different parts of the city



WHAT WOULD HELP US ACHIEVE OPTIMUM PHYSICAL, MENTAL, CULTURAL, SOCIAL, SPIRITUAL, AND ECONOMIC HEALTH?

Economy- participants want small businesses and non-profits to work together, small employers pool funds and group together to buy insurance, increase small business and help the middle class, jobs for those without advanced degrees, more full-time employment, benefits for good employers, more housing, financial education opportunities *Health Education*- participants recommend educating children on healthy food choices, starting young with good health, nutrition information made available at restaurants

Community- better race relations, increased feeling of safety, stay engaged, increase number of neighborhood associations

CITY OF COLUMBIA, WARD 3

WHEN THINKING ABOUT HEALTH, WHAT ARE THE GREATEST STRENGTHS IN OUR COMMUNITY?

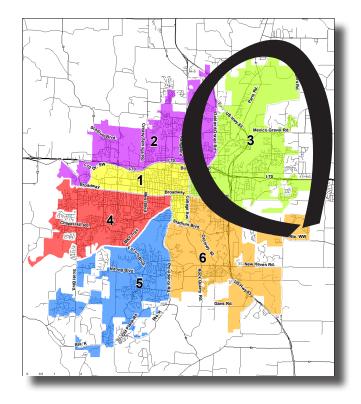
Health Care- variety of medical facilities, support for alternative medical care, access is greater and easier due to the small geographic area to cover, more doctors per capita, the draw of the teaching hospital, care provided by the Family Health Center and community support for the clinic Community- progressive Columbia mentality, community is involved Vulnerable Populations- disabled, retirement

facilities and services

WHAT ARE THE MOST IMPORTANT HEALTH RELATED ISSUES IN OUR COMMUNITY?

Vulnerable Populations- aging population and need for more supportive services such as aging in place, adult day care services, home health and respite Physical Health- turnover in medical/lower level staff, lack of affordable dental care, disconnect between dental health and the rest of the body Economy- cuts in funding for youth oriented programs,

Meals on Wheels funding reduced, funding decrease overall



WHAT WOULD HELP US ACHIEVE OPTIMUM PHYSICAL, MENTAL, CULTURAL, SOCIAL, SPIRITUAL, AND ECONOMIC HEALTH?

Health Education- - education and communication, health messages are not getting to the people who need it, address the cultural barriers of communication, early education about health and active lifestyles, eliminate negative image of public health services/stigma, meet people where they are, keep putting out the message

Community- more meeting rooms in neighborhoods, more quiet spaces and places, neighborhood connectivity and involvement, networking to increase contacts with other people

Physical Health- accessible health care for all, expand access to Medicaid, visibility of health services and professionals

Geographic Focus Group Responses (continued)

CITY OF COLUMBIA, WARD 4

WHEN THINKING ABOUT HEALTH, WHAT ARE THE GREATEST STRENGTHS IN OUR COMMUNITY?

Food and Nutrition- farmers market, urban farm movement, community gardens, chicken ordinance, easy to feel safe and eat healthy food downtown, careful regulations of food establishments, move toward healthier vending machine options, school lunches are healthier and more appealing, school-based gardens *Health Care*- University clinics, engaged public health department, wellness resources at the University *Physical Activity*- great access to gyms, emphasis on cycling, overall encouragement of kids to be healthier

WHAT ARE THE MOST IMPORTANT HEALTH RELATED ISSUES IN OUR COMMUNITY?

Public Safety-violence, personal safety, drop-out rates, domestic violence, decrease in partnerships with public services (fire and police), motorists have unsafe driving habits, no one stops at crosswalks

Vulnerable Populations- homeless, kids with no resources, accessible housing for disabled, mobility among the poor

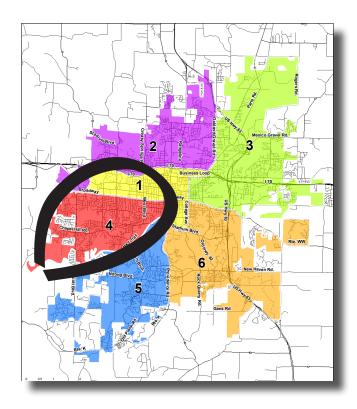
Transportation-transit should go to more areas, expand distance covered, reduce cost of ridership

WHAT WOULD HELP US ACHIEVE OPTIMUM PHYSICAL, MENTAL, CULTURAL, SOCIAL, SPIRITUAL, AND ECONOMIC HEALTH?

Infrastructure- provide infrastructure so outreach can happen, stoplight at Ash/Fairview to make cycling safer, built environment doesn't support activity, we build trails that we must drive to, must take a car to the food bank, can't have a neighborhood restaurant or small grocery store in an area zoned residential

Education- outreach and education to allow for accessing resources, emphasis on adaptive coping mechanisms, strengthen public schools, awareness and acceptance of problems so they can be addressed

Government- changes need to be made at the macro/policy level, zoning changes could prevent tobacco and alcohol from being sold near schools, educate policy makers, more Health Impact Assessments (HIA)



Geographic Focus Group Responses (continued)

CITY OF COLUMBIA, WARD 5

WHEN THINKING ABOUT HEALTH, WHAT ARE THE GREATEST STRENGTHS IN OUR COMMUNITY?

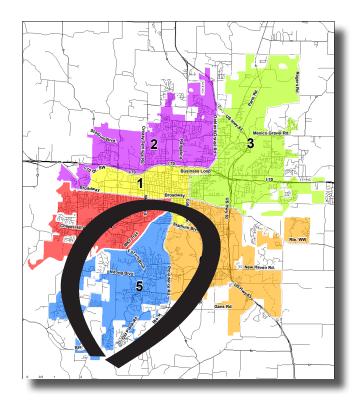
Food and Nutrition- food pantry, variety of restaurants, positive changes to the types of food available in school and in school vending machines, access to farmers markets and locally grown food, Buddy Packs, summer food programs

Health Care- availability of health care, hospitals, public health department immunization program *Environment*- clean air, Cleanup Columbia

WHAT ARE THE MOST IMPORTANT HEALTH RELATED ISSUES IN OUR COMMUNITY?

Substance Use- drug abuse, rampant drug culture in high schools, high school students dealing cocaine, high school students don't have drug-related education or places to go for help

Economy- lack of middle-of-the-road housing, increasing rent, rental properties, disparities in neighborhoods *Public Safety*- appearance of rising crime rate, safety in neighborhoods, burglaries



WHAT WOULD HELP US ACHIEVE OPTIMUM PHYSICAL, MENTAL, CULTURAL, SOCIAL, SPIRITUAL, AND ECONOMIC HEALTH?

Communication- joint meetings and activities, keep community aware of problems, bringing information to the neighborhoods, public health department communication with people who need the services *Community*- encourage parents to stay active in school, highlight issues to bring people together *Public Safety*- stay aware of large city issues, strengthen neighborhood watch programs, reduce gang activity and drug use

Geographic Focus Group Responses (continued)

CITY OF COLUMBIA, WARD 6

WHEN THINKING ABOUT HEALTH, WHAT ARE THE GREATEST STRENGTHS IN OUR COMMUNITY?

Health Care- health centers, University research and outreach, vaccination programs, medical facilities, number of doctors and hospitals, nurses, public health department, availability of health care

Infrastructure- easy to get around, sidewalks are safe to use, bike lanes, recreational walking, walk-able/bike-able community

Physical Activity- the ARC, workout machines on the trails and at Stephens Lake Park, focus on healthy lifestyle, networks for healthy activities

WHAT ARE THE MOST IMPORTANT HEALTH RELATED ISSUES IN OUR COMMUNITY?

Physical Health- poor access to dental care, uninsured/ underinsured, conservative medical community, lack of extended care beds, insurance companies dictate service, preventive care, failure to expand Medicaid, lack of affordable health care

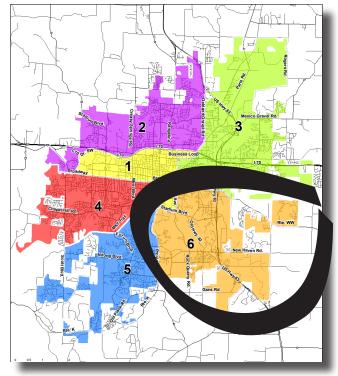
Substance Use-drug use problems have been going on for a long time, drug use among youth, alcohol abuse

Mental Health- eating disorders among youth and college age, lack of support for long-term mental health services

WHAT WOULD HELP US ACHIEVE OPTIMUM PHYSICAL, MENTAL, CULTURAL, SOCIAL, SPIRITUAL, AND ECONOMIC HEALTH?

Economy- good jobs, healthy jobs, living wage jobs, balanced use of resources, money distribution tied to best practices/ research-based, maximize money that people have at their disposal by developing affordable housing *Personal Health*- unfunded medical services cost the community, provide uninsured access to preventive and primary care, universal health care, encourage preventive care, provide affordable and free services, expand Medicaid, collaboration of medical services with students and schools

Food and Nutrition- money to buy healthy foods, healthy and local food mobiles, hot lunch program for kids, eating a plant-based diet, farm policy that supports healthful food (non-commodity food)



Demographics

Focus group participants were asked to complete a demographic information sheet. This was a self-reporting form. Compiled results from all focus groups are listed below. Results from each geographic location are in the Appendix.

The majority of the participants had a college degree or higher (80.6%) and income at or above \$60,000 (61%). Our survey sample is a representative sample for Boone County based on ethnicity. We are below our County demographics in male and youth participants. According to 2011 U.S. Census data, the average household income in Boone County was \$46,769. We are unable to compare the income data from survey respondents to county level data for reasons stated in the Discussion section of this report.

Total

PERCENT

70.8% 29.2% 100%

PERCENT

80.6%

9.7%

6.9%

2.8%

100%

PERCENT

5.6% 11.0% 15.3% 51.4% 9.7% 4.2% 2.8% 100%

PERCENT

61.1%

38.9%

100%

72

| FOCUS GROUP | NUMBER | PERCENT | GENDER | NUMBER |
|-----------------|-----------|---------|---------------------------|--------|
| LOCATION | ATTENDING | OFTOTAL | Female | 51 |
| Ward 1 | 9 | 12.5% | Male | 21 |
| Ward 2 | 6 | 8.0% | Total | 72 |
| Ward 3 | 9 | 12.5% | · | I |
| Ward 4 | 15 | 21.0% | EDUCATION | NUMBER |
| Ward 5 | 7 | 10.0% | | - |
| Ward 6 | 10 | 14.0% | College or Higher | 58 |
| Northern Boone | 10 | 14.0% | High School | 7 |
| Southern Boone | 6 | 8.0% | Diploma or GED | |
| Total | 72 | 100% | Less than High | 5 |
| | 1 | 1 | School Diploma Unknown | |
| AGE | NUMBER | PERCENT | | 2 |
| - | | | Total | 72 |
| 18 or younger | 4 | 5.6% | | |
| 19-25 | 5 | 6.9% | ANNUAL INCOME | NUMBER |
| 26-39 | 10 | 13.9% | Under \$15,000 | 4 |
| 40-54 | 16 | 22.2% | \$15,000-\$29,999 | 8 |
| 55-64 | 25 | 34.7% | \$30,000-\$59,999 | 11 |
| 65 or older | 9 | 12.5% | \$60,000-\$99,999 | |
| Unknown | 3 | 4.2% | Over \$100,000 | 37 |
| Total | 72 | 100% | No Income | 7 |
| | I | I | Don't Know | 3 |
| RACE | NUMBER | PERCENT | Total | 2 |
| | ~ | | IOLdi | 72 |
| White | 62 | 86.1% | | |
| Black/AA | 7 | 9.7% | MARITAL STATUS | NUMBER |
| Asian | 2 | 2.8% | Married/ | |
| Black, Hispanic | 1 | 1.4% | Cohabitating | 44 |
| Total | 72 | 100% | Single | 28 |

| HEALTH CARE | NUMBER | PERCENT |
|--|--------|---------|
| Health insurance | 50 | 69.4% |
| Medicare | 4 | 5.6% |
| Health insurance/Medicare | 3 | 4.2% |
| VA | 3 | 4.2% |
| Health insurance/VA | 1 | 1.4% |
| Insurance/Medicare | 1 | 1.4% |
| Medicaid | 1 | 1.4% |
| Medicare/pay cash | 1 | 1.4% |
| Medicare/Medicaid | 1 | 1.4% |
| My parents | 1 | 1.4% |
| Parents pay | 1 | 1.4% |
| Pay cash | 1 | 1.4% |
| Pay cash/Do not use insurance or use free clinic | 1 | 1.4% |
| Pay cash/Medicaid | 1 | 1.4% |
| Retired military | 1 | 1.4% |
| VA/Pay cash | 1 | 1.4% |
| Total | 72 | 100% |

Discussion

Overarching Themes and Strengths

We look to the Community Themes and Strengths Assessment to help identify: What are our community issues? What are our strengths? What needs to happen to help us reach our community vision?

