

Community Health Assessment Community Health Improvement Plan

2012



East Central Kansas Public Health Region

Chase, Coffey, Franklin, Greenwood, Lyon, Morris, Osage, Wabaunsee



Table of Contents

Acknowledgements	2
Executive Summary	3
Background	4
The Region	4
The Process