Mental health, crime and safety, obesity, substance use and health care access were common issues from both the survey and focus groups. Our community strengths include our infrastructure, community gardens, and vast healthcare structure. A strong community and prosperous economy are needed to reach our community vision. Focus group questions and responses centered around community health, with a focus on community assets and prevention. In contrast, survey responses were focused on the concerns our community members have about individual health, such as: mental health, obesity, and substance use.

Assessment Limitations

Both focus group and survey participants were asked to self-report household income. The income categories do not directly correlate with categories from comparison data sources, therefore, we are unable to compare our sample to Boone County income data. We also did not ask for the number of members in the household and, as a result, are unable

to measure poverty level data for participants. Survey respondents were not given the option to leave an email address in order to receive future communication. This was a lost opportunity to share the MAPP Process with a large number of community members. Future surveys will include the voluntary collection of email addresses. In addition, some of the demographic information gathered was incomplete, which can explain the discrepancies between the response totals listed in the Process section and those represented in the tables and graphs. The final tally of responses noted in the Process section, was ultimately impacted by those who exited the survey before answering all questions, as well as those who skipped questions. Future surveys will consider providing more than one option for gender selection.

Securing focus group participants proved to be challenging. Participants were recruited by members of CHAMP. This method of sampling can lead to limitations. Focus groups were hosted during the summer months, a time when college students are not typically available and family commitments can impede participation in community efforts. Focus group discussion answers were recorded on paper flip charts and analyzed based on the frequency of responses. Sessions were not video or voice recorded. As a result, we must consider that the frequency of some responses may not have been captured accurately and, therefore, the data analysis can be impacted. Future focus group responses should either be weighted by participants or voice recorded to ensure accuracy.

The survey and focus groups have minimal representation from youth. It is worth noting that a CHAMP partner agency, Central Missouri Community Action Agency, completed a PhotoVoice project with low-income youth just prior to the CTSA assessment. For this project, CMCA gave cameras to nine youth between the ages of 11-15 and asked them to take pictures of their community from their point of view. These young photographers captured images that reinforce some of the common themes from this Community Themes and Strengths Assessment including, but not limited to community, healthy eating, and bullying. The photos from this project are included in the Appendix. Future efforts to capture community input should include PhotoVoice as a method of reaching the youth population.

Assessment Data Dissemination

CHAMP members were presented with preliminary data findings at a CHAMP meeting in August 2013. A fact sheet summary (Appendix) was also distributed during that time and posted on the City of Columbia website, http://www.gocolumbiamo.com/Health/MAPP.php. The fact sheet summary was also shared with focus group participants via email.

Acknowledgements

Leigh Britt (City of Columbia), Barbara Buffaloe (City of Columbia), Eduardo Crespi (Centro Latino de Salud), Nick Foster (Voluntary Action Center), Jenny Grabner (Southern Boone Learning Garden), Jackie Herzberg (MedZou), Sarah Klaassen (Central Missouri Community Action), Steve Kuntz (Mid-Missouri Legal Services), Kelsey Lammy (Youth Community Coalition), Valorie Livingston (Boys and Girls Club), Jessica Macy (Boone County Council on Aging), Scott Olsen (Boone County Fire Protection District), Dan Schneiderjohn (Columbia/Boone County Public Health and Human Services), Brittney Vigna (Youth Community Coalition), Rev. Carmen G. Williams (Russell Chapel Christian Methodist Episcopal Church), Ryan Worley (Youth Community Coalition)

Thank you to all of the people that helped and participated in the Community Themes and Strengths Assessment.

Appendices

Boone County Community Health Survey

Boone County Community Health Survey

Please take 5 minutes to complete the survey. The purpose of this survey is to get your opinions about community health issues in Boone County. The Boone County Community Health Assessment Mobilization Partnership (CHAMP) will use the results of this survey and other information to identify the most pressing issues which can be addressed through community action. Your opinion is important and we value your input. Thank you!

- 1. What do you think are the **5** most important factors for a "Healthy Community?" Those factors which most improve the quality of life in a community. (Check 5).
 - ____ Use of parks and recreation ____ Public Transportation Good place to raise children ____ Clean environment ____ Low crime / safe neighborhoods ____ Access to healthy foods ____ Religious or spiritual values ____ Safe and affordable housing Low level of child abuse ____ Safe walking and biking routes Good schools ____ Community and cultural events Access to health care (e.g., medical, mental, ____ Excellent race relations ____ Other_____ ____ Good jobs and healthy economy dental)
- 2. Among adults, which 5 health conditions or behaviors have the greatest impact on overall community health. (Check 5)
- _____ Self-harm (cutting) ____ Senior falls (falling at home) Arthritis Hearing and visioning impairments or loss ____ Worksite injuries ____ Anorexia / Bulima ____ Motor vehicle crash injuries (including ____ Alcohol abuse Cancers ____ Drug abuse Dental problems motorcycles and ATV's) ____ Sexually Transmitted Diseases (STDs) ____ Lack of exercise Diabetes ____ HIV / AIDS ____ Poor eating habits / choices Heart disease and stroke ____ Suicide ____ Homelessness High blood pressure ____ Homicide Lung disease (COPD, emphysema) ____ Regular check-ups and shots / vaccinations Mental health issues (depression, anxiety, ____ Racism / discrimination ____ Assault / Violence ____ Domestic / family violence etc.)
 - Stress
 - Obesity

- - ____ Self-harm (cutting)

____ Adult abuse / neglect

Rape / sexual assault

- ____ Anorexia / Bulima
- ____ Drug abuse
- ____ Sexually Transmitted Diseases (STDs)
- ____ HIV / AIDS
- ____ Suicide
- ____ Homicide
- ____ Assault / Violence
- ____ Domestic / Family Violence
- ____ Child abuse / neglect
- Rape / sexual assault
- ____ Fighting

- Other
- 3. <u>Among youth (age 0-18)</u>, which <u>5</u> health conditions or behaviors have the greatest impact on overall community health. (Check 5).
 - ____ Cancers ____ Dental problems
 - Diabetes
 - Asthma
 - Obesity
 - Mental health issues (depression, anxiety,
 - etc.)
 - Autism
 - ADD / ADHD
 - Stress
 - Low self-esteem
 - Alcohol abuse

Turn Over

- ____ Bullying
- ____ Dropping out of school
- ____ Motor vehicle crash injuries (including motorcycles and ATV's)
- ____ Lack of exercise
- Poor eating habits
- ____ Homelessness
- ____ Regular check-ups and shots / vaccinations
- ____ Racism / Discrimination
- ____ Tobacco use
- Not using seat belts / child safety seats
- Other

- ____ Tobacco use
- ____ Not using seat belts

4. How satisfied are you with the health of Boone County Adults?

| Very dissatisfied | Dissatisfied | Neutral | Satisfied | Very Satisfied |
|--|---|---|-----------------------|--|
| 5. How satisfied are you with the health of Bo | one County Youth (age 0 | -18)? | | |
| Very dissatisfied | Dissatisfied | Neutral | Satisfied | Very Satisfied |
| Please answer questions #6-14 so we can see | how different types of p | eople feel about local he | alth issues. | |
| 6. What is your Zip code? 7. Age: 18 or less 19 - 25 26 - 39 40 - 54 55 - 64 65 or over 8. Gender: Male Female 9. Ethnic group (Check all that apply): African American / Black Asian / Pacific Islander Hispanic / Latino | N 11. Education L H C O 12. Household N U \$ | larried / co-habitating / par ot married / Single ess than high school igh school diploma or GE ollege degree or higher ther | rtnered all D - | w do you pay for your health care? (check that apply) Pay cash (no insurance) Do not use health care or use free clinics (no insurance) Health insurance (e.g., private insurance, Blue Shield, HMO) Medicaid Medicare Veterans' Administration Indian Health Services Other |
| <pre> Native American White / Caucasian Other</pre> | N | 50,000 to \$99,999 lore than \$100,000 on't know | | |

Thank you for your response! If you have questions or would like more information, please contact: Rebecca Roesslet Columbia/Boone County Public Health and Human Services 1005 W Worley St. Columbia, MO 65203 <u>champ@gocolumbiamo.com</u> 573-874-7490 This page intentionally left blank.

Example Focus Group Invitation

let YOUR VOICE be heard!

THURSDAY, JULY 11TH DINNER • 5:30 P.M. FOCUS GROUP • 6-7:30 P.M.

The Food Bank for Central & Northeast MO 2101 Vandiver Drive

We are looking for 12 residents from Ward 2 who would like to share their opinions about health in Boone County. If you are interested, please call or email:

Michelle Riefe 573-874-6331 or champ@gocolumbiamo.com

Seats are limited to 12 participants so please RSVP today to reserve your spot in this focus group. All focus group attendees will receive a \$20 gift card. Dinner and childcare provided.



Our department is working on an updated Community Health Assessment and Community Health Improvement Plan. We believe the best way to identify and improve health issues in our community is with input from community members. By attending this focus group, you have the opportunity to help shape what a healthy Boone County looks like. We appreciate your time and value your opinions.



Columbia/Boone County Public Health & Human Services 1005 W Worley 573-874-7355 www.gocolumbiamo.com/Health

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Categorical Topics from Focus Groups

| РК | PARKS |
|-------|---|
| AW | ANIMAL WELFARE |
| С | COMMUNITY |
| PA | PHYSICAL ACTIVITY |
| 0 | OBESITY |
| SA | SUBSTANCE ABUSE |
| ТТ | TRANSPORTATION |
| МН | MENTAL HEALTH |
| НС | HEALTH CARE |
| SS | SOCIAL SERVICES |
| IF | INFRASTRUCTURE/WALKING AND BIKING PATHS |
| FOOD | FOOD |
| ED | EDUCATION |
| HE | HEALTH EDUCATION |
| PS | PUBLIC SAFETY |
| FAITH | FAITH |
| CD | CHRONIC DISEASE |
| ТОВ | ТОВАССО |
| SH | SEXUAL HEALTH |
| GOVT | GOVERNMENT |
| PR | PERSONAL RESPONSIBILITY |
| EG | GREEN/ENVIRONMENT |
| SPEAK | COMMUNICATION |
| AH | AFFORDABLE HOUSING |
| PE | PUBLICENGAGEMENT |
| EV | ENVIRONMENT |
| VP | VULNERABLE POPULATIONS |
| ОТ | OTHER |
| ECON | ECONOMY |

Focus Group Demographics by Location

SOUTHERN BOONE DEMOGRAPHICS

| EDUCATION | NUMBER | PERCENT | AGE | NUMBER | PERCENT |
|-------------------|--------|---------|-----------------|--------|---------|
| College or higher | 6 | 100.0% | 40-54 | 2 | 33.3% |
| TOTAL | 6 | 100% | 55-64 | 4 | 66.7% |
| | | | TOTAL | 6 | 100% |
| INCOME | NUMBER | PERCENT | | | |
| Under \$15,000 | 1 | 16.7% | GENDER | NUMBER | PERCENT |
| \$30,000-\$59,999 | 1 | 16.7% | Female | 5 | 83.3% |
| \$60,000-\$99,999 | 4 | 66.7% | Male | 1 | 16.7% |
| TOTAL | 6 | 100% | TOTAL | 6 | 100% |
| | | | | | |
| HEALTH CARE | NUMBER | PERCENT | MARITAL | NUMBER | PERCENT |
| Health insurance | 3 | 50.0% | STATUS | - | - |
| Medicare | 1 | 16.7% | Married/ | 4 | 66.7% |
| Pay cash | 1 | 16.7% | Cohabitating | | aa a04 |
| Retired military | 1 | 16.7% | Single TOTAL | 2 | 33.3% |
| TOTAL | 6 | 100% | IUIAL | 0 | 100% |

.....

| RACE | NUMBER | PERCENT |
|-------|--------|---------|
| White | 6 | 100.0% |
| TOTAL | 6 | 100% |

NORTHERN BOONE DEMOGRAPHICS

| EDUCATION | NUMBER | PERCENT | AGE | NUMBER | PERCENT |
|---------------------------------|--------|---------|------------|--------|---------|
| Less than a high school diploma | 1 | 10.0% | 40-54 | 2 | 20.0% |
| High school diploma or GED | 4 | 40.0% | 55-64 | 5 | 50.0% |
| College or higher | 5 | 50.0% | 65 or over | 3 | 30.0% |
| TOTAL | 10 | 100% | TOTAL | 10 | 100% |

| INCOME | NUMBER | PERCENT |
|---------------------|--------|---------|
| \$15,000-\$29,999 | 1 | 10.0% |
| \$30,000-\$59,999 | 3 | 30.0% |
| \$60,000-\$99,999 | 3 | 30.0% |
| More than \$100,000 | 2 | 20.0% |
| Don't know | 1 | 10.0% |
| TOTAL | 10 | 100% |

| GLINDLI | NONDER | LICENT |
|--------------------------|--------|---------|
| Female | 9 | 90.0% |
| Male | 1 | 10.0% |
| TOTAL | 10 | 100% |
| MARITAL STATUS | NUMBER | PERCENT |
| Married/ Cohabitating | 5 | 50.0% |
| Single | 5 | 50.0% |
| TOTAL | 10 | 100% |
| | | DEDCENT |

GENDER

NUMBER PERCENT

| HEALTH CARE | NUMBER | PERCENT |
|---------------------------|--------|---------|
| Health insurance | 5 | 50.0% |
| Health insurance/Medicare | 2 | 20.0% |
| Medicare | 1 | 10.0% |
| Medicare/Medicaid | 1 | 10.0% |
| VA | 1 | 10.0% |
| TOTAL | 10 | 100% |

| TOTAL | 10 | 100% |
|-------|--------|---------|
| White | 10 | 100.0% |
| RACE | NUMBER | PERCENT |

WARD 1 DEMOGRAPHICS

| INCOME | NUMPED | DEDCENIT | ΤΟΤΑΙ | • | 100% |
|----------------------------|--------|----------|-------|--------|---------|
| | | | 55-64 | 1 | 11.1% |
| TOTAL | 9 | 100% | 40-54 | 3 | 33.3% |
| College or higher | 7 | 77.8% | 26-39 | 3 | 33.3% |
| High school diploma or GED | 2 | 22.2% | 19-25 | 2 | 22.3% |
| EDUCATION | NUMBER | PERCENT | AGE | NUMBER | PERCENT |

| INCOME | NUMBER | PERCENT |
|-------------------|--------|---------|
| Under \$15,000 | 2 | 22.2% |
| \$15,000-\$29.999 | 2 | 22.2% |
| \$30,000-\$59,999 | 2 | 22.2% |
| \$60,000-\$99,999 | 3 | 33.4% |
| TOTAL | 9 | 100% |

| 2 | 22.3% |
|---|-----------------------|
| 3 | 33.3% |
| 3 | 33.3% |
| 1 | 11.1% |
| 9 | 100% |
| | |
| | 2 3 3 1 9 |

| GENDER | NUMBER | PERCENT |
|--------|--------|---------|
| Female | 7 | 77.8% |
| Male | 2 | 22.2% |
| TOTAL | 9 | 100% |

| HEALTH CARE | NUMBER | PERCENT |
|---|--------|---------|
| Health insurance | 7 | 77.8% |
| Pay cash/do not use health insurance or use free clinic | 1 | 11.1% |
| Pay cash/Medicaid | 1 | 11.1% |
| TOTAL | 9 | 100% |

| MARITAL STATUS | NUMBER | PERCENT |
|--------------------------|--------|---------|
| Married/ Cohabitating | 5 | 50.6% |
| Single | 4 | 44.4% |
| TOTAL | 9 | 95% |

| RACE | NUMBER | PERCENT |
|----------|--------|---------|
| Black/ | | |
| African- | 5 | 55.6% |
| American | | |
| White | 4 | 44.4% |
| TOTAL | 9 | 100% |

WARD 2 DEMOGRAPHICS

Insurance/Medicare

TOTAL

| EDUCATION | NUMBER | PERCENT | AGE | NUMBER | PERCENT |
|----------------------------|--------|---------|------------|--------|---------|
| High school diploma or GED | 1 | 16.7% | 26-39 | 1 | 16.7% |
| College or higher | 5 | 83.3% | 40-54 | 1 | 16.7% |
| TOTAL | 6 | 100% | 55-64 | 3 | 50.0% |
| | | | 65 or over | 1 | 16.7% |
| INCOME | NUMBER | PERCENT | TOTAL | 6 | 100% |
| \$15,000-\$29,999 | 1 | 16.7% | | | |
| \$60,000-\$99,999 | 5 | 83.3% | GENDER | NUMBER | PERCENT |
| TOTAL | 6 | 100% | Female | 5 | 83.3% |
| | | | Male | 1 | 16.7% |
| HEALTH CARE | NUMBER | PERCENT | TOTAL | 6 | 100% |
| Health insurance | 4 | 66.7% | | | |
| Health insurance/Medicare | 1 | 16.7% | MARITAL | NUMBER | PERCENT |
| Insurance/Medicare | 1 | 16.7% | STATUS | | |

1

6

16.7%

100%

| Married/ Cohabitating | 3 | 50.0% |
|--------------------------|---|-------|
| Single | 3 | 50.0% |
| TOTAL | 6 | 100% |
| | | |

| RACE | NUMBER | PERCENT |
|-------|--------|---------|
| White | 6 | 100.0% |
| TOTAL | 6 | 100% |

WARD 3 DEMOGRAPHICS

| EDUCATION | NUMBER | PERCENT |
|-------------------|--------|---------|
| College or higher | 8 | 88.9% |
| Unknown | 1 | 11.1% |
| TOTAL | 9 | 100% |

| TOTAL | 9 | 100% |
|-------------------|--------|---------|
| \$100,000 or more | 1 | 11.1% |
| \$60,000-\$99,999 | 4 | 44.4% |
| \$30,000-\$59,999 | 1 | 11.1% |
| \$15,000-\$29.999 | 3 | 33.3% |
| INCOME | NUMBER | PERCENT |

| AGE | NUMBER | PERCENT |
|------------|--------|---------|
| 26-39 | 2 | 22.2% |
| 55-64 | 4 | 44.4% |
| 65 or over | 3 | 33.3% |
| TOTAL | 9 | 100% |

| GENDER | NUMBER | PERCENT |
|--------|--------|---------|
| Female | 5 | 56.6% |
| Male | 4 | 44.4% |
| TOTAL | 9 | 100% |

| HEALTH CARE | NUMBER | PERCENT |
|-------------------|--------|---------|
| Health insurance | 5 | 55.6% |
| Medicare | 1 | 11.1% |
| Medicare/pay cash | 1 | 11.1% |
| VA | 1 | 11.1% |
| VA/pay cash | 1 | 11.1% |
| TOTAL | 9 | 100% |

| MARITAL STATUS | NUMBER | PERCENT |
|--------------------------|--------|---------|
| Married/ Cohabitating | 8 | 88.9% |
| Single | 1 | 11.1% |
| TOTAL | 9 | 100% |

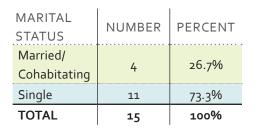
| RACE | NUMBER | PERCENT |
|-------------|--------|---------|
| African- | | |
| American/ | 1 | 11.1% |
| Black | | |
| White | 7 | 77.8% |
| Black, His- | 1 | 11.1% |
| panic | T | 11.190 |
| TOTAL | 9 | 100% |



WARD 4 DEMOGRAPHICS

| EDUCATION | NUMBER | PERCENT | AGE | NUMBER | PERCENT |
|---------------------------------|--------|---------|------------|--------|---------|
| Less than a high school diploma | 4 | 73.3% | 18 or less | 4 | 26.7% |
| College or higher | 11 | 26.7% | 19-25 | 1 | 6.7% |
| TOTAL | 15 | 100% | 26-39 | 2 | 13.3% |
| | | | 40-54 | 3 | 20.0% |
| INCOME | NUMBER | PERCENT | 55-64 | 2 | 13.3% |
| Under \$15,000 | 1 | 6.7% | 65 or over | 1 | 6.7% |
| \$15,000-\$29,999 | 1 | 6.7% | Unknown | 2 | 13.3% |
| \$60,000-\$99,999 | 9 | 60.0% | TOTAL | 15 | 100% |
| \$100,000 or more | 1 | 6.7% | | 1 | 1 |
| No income | 2 | 13.3% | GENDER | NUMBER | PERCENT |
| Don't know | 1 | 6.7% | Female | 10 | 66.5% |
| TOTAL | 15 | 100% | Male | 5 | 33.4% |
| | | | TOTAL | 15 | 100% |

| HEALTH CARE | NUMBER | PERCENT |
|---------------------|--------|---------|
| Health insurance | 10 | 66.7% |
| Health insurance/VA | 1 | 6.7% |
| Medicaid | 1 | 6.7% |
| Parents | 2 | 13.3% |
| VA | 1 | 6.7% |
| TOTAL | 15 | 100% |



| RACE | NUMBER | PERCENT |
|-------|--------|---------|
| White | 14 | 93.3% |
| Asian | 1 | 6.7% |
| TOTAL | 15 | 100% |



WARD 5 DEMOGRAPHICS

| EDUCATION | NUMBER | PERCENT | AGE | NUMBER | PERCENT |
|---------------------------------|-------------|------------------|----------------|--------|----------------|
| College or higher | 7 | 100.0% | 19-25 | 1 | 14.3% |
| TOTAL | 7 | 100% | 40-54 | 3 | 42.9% |
| | | | 55-64 | 1 | 14.3% |
| INCOME | NUMBER | PERCENT | 65 or over | 1 | 14.3% |
| \$30,000-\$59,999 | 3 | 42.9% | Unknown | 1 | 14.3% |
| \$60,000-\$99,999 | 3 | 42.9% | TOTAL | 7 | 100% |
| No income | 1 | 14.3% | | | |
| TOTAL | 7 | 100% | GENDER | NUMBER | PERCENT |
| | / | | | 1 | 1 |
| | , , | | Female | 3 | 42.9% |
| HEALTH CARE | NUMBER | PERCENT | Female Male | 3 | 42.9% 57.1% |
| HEALTH CARE Health insurance | | PERCENT 85.7% | | | |
| | NUMBER | | Male | 4 | 57.1% |
| Health insurance | NUMBER 6 | 85.7% | Male | 4 | 57.1% |



| Single | 1 | 14.3% |
|--------|--------|---------|
| TOTAL | 7 | 100% |
| | | |
| RACE | NUMBER | PERCENT |
| White | 7 | 100.0% |
| TOTAL | 7 | 100% |

6

Cohabitating

85.7%

WARD 6 DEMOGRAPHICS

Health insurance

TOTAL

| EDUCATION | NUMBER | PERCENT | AG |
|-------------------|--------|---------|-----|
| College or higher | 9 | 90.0% | 19- |
| Unknown | 1 | 10.0% | 26- |
| TOTAL | 10 | 100% | 40- |
| | | | 55- |
| INCOME | NUMBER | PERCENT | то |
| \$30,000-\$59,999 | 1 | 10.0% | |
| \$60,000-\$99,999 | 6 | 60.0% | GE |
| \$100,000 or more | 3 | 30.0% | Fer |
| TOTAL | 10 | 100% | Ma |
| | | | то |
| HEALTH CARE | NUMBER | PERCENT | |

10

10

100.0%

100%

| AGE | NUMBER | PERCENT |
|-------|--------|---------|
| 19-25 | 1 | 10.0% |
| 26-39 | 2 | 20.0% |
| 40-54 | 2 | 20.0% |
| 55-64 | 5 | 50.0% |
| TOTAL | 10 | 100% |

| GENDER | NUMBER | PERCENT |
|--------|--------|---------|
| Female | 7 | 70.0% |
| Male | 3 | 30.0% |
| TOTAL | 10 | 100% |

| MARITAL STATUS | NUMBER | PERCENT |
|--------------------------|--------|---------|
| Married/ Cohabitating | 9 | 90.0% |
| Single | 1 | 10.0% |
| TOTAL | 10 | 100% |



| RACE | NUMBER | PERCENT |
|-----------|--------|---------|
| White | 8 | 80.0% |
| African- | | |
| American/ | 1 | 10.0% |
| Black | | |
| Asian | 1 | 10.0% |
| TOTAL | 10 | 100% |

Focus Group Facilitator's Agenda

Community Themes & Strengths Assessment Focus Group



Facilitator's Agenda

- I. Welcome- (5 min)
 - a. Facilitator will welcome the group after the 30 minute dinner period is over
 - b. Introduce support staff
- II. Mobilizing for Action Through Planning and Partnership (MAPP): Process Overview (5 min)
 - a. Health Dept. support staff will give a brief overview of the MAPP process, where are we now in the cycle. Attendees have the handout at their table
 - b. Public health system-explain the *Missouri Public Health System at a Glance* display in the room
- III. Community Themes & Strengths Assessment Focus Group: Purpose, Process (5 min), Support staff will cover this
- IV. Introductions (5 min)
 - a. Participant introductions
 - b. Ground rules
- V. Discussion Questions: three questions (60 minutes)
 - a. Brainwriting for each question-3 min
 - b. Discussion for each question-17 min
- VI. Next Steps (5min)
 Focus group results and survey results will be used to develop overarching themes and strengths for Boone County
 Final report will be made available the end of this year, can be emailed a copy if requested
- VII. Evaluation and Close (5 min)

Focus Group Participant Evaluation Form

Focus Group Evaluation Questions

| Rate the extent to which you agree with the following statements. | Strongly Disagree | Disagree | Agree | Strongly Agree |
|--|----------------------|----------|-------|-------------------|
| I understand why my participation in today's focus group was important. | | | | |
| Participating in today's focus group was a good use of my time. | | | | |
| My facilitator created a safe environment for sharing my ideas. | | | | |
| My facilitator ensured all voices were heard. | | | | |
| I believe that diverse community perspectives were represented. | | | | |
| I believe the health topics identified reflect the health needs of my community. | | | | |
| I understand how information collected during today's event will be used. | | | | |
| The focus group process was well organized. | | | | |

| Please answer the following questions. |
|---|
| What did you like most about today's event? |
| |
| |
| |
| What do you think could have been improved? |
| |
| |
| Additional comments: |
| |
| |

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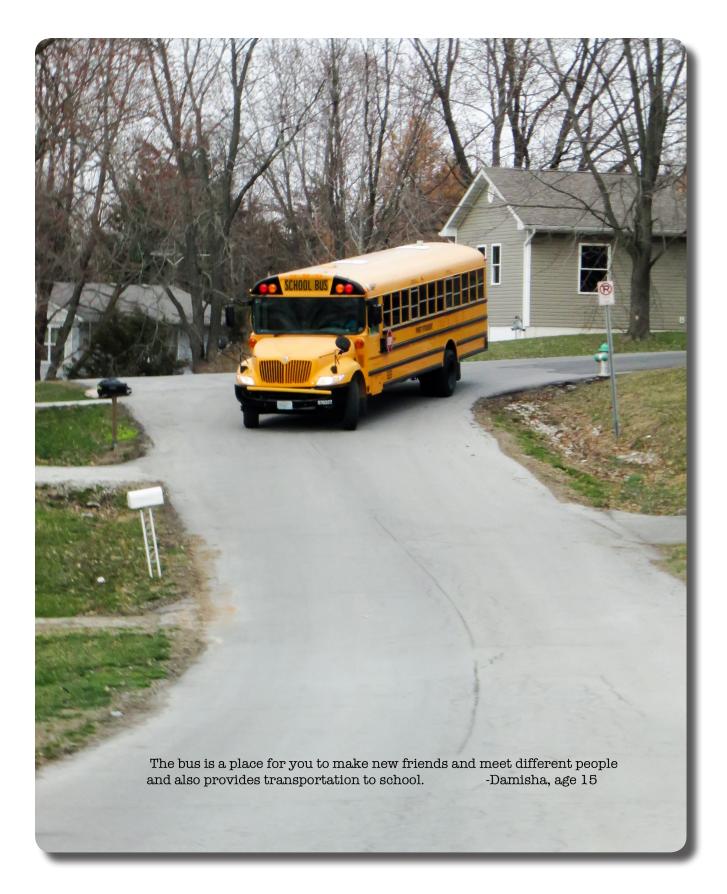
PhotoVoice - Central Missouri Community Action

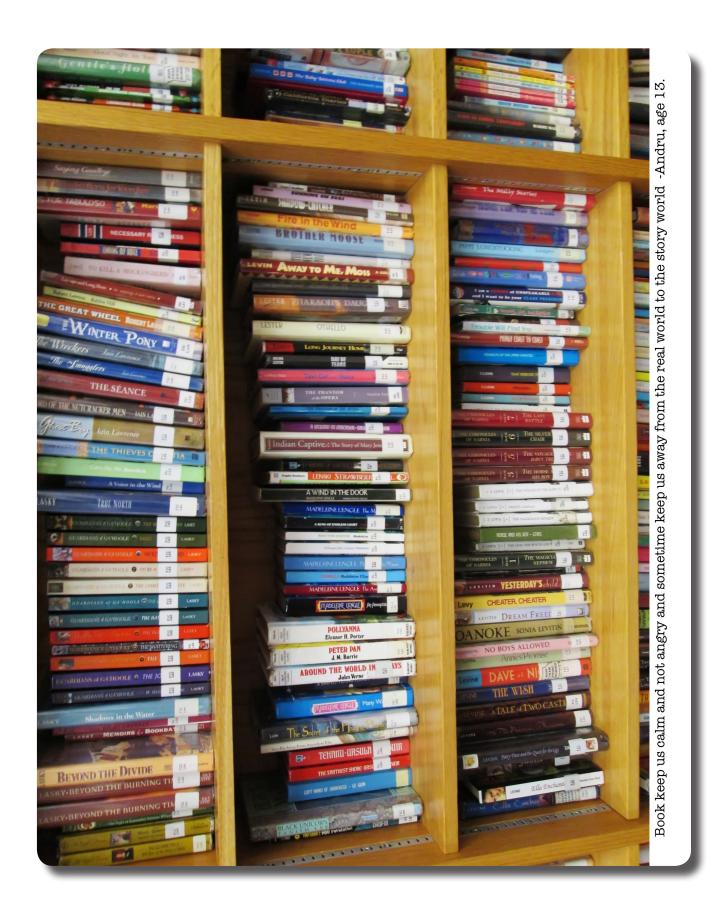
Central Missouri Community Action gave cameras to nine youth between the ages of 11-15 and asked them to take pictures of their community from their point of view. During the seven week project, the youth discussed topics such as basic needs, lifelong learning, relationships, and advocacy. These young photographers captured images that reinforce some of the common themes from the Community Themes and Strengths Assessment including but not limited to community, healthy eating, and bullying.

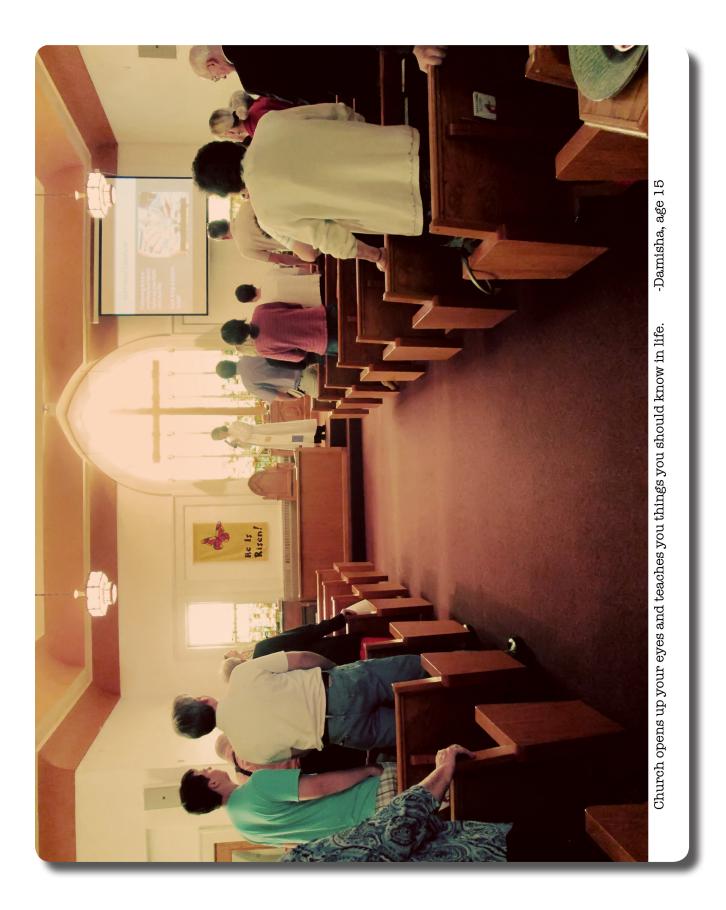


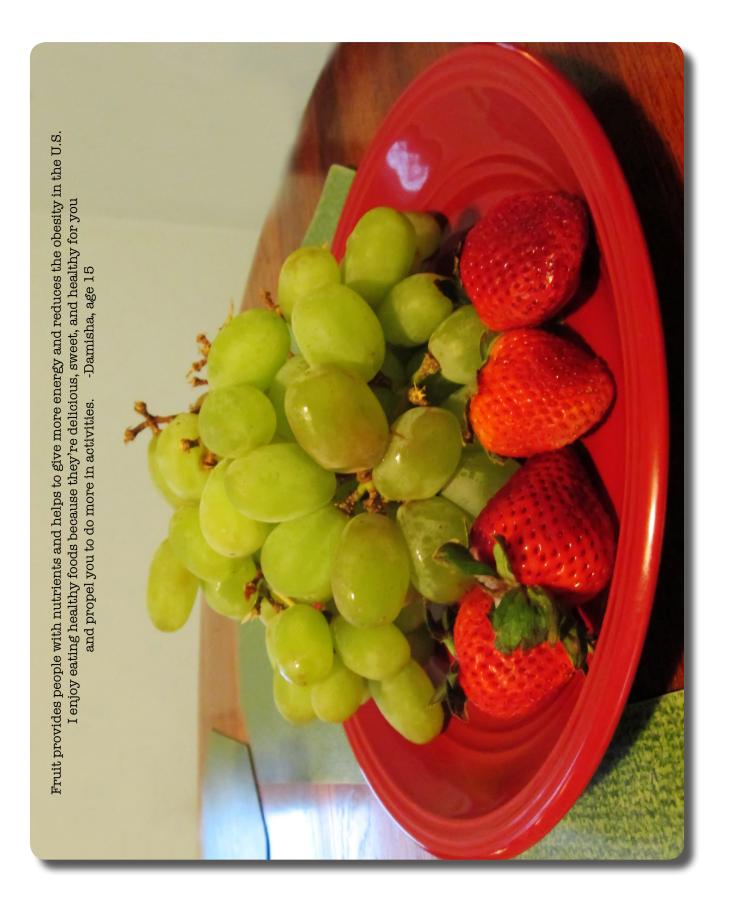
Parent will keep learning new thing about the world to teach to their kids so their kids can be better than them. -Andru, Age 13

You have to have two things to succeed in life: friends and work. Friends are important because they help you be happy. Work is not a job – it's something you want to do -Andru, age 13.

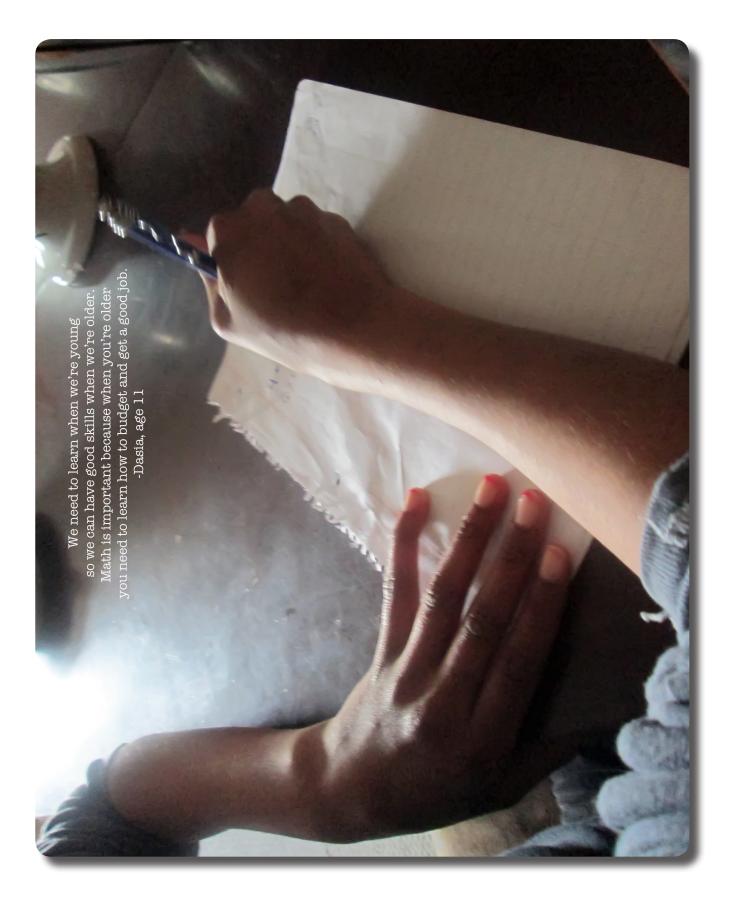


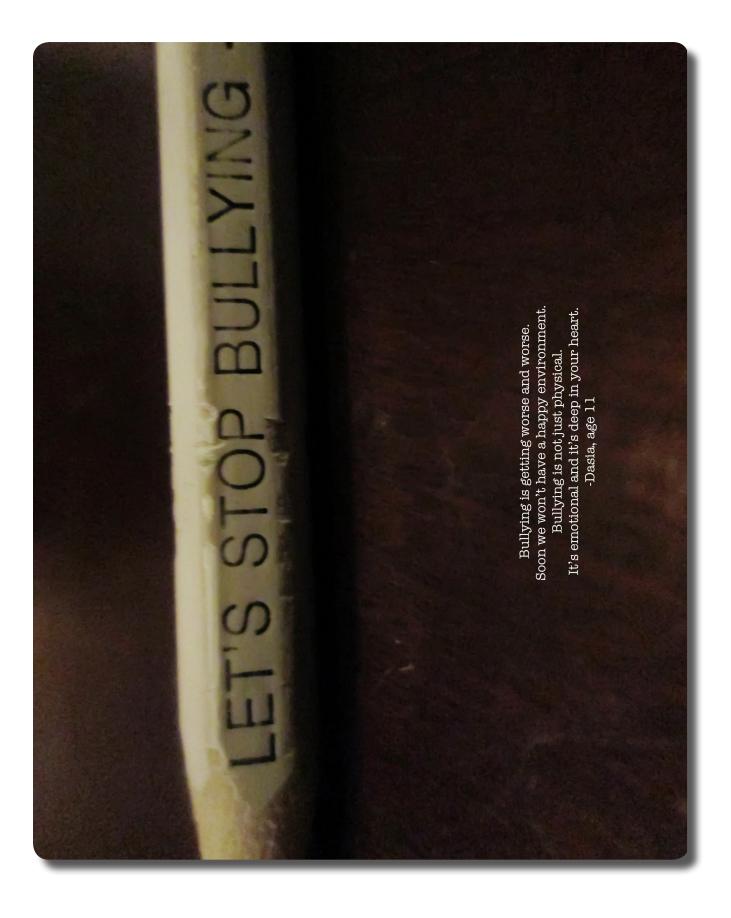






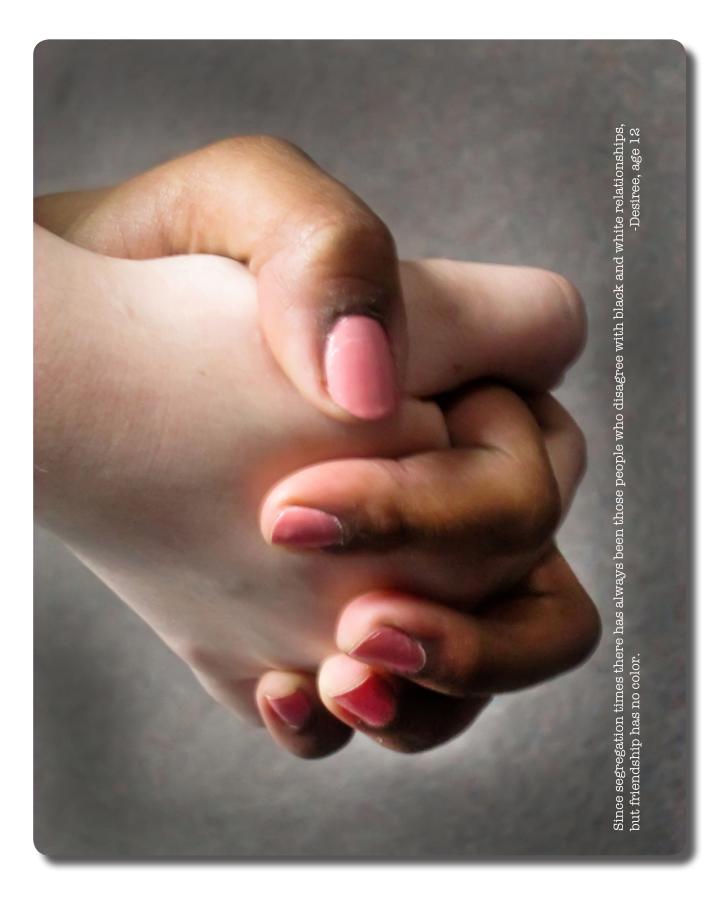


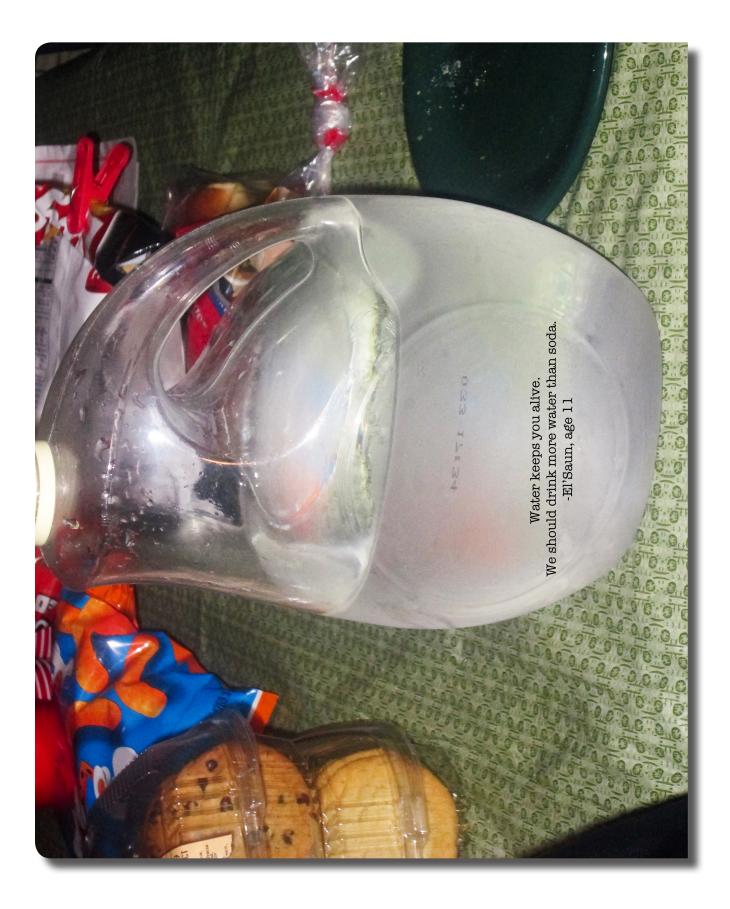


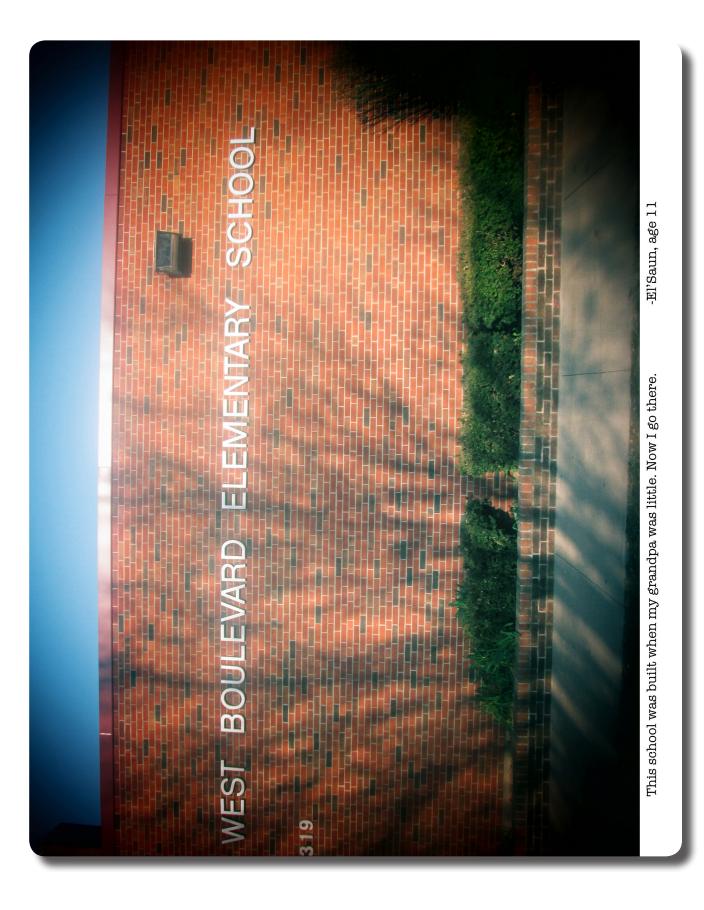




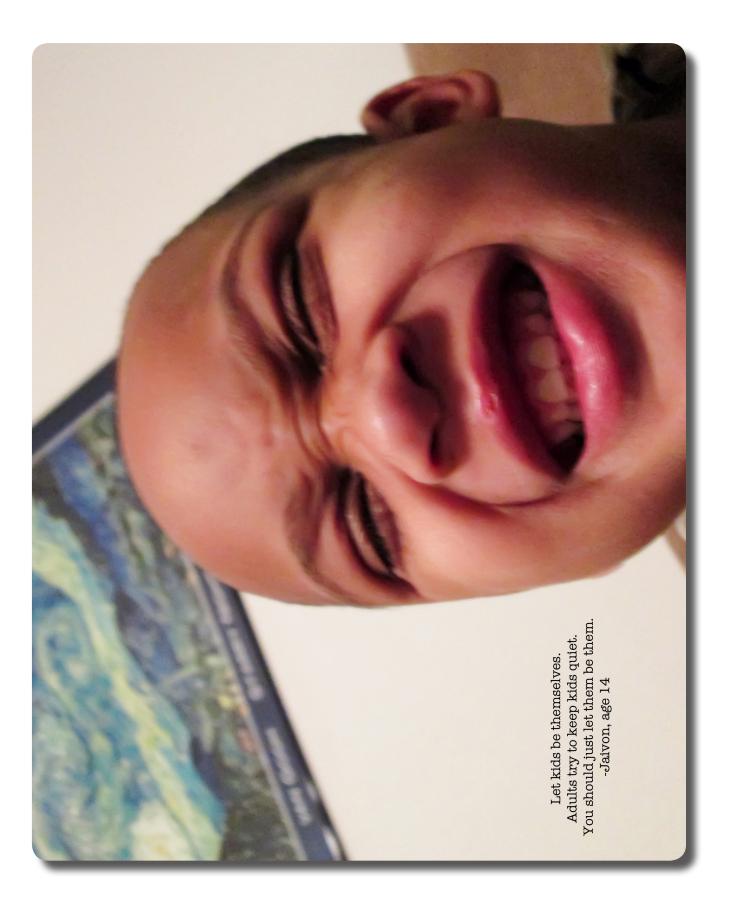


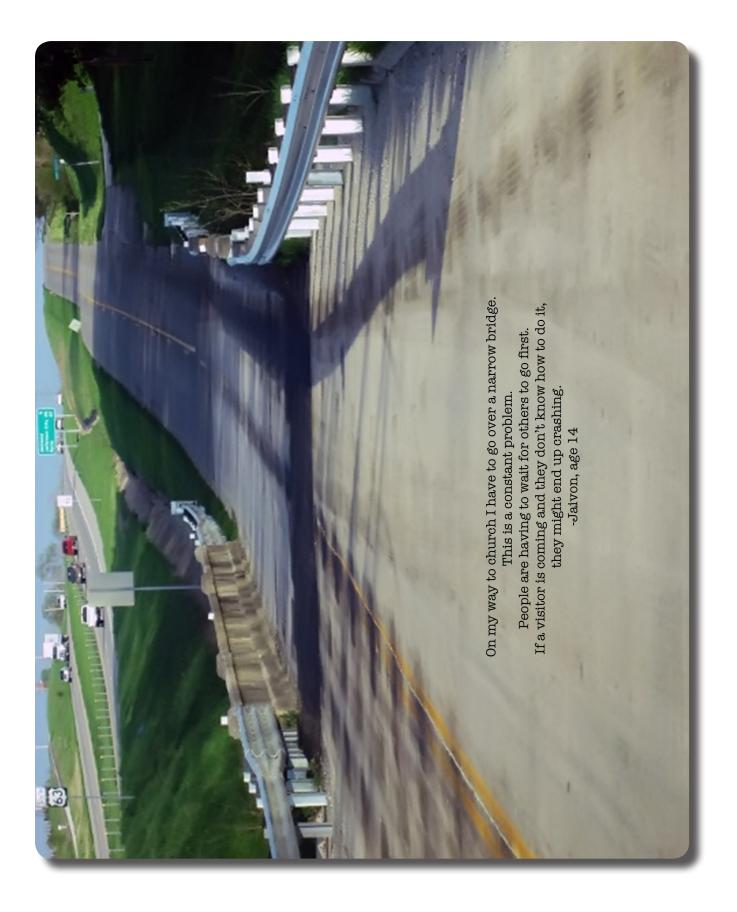


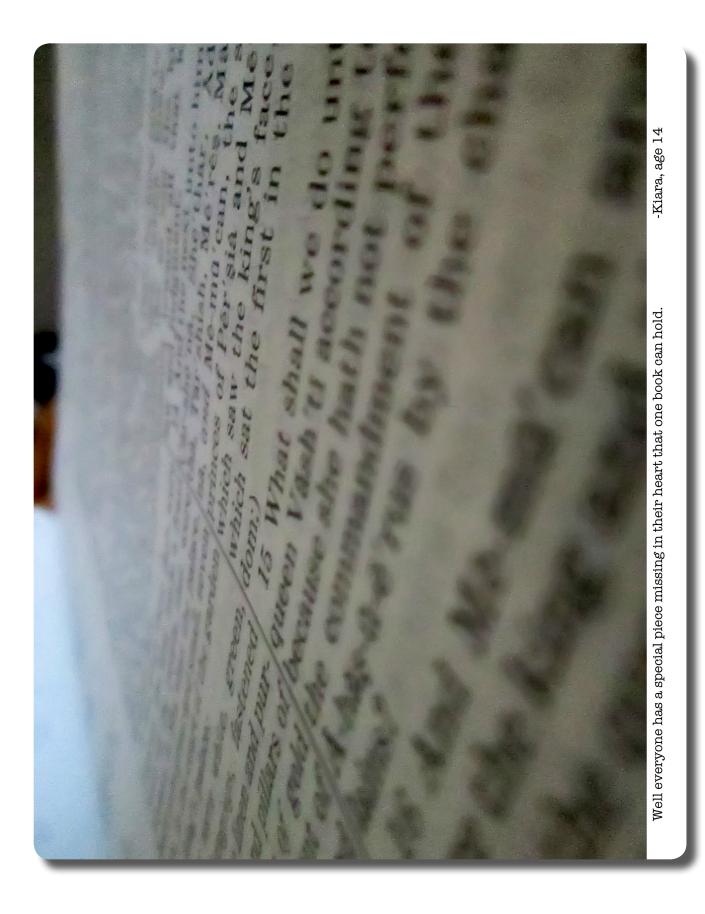






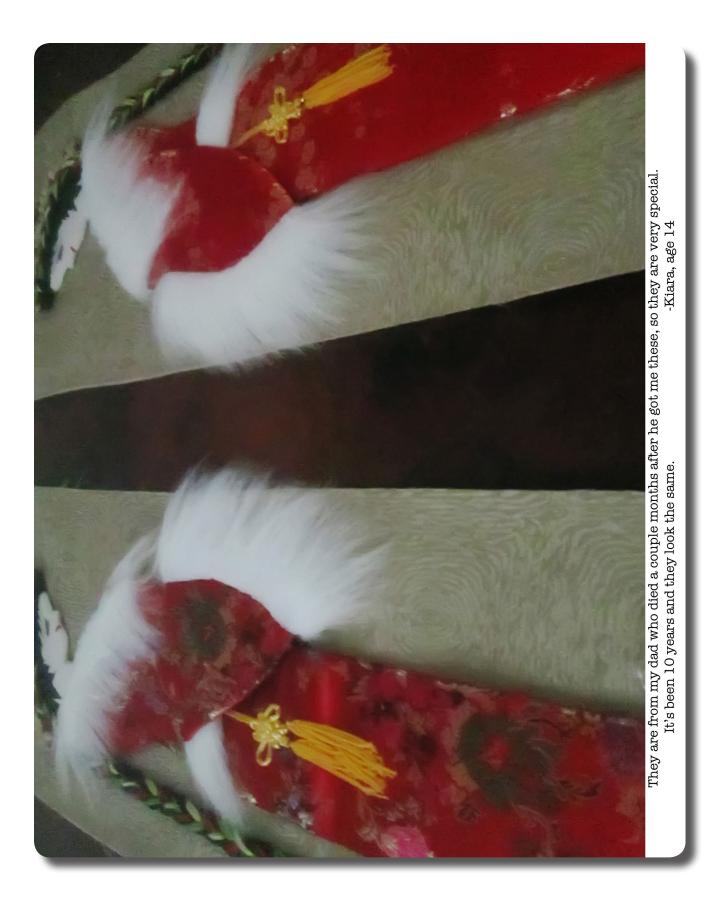






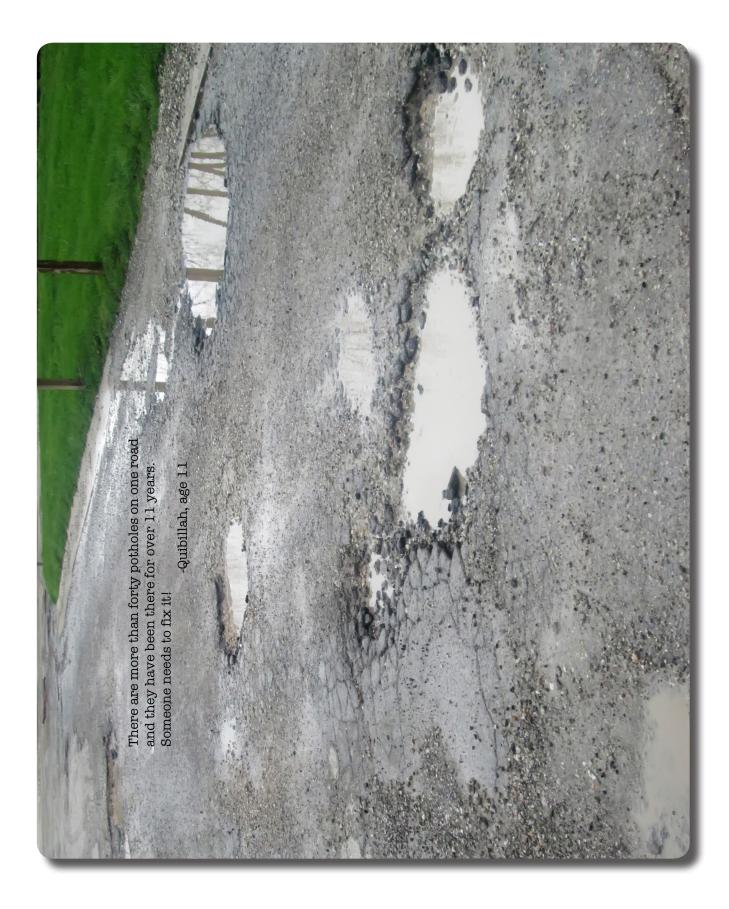


the stories that are told somehow, and sometimes they can affect the way you act toward people.





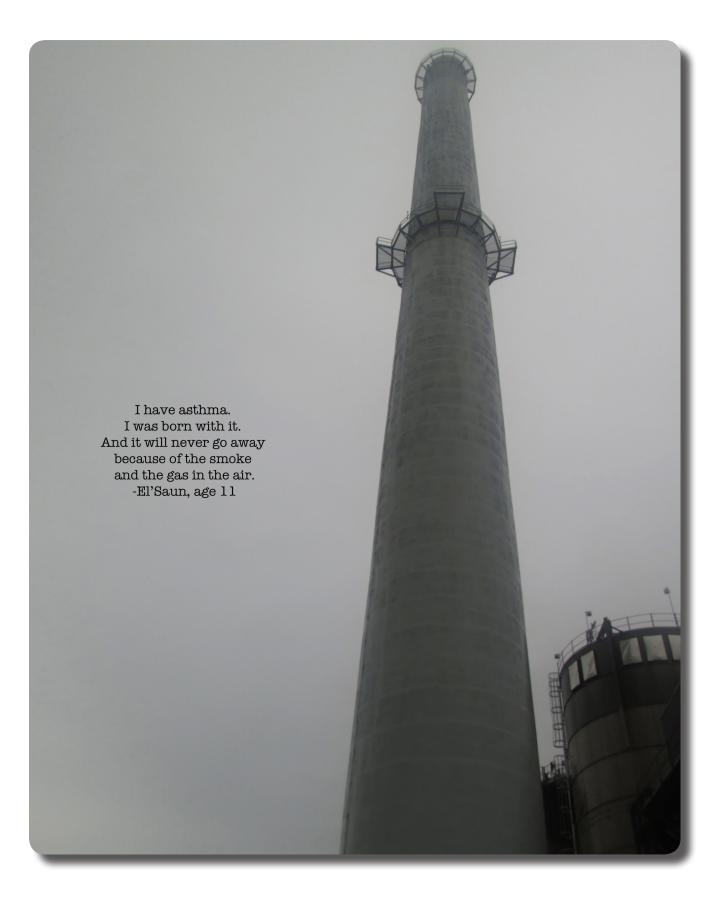
There's a rule at school that phones are not allowed. I think they have the rule because they thought we'd play on them all day and not listen to the teachers but it's so important to have a phone because there's a lot of violence going on and most moms are worried about their children getting hurt. -Quibillah, age 11











Community Themes & Strengths Assessment Fact Sheet

COMMUNITY THEMES & STRENGTHS ASSESSMENT

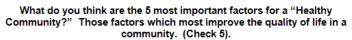
PROCESS

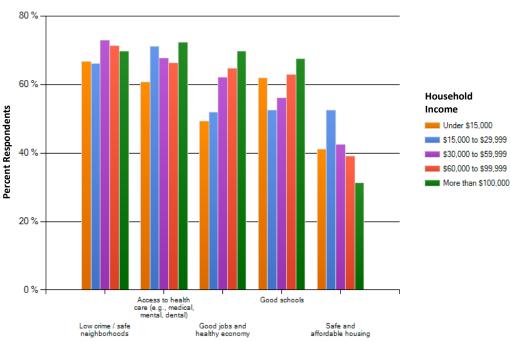
The Community Themes and Strengths Assessment is a vital part of our community health improvement process. During this phase, community thoughts, opinions, concerns and solutions are gathered. Feedback about the quality of life in our community and community assets are also gathered. The result of this phase is a strong understanding of community concerns, perceptions about quality of life, and a map of community assets. Community input was gathered by holding focus groups as well as developing and distributing a community survey. A representative sample of Boone County was targeted for input in both measures.

RESULTS

COMMUNITY HEALTH SURVEY: The Community Health Survey was distributed during the month of June with 1,653 surveys completed. Five survey questions were developed by the Community Themes and Strengths subcommittee. Results are as follows:

| What do you think are the five most important factors for a "Healthy Community?" | | Among adults, which five health conditions or behaviors have the greatest impact on overall community health? | | Among youth (age 0-18), which five health conditions or behaviors have the greatest impact on overall community health? | |
|--|-------|---|-------|---|-------|
| Low crime/safe neighborhood | 70.5% | Obesity | 43.6% | Drug abuse | 39.6% |
| Access to health care | 66.7% | Drug abuse | 42.4% | Bullying | 36.3% |
| Good schools | 60.3% | Mental health | 42.4% | Dropping out HS | 35.0% |
| Good jobs/healthy economy | 60.3% | Alcohol abuse | 36.1% | Obesity | 35.0% |
| Safe and affordable housing | 39.9% | Poor eating habits/choices | 29.6% | Mental health | 34.4% |





The top five most important factors for a healthy community were consistent among all household incomes.

Additionally, when asked to rate their satisfaction with the health of adults in Boone County, 34.3% of respondents said either satisfied or very satisfied while 21.9% were either dissatisfied or very dissatisfied. The remaining 43.8% were neutral.

When asked about the health of Boone County youth (age 0-18), 28% were either satisfied or very satisfied, while 27.1% were either dissatisfied or very dissatisfied. The remaining 44.9% were neutral.



COMMUNITY FOCUS GROUPS: CHAMP members facilitated eight focus groups, which were held between June 24th and July 17th. Focus groups were planned around geographic boundaries: Northern Boone, Southern Boone and the six City of Columbia Wards. A total of 72 Boone county residents participated in focus groups. Three questions were developed by the MAPP Core + team and asked at each focus group. Results are as follows:

| When thinking about health, what are the greatest strengths in our community? | What are the most important health related issues in our community? | What would help us achieve optimum physical, mental, cultural, social, spiritual, and economic health? |
|--|--|--|
| Health Care: many medical providers, hospitals, clinics, options for un-insured; Community: people care for one another, friendly, involved; Food and Nutrition: community gardens, farmers markets, "Buddy Packs"; Infrastructure: walk-able/bike-able community | Public Safety: bicyclist safety, increasing violence, gun violence, unsafe driving habits; Substance Use: excessive alcohol consumption, youth drug use; Vulnerable Populations: aging population, homeless, veterans, disabled; Economy: increasing unemployment for minorities, high cost of living, "fast cash" stores, growing poverty, reduction in funding for programs | Community : More engaged community, community-based events, get to know your neighbor, revitalize neighborhood associations; Economy : More economic opportunities, living wage jobs, funding to address issues, financial education |

| Each focus group had concerns specific to their geographic area: | | | |
|--|---|--|--|
| Ward 1 | fewer "fast cash" and liquor stores, better food from supplemental programs | | |
| Ward 2 | jobs that don't require advanced degree, nutrition information in restaurants | | |
| Ward 3 | a sidewalk for wheelchairs, a neighborhood park | | |
| Ward 4 | policies to influence health and healthy behavior, focus efforts on young children | | |
| Ward 5 | healthy and local food mobiles, funding distribution tied to best practices/research | | |
| Ward 6 | changes to policy and the built environment, more tax initiatives for vulnerable populations/services | | |
| Northern Boone | storm shelter in Harrisburg, improved GPS for ambulance response | | |
| Southern Boone | a recreation center in Ashland, a method for sharing community information | | |

CONCLUSION

The Community Themes and Strengths assessment gives our community members a voice in this process. Focus group responses highlight an upstream approach to community health, with an emphasis on health care, nutrition, public safety and a strong community while the survey responses highlight the downstream impacts of poor health, such as obesity, mental health, and substance use. The information gathered during the community themes and strengths assessment will be used in conjunction with the other assessments to identify our strategic issues and reach our community vision of optimum physical, mental, cultural, social, spiritual and economic health.

ACKNOWLEDGEMENTS

Subcommittee Members: Leigh Britt- City of Columbia, Jessica Macy- Boone County Council on Aging, Sarah Klaassen- Central Missouri Community Action, Jackie Herzberg- MedZOU, Barbara Buffaloe- City of Columbia, Rev. Carmen G. Williams- Russell Chapel Christian Methodist Episcopal Church, Eduardo Crespi- Centro Latino de Salud, Ryan Worley- YC2, Rebecca Roesslet- Columbia/Boone County Public Health and Human Services, Jenny Grabner-Southern Boone Learning Garden, Steve Kuntz- Mid-Missouri Legal Services, Scott Olsen- Boone County Fire Protection District, Valorie Livingston- Boys and Girls Club, Nick Foster- Voluntary Action Center, Brittney Vigna-YC2 and Kelsey Lammy- YC2

Additional thanks to everyone who participated in the focus groups and completed the survey.





Phase Four: Identify Strategic Issues



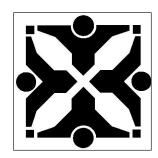
Columbia/Boone County Public Health & Human Services This page left intentionally blank



Identifying strategic issues is the fourth phase of the MAPP Process. Strategic issues are critical challenges to be addressed, as well as significant opportunities to be leveraged, in order for a community to achieve its vision. Phase Four was conducted between August and November 2013, during which time the MAPP Steering Committee met on five occasions to review data and identify overarching strategic issues. The CHAMP group approved the following strategic issues in November 2013:

- How do we prevent crime and promote safe and healthy neighborhoods where people live, work, and play?
- How do we create a community and environment which provides access, opportunities, and encouragement for healthy lifestyles?
- How can we increase access to and utilization of comprehensive health services?
- How do we address the root causes of health disparities to ensure health equity?
- How do we reduce risky behaviors and the stigma associated with behavioral health?

At the conclusion of Phase Four, work groups were formed around these five strategic issues. These work groups will begin meeting in Phase Five to formulate goals and strategies.









Our PROCESS

Phase Four began with the review of data collected in Phase Three. This data was distributed to the CHAMP members during the August 2013 CHAMP meeting. Following the August meeting, CHAMP members were given an opportunity to share their ideas for strategic issues via an online survey.

Survey Question:

3

"Based upon presentations and discussions surrounding the four community assessments, please list the top five strategic issues you feel must be addressed in order to achieve the community vision."

The qualitative information received from the 14 survey responses was categorized and shared with the Steering Committee towards the conclusion of the strategic issue development process (Appendix). CHAMP members were also given a series of questions to answer about each of the four assessments. These responses (Appendix) were shared with the Steering Committee at a later meeting. Both the survey responses and the question responses were shared with the group after they were provided with an opportunity to work through the strategic issue identification process without external influences.

The Steering Committee took the lead role in identifying strategic issues over the course of five meetings. In the first meeting, members reviewed the assessment data presented in the August 2013 CHAMP meeting, agreed upon a process for identifying the strategic issues, and completed a brainstorming exercise. The brainstorming exercise consisted of committee members divided into four teams of four. Each team spent five minutes first identifying critical challenges, then five minutes identifying opportunities to be leveraged from each of the four MAPP assessments conducted in Phase Three. Ideas from each assessment were captured on colored index cards. The cards were then displayed on a "sticky wall" and grouped by commonalities. The information was then consolidated into common categories prior to the next Steering Committee meeting (Appendix).

In the second meeting, members reviewed the information from the previous meeting with a goal of determining which issues were essential to achieve our vision. Data from each of the four assessments was closely reviewed and collapsed into common groups/themes. These groups/themes were referred to as "buckets." The CHAMP responses to the assessment questions, along with the buckets, were pulled together to highlight commonalities. This information was then organized into a mind map (Appendix) for visualization.

Our PROCESS

In the third meeting, members broke into three groups of five to identify the themes pulled from the data found in each of the four assessments. This was done using the tool from the 2013 MAPP User's Handbook: pg. 89 (Appendix). Five key themes were identified: access to health care; safe and healthy neighborhoods (crime and safety); healthy lifestyles; behavioral health (mental health and substance use); and disparities in health outcomes. Groups reconvened to further explore cross-cutting themes, with the tool from the MAPP User's Handbook: pg. 92 "Using the 5 Whys" (Appendix). The strategic issues suggested by CHAMP in August were shared with the Steering Committee during this meeting.

In the fourth meeting, members reviewed the core themes from meeting three and finished the 5 Whys exercise. Strategic issue examples from other communities were shared with the group. The Steering Committee broke into small groups to draft strategic issues from each of the five key themes.

During the fifth meeting, members further developed the disparities strategic issue and finalized the other four. Potential stakeholders were identified in this meeting. Stakeholders are identified as community members who are knowledgeable about the themes within the five strategic issues. The stakeholder involvement will continue into Phase Five: Formulate Goals and Strategies.

Our PROCESS

PRELIMINARY RESULTS

- 1. Safe Neighborhoods: How do we prevent crime and promote safe and healthy neighborhoods where people live, work, and play?
- 2. Healthy Lifestyles: How do we create a community and environment which provides access, opportunities, and encouragement for healthy lifestyles?
- 3. Access to Health Care: How can we increase access to and utilization of comprehensive health services?
- 4. Disparities: How can we develop skills, knowledge, and education to address health disparities?
- 5. Behavioral Health: How do we reduce risky behaviors and the stigma associated with behavioral health?

RESULTS

Steering Committee members presented the five strategic issues to CHAMP members during the November 2013 CHAMP meeting. At the conclusion of each strategic issue presentation, CHAMP members reviewed a checklist (Appendix) with the following questions:

- Is the issue related to our vision?
- Will the issue affect our entire community?
- Is the issue something that will affect us now and in the future?
- In order to address the issue, do we need leadership support?
- Are there long term consequences of us not addressing this issue?
- Does the issue require involvement of more than one organization?

Following a CHAMP group discussion, the disparity strategic issue was revised to:

• How do we address the root causes of health disparities to ensure health equity?

The five strategic issues were finalized at the November 2013 CHAMP meeting. This meeting marked the end of Phase Four: Identifying Strategic Issues.



DISSEMINATION OF PHASE FOUR RESULTS

As previously mentioned, the strategic issues were shared with CHAMP members during the November 2013 CHAMP meeting. The December 2013 MAPP newsletter (Appendix) contained the strategic issues. The newsletter was shared with CHAMP members, Picturing Our Future participants from Phase Two, and Community Focus Group participants from Phase Three. The MAPP newsletter was also posted on the City of Columbia website, http://www.GoColumbiaMO.com/Health/MAPP.php.

LIMITATIONS

During our planning process for Phase Four, we underestimated the number of Steering Committee meetings that would be needed to identify the strategic issues. In order to finalize our strategic issues prior to our November CHAMP meeting, we had to add a last minute meeting to our timeline. We also decided early in the process not to review strategic issue examples from other communities. When we altered that plan, and provided examples, the process became more focused and efficient.

EVALUATIONS

Phase Four was evaluated with an online survey of Steering Committee members. Survey questions focused on the process used to identify the issues. Evaluation results were shared with the MAPP Core Team for planning purposes.

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Appendices

Qualitative Survey Data From August 2013 CHAMP Meeting

Vision Statement: A vibrant, diverse, and caring community in which all individuals can achieve their optimum physical, mental, cultural, social, spiritual, and economic health



Strategic Issues Survey

Based upon presentations and discussions surrounding the four community assessments, please list the top five strategic issues you feel must be addressed in order to achieve the community vision?

Response 1:

- Stronger neighborhoods that lead to reduced crime, better infrastructure, and ability to discern community needs at a micro-level
- Increase formal partnerships around key issues
- Substance use will help on the crime and safety aspect plus the community health issues of concern to residents
- ACA and Medicaid expansion increase the number of people covered with basic care and preventative services
- Obesity support environmental conditions that make healthy eating and activity the norm

Response 2:

- Revitalizing neighborhood associations to strengthen our community and reduce crime
- Health disparities related to maternal child health
- Substance use
- Sidewalks
- Improve community communication

Response 3:

- More employment opportunities that don't require a degree with a living wage
- More affordable housing options
- Equity in employment and housing
- Apprenticeship opportunities for at risk youth to alleviate crime
- Access to healthy foods in areas where there are none

Response 4:

- Affordable Care Act
- Assure workforce

- Promote healthy economy and make Columbia an attractive place for businesses
- Positive youth development programs (include healthy eating, physical activity, sexual health, alcohol/drug abuse prevention, etc.)
- Mobilization of partnerships resources with everyone working toward a common (well defined and formalized) goal

Response 5:

- Assist in the implementation of the ACA
- Work toward the expansion of Medicaid
- Availability of nutritious, affordable foods
- Availability of adequate housing
- Reduction of crime, particularly violent crimes

Response 6:

- Mobilize community based partnerships
- Educate/empower members of the public regarding health disparities and interventions
- Prepare the public for implementation of the Affordable Care Act and take advantage of its benefits
- Partner with the schools & other community based organizations to educate & empower parents to assist their children in adopting healthy behaviors
- Ensure that public health is actively involved in public policy development at the local & state level

Response 7:

- Safe community
- Disparities in health status
- Substance abuse/mental health issues
- Obesity
- Availability of nutritious foods county-wide

Response 8:

- Disparity among different groups, especially in the minority Black/AA population
- Focus on neighborhood efforts, building a sense of community to work together on safety, healthy living, exercise, community gardens, etc.
- Formalize partnerships; continue to build on the good that we do
- Focus on education and outreach to promote healthy living

Response 9:

- Poverty
- Health disparities (racial)
- Obesity/overweight issues (affects diabetes, heart disease, quality of life, etc.)

• Drug/alcohol use

Response 10:

- Health disparities in race and class
- Social determinants: transportation, affordable housing
- Access to health care (including policies/expansion related to Affordable Care Act)

Response 11:

- Disparities between blacks and whites
- Build community by focusing on neighborhoods
- Alignment of resources
- Mobilize partnerships
- Find the gaps in data and work to fill them in (i.e. figure out how the student populations really effects #s we make decisions by)

Response 12:

- Disparities in health status and determinants of health
- Obesity, especially in children
- Safety and violence prevention
- Enhancing and formalizing partnerships
- Access to health care for low income people

Response 13:

- Disparity we need to aggressively combat the existing disparities in health, earnings, and education and job attainment in our African-American population
- Health health care coordination and case management for low-income African-American residents, preventative medical and dental health care provision regardless of ability to pay
- Achievement support the African-American youth with programs and services that reduce the achievement gap and encourage completion of high school education
- Obesity create community-wide health and wellness programs and services focused on reducing obesity rate in our population
- Safety public safety in the county with adequate police staffing, low crime rate, and laws that reduce recidivism in offenders

Response 14:

- Disparity this was so evident in all of the data
- Disadvantaged youth
- Obesity
- Good jobs/transportation to jobs
- Elderly/transportation for elderly

Challenges and Opportunities Brainstorming, Steering Committee Meeting #1 Results Grouped by Common Categories

Health Disparities

- Health disparities related to maternal child health
- Disparities in health status
- Disparities among different groups, especially in the minority-Black/AA population
- Health disparities (racial)
- Health disparities in race and class
- Disparities between blacks and whites
- Disparities in health status and determinants of health
- Disparity- we need to aggressively combat the existing disparities in health, earnings, and education and job attainment in our African-American population
- Disparity- this was so evident in all of the data
- Educate/empower members of the public regarding health disparities and interventions

Crime and Safety

- Revitalizing neighborhood associations to strengthen our community and reduce crime
- Stronger neighborhoods that lead to reduced crime
- Apprenticeship opportunities for youth at risk to alleviate crime
- Reduction of crime, particularly violent crimes
- Safe community
- Safety and violence prevention
- Public safety in the county with adequate police staffing, low crime rate, and laws that reduce recidivism in offenders
- Substance use-will help on the crime and safety issue
- Focus on neighborhoods efforts-building a sense of community to work together on safety

Mobilize partnerships/align resources

- Increase formal partnerships around key issues
- Mobilization of partnerships to consolidate resources with everyone working towards a common (well defined and formalized) goal
- Mobilize community based partnerships
- Formalize partnerships; continue to build on the good that we do
- Alignment of resources
- Mobilize partnerships

Obesity

- Obesity-support environmental conditions that make health eating and activity the norm
- Obesity
- Obesity/overweight issues (affects diabetes, heart disease, quality of life, etc)
- Obesity, esp. in children
- Obesity- create community-wide health and wellness programs and services focused on reducing obesity rate in our population

• Obesity

Employment opportunities

- More employment opportunities that don't require a degree with a living wage
- Good jobs/transportation to jobs
- Combat disparities in earnings and job attainment in our African-American population
- Make Columbia an attractive place for businesses
- Equity in employment

Youth education and prevention programming

- Positive youth development programs (include healthy eating, physical activity, sexual health, alcohol/drug abuse prevention etc)
- Partner with the schools and other community based organizations to educate and empower parents to assist their children in adopting healthy behaviors
- Focus on education and outreach to promote healthy living
- Safety and violence prevention
- Support the African-American youth with programs and services that reduce the achievement gap and encourage completion of High School education

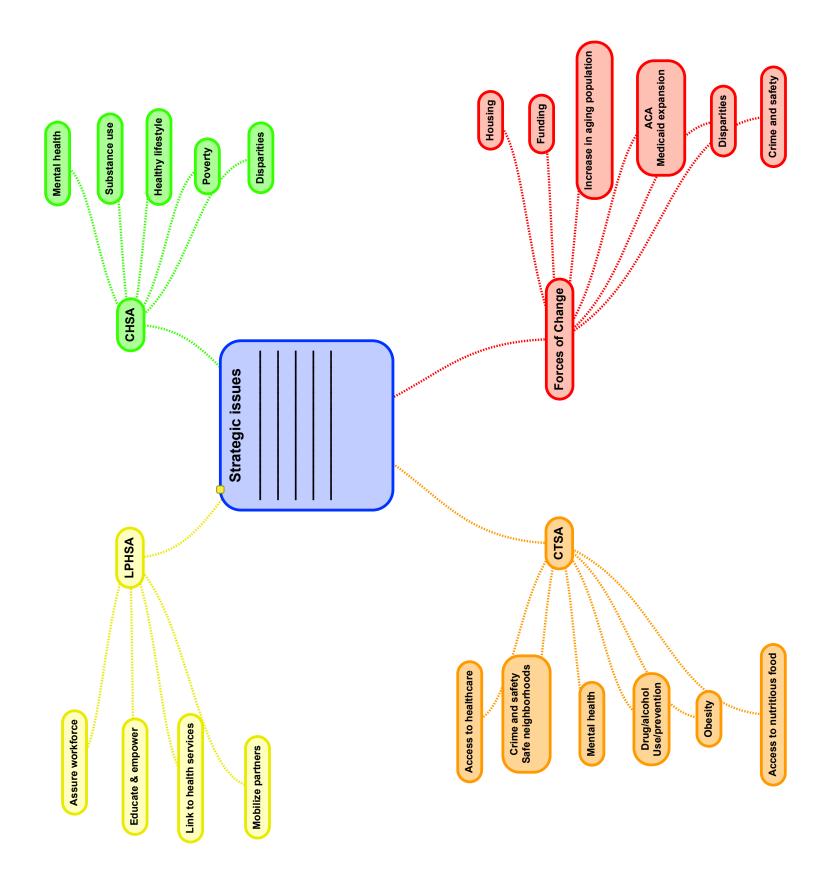
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Mind Map, Steering Committee Meeting #2

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Identify Strategic Issues MAPP Tool, Steering Committee Meeting #3

| | What themes did you see among three or more of the assessments? What data points informed these themes? |
|------------|--|
| THEME: | |
| CTSA Data | |
| CHSA Data | |
| LPHSA Data | |
| FoC Data | |
| | |
| THEME: | |
| CTSA Data | |
| CHSA Data | |
| LPHSA Data | |
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| CTSA Data | |
| CHSA Data | |
| LPHSA Data | |
| FoC Data | |

"Using the 5 Why's" MAPP Tool, Steering Committee Meeting #3

Determine Root Causes of Health Issues: Using the 5 Whys

Consider using this worksheet to identify strategic issues that represent the root causes of poor health or community conditions.

What Are the 5 Whys?

The 5 Whys are one way to systematically identify root causes to solve a specific problem. It may also help you determine how different root causes of an issue are related to one another. It should focus on the whys and not be used to identify who or to place blame on a person or organization. It is a systematic way to solve problems and to consider causeeffect relationships.

When Should We Use the 5 Whys?

It should be used when a group is working to solve a problem. It is especially useful as part of a process to solve complex problems where the real cause of the problem is unclear. It should be used to identify the root cause of a problem, which if eliminated, would prevent a problem from reoccurring. The 5 Whys are most useful when complex techniques or statistical analysis are not available or useful.

How Do the 5 Whys Work?

The 5 Whys are a set of questions that help get beyond the surface of a problem and peel away the layers of symptoms in order to identify the root causes of a problem or condition. This is done by asking the question "why?" five times in order to get to the root cause. Sometimes fewer questions identify the root cause and sometimes you may need to ask the question more than five times. The questioning can stop once the group working together on the issue agrees that it's identified the root cause of a problem.

Here's how it works:

- 1. Write down the specific issue. Ensure that the issue is the current condition. This helps the group formalize the problem and ensure that they agree on and focus on the same problem. Use data to describe the issue when possible (e.g., Happy County's teen pregnancy rates rose 15 percent from 2011 to 2012).
- 2. Ask why the problem is occurring. Write the answer below the problem.
- 3. If the answer provided does not identify the root cause of the problem that you wrote in the first step, ask why the problem is occurring again and write that answer down.
- 4. Complete the second and third steps until the group agrees that the problem's root cause is identified.

The 5 Whys can be used on their own or along with a fishbone diagram. A fishbone diagram helps explore all potential root causes of a particular issue or problem. Once you identify the many potential causes or issues by using a fishbone diagram, then you can use the 5 Whys to closely examine each one to ensure you identify the root cause(s). For more information on fishbone diagrams, visit: www.isixsigma.com/tools-templates/cause-effect/cause-and-effect-aka-fishbone-diagram/.

Example of 5 Whys

PROBLEM OR ISSUE:

The rate of primary care doctors in Happy City who accept Medicaid has decreased over the past five years.

- 1. Why is this problem happening? Providers are frustrated with high rates of appointment no-shows in Medicaid patient population.
- 2. Why is the problem stated in #1 happening? Patients do not always have reliable transportation to medical appointments.
- 3. Why is the problem stated in #2 happening? Providers are located in areas of the city far from where the majority of Medicaid patients live.
- 4. Why is the problem stated in #3 happening? Providers are concerned about safety of their patients and their staff by locating practices in particular areas.
- 5. Why is the problem stated in #4 happening? Rates of crime are high in areas of the city with high proportion of Medicaid patients.



5 Whys Worksheet

WORKSHEF

Use the worksheet below and on the next page to guide you in completing the 5 Whys. If needed, add entries to ask the question a few more times until the group agrees that the root cause of the problem or issue is identified.

Once the group agrees that the root cause of the problem has been identified, the team can move forward in deciding what action to take to act upon the root cause. Add additional entries to the worksheet to allow you to do this for each key problem you're facing.

PROBLEM OR ISSUE:

| 1. | Why is this problem happening? | |
|-------|--|--|
| 2. | Why is the problem stated in #1 happening? | |
| 3. | Why is the problem stated in #2 happening? | |
| 4. | | |
| 5. | Why is the problem stated in #4 happening? | |
| PROBI | LEM OR ISSUE: | |
| 1. | | |
| 2. | | |
| 3. | Why is the problem stated in #2 happening? | |
| 4. | Why is the problem stated in #3 happening? | |

5. Why is the problem stated in #4 happening?



Determine Root Causes of Health Issues: Using the 5 Whys

PROBLEM OR ISSUE:

| | 1. | . Why is this problem happening? | | | | |
|-----|------|--|--|--|--|--|
| | | | | | | |
| | 2. | Why is the problem stated in #1 happening? | | | | |
| | | | | | | |
| ; | 3. | Why is the problem stated in #2 happening? | | | | |
| | | | | | | |
| | 4. | Why is the problem stated in #3 happening? | | | | |
| | | | | | | |
| | 5. | Why is the problem stated in #4 happening? | | | | |
| | | | | | | |
| _ | | | | | | |
| | | | | | | |
| PR(| OBLE | M OR ISSUE: | | | | |
| | | | | | | |
| | 1. | Why is this problem happening? | | | | |
| _ | | | | | | |
| | 2. | Why is the problem stated in #1 happening? | | | | |
| | | | | | | |
| - | | | | | | |
| ; | 3. | Why is the problem stated in #2 happening? | | | | |
| _ | | | | | | |
| | 4. | Why is the problem stated in #3 happening? | | | | |
| | | | | | | |
| - | | | | | | |
| | F | Why is the problem stated in #4 hoppening? | | | | |
| | 5. | Why is the problem stated in #4 happening? | | | | |

Strategic Issues Checklist From November 2013 CHAMP Meeting

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Vision Statement: A vibrant, diverse, and caring community in which all individuals can achieve their optimum physical, mental, cultural, social, spiritual, and economic health.

| Strategic Issue | Is the issue related to our vision? | Will the issue affect our entire community? | Is the issue something that will affect us now and in the future? | In order to address the issue, do we need leadership support? | Are there long- term consequences of us not addressing this issue? | Does the issue require involvement of more than one organization? |
|---|-------------------------------------|---|--|--|--|---|
| Safe Neighborhoods How do we prevent crime and promote safe and healthy neighborhoods where people live, work, and play? | □ Yes □ No | □ Yes □ No | □ Yes □ No | □ Yes □ No | □ Yes □ No | □ Yes □ No |
| Healthy Lifestyle How do we create a community and environment which provides access, opportunities, and encouragement for healthy lifestyles? | □ Yes □ No | 🗆 Yes 🗆 No | □ Yes □ No | □ Yes □ No | □ Yes □ No | □ Yes □ No |
| Access to Care How can we increase access to and utilization of comprehensive health services? | □ Yes □ No | 🗆 Yes 🗆 No | □ Yes □ No | 🗆 Yes 🗆 No | □ Yes □ No | 🗆 Yes 🗆 No |



Vision Statement: A vibrant, diverse, and caring community in which all individuals can achieve their optimum physical, mental, cultural, social, spiritual, and economic health.

| Strategic Issue | Is the issue related to our vision? | Will the issue affect our entire community? | Is the issue something that will affect us now and in the future? | In order to address the issue, do we need leadership support? | Are there long- term consequences of us not addressing this issue? | Does the issue require involvement of more than one organization? |
|---|-------------------------------------|---|--|--|--|---|
| Disparities How do we address the social, economic, and political systems at the root of health disparities to ensure health equity? | □ Yes □ No | 🗆 Yes 🗆 No | 🗆 Yes 🗆 No | □ Yes □ No | □ Yes □ No | □ Yes □ No |
| Behavioral Health How do we reduce risky behaviors and the stigma associated with behavioral health? | 🗆 Yes 🗆 No | 🗆 Yes 🗆 No | 🗆 Yes 🗆 No | 🗆 Yes 🗆 No | 🗆 Yes 🗆 No | 🗆 Yes 🗆 No |

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December 2013 MAPP Newsletter

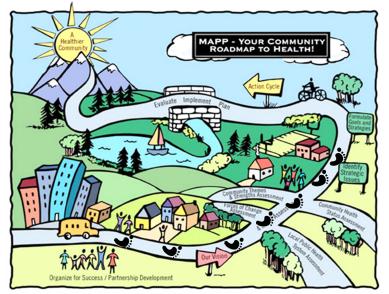
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Our Vision: A vibrant, diverse, and caring community in which all individuals can achieve their optimum physical, mental, cultural, social, spiritual, and economic health.

December 2013

Mobilizing for Action through Planning and Partnership



Strategic Issues Identified

hase four of the MAPP process, Identifying Strategic 1. How do we prevent crime and promote safe and are identified as fundamental policy choices or play? critical challenges that must be addressed in order for 2. How dowe create a community and environment which our community to achieve its stated vision. In identifying provides access, opportunities, and encouragement for and developing our strategic issues, we used data from healthy lifestyles? all four of our assessments to help paint a clear picture of 3. How can we increase access to and utilization of the needs at hand.

Five strategic issues have been identified by Community disparities to ensure health equity? Health Assessment Mobilization Partnership (CHAMP).

Issues, concluded November 2013. Strategic Issues healthy neighborhoods where people live, work, and

comprehensive health services?

4. How do we address the root causes of health

5. How do we reduce risky behaviors and the stigma associated with behavioral health?

Coming Soon: Community Health Assessment

he Community Health Assessment (CHA) will be released in early January 2014. The CHA is a result of the four assessments completed in phase three of the MAPP process: Community Health Status Assessment, Community Themes and Strengths Assessment, Local Public Health Assessment, and Forces of Change Assessment. It's purpose is to learn about

the health status of the Boone County population as well as identify areas for health improvement. The CHA is developed through a participative, collaborative process with various community entities.



Save the Date!

ACHIEVING OUR VISION COMMUNITY FORUM

Please join a community-wide coalition of public health partners and help us achieve our collective vision for Boone County:

A vibrant, diverse, and caring community in which all individuals can achieve their optimum physical, mental, cultural, social, spiritual, and economic health

TUESDAY, JANUARY 14TH

ANYTIME BETWEEN 5 & 7 P.M.

ACTIVITY & RECREATION CENTER (ARC) 1701 W. ASH STREET | COLUMBIA, MISSOURI

This will be an open house format. Refreshments will be served.

We hope to see you on January 14th! Your voice is important to us.

Questions? Contact us at: 573.817.6403 or champ@gocolumbiamo.com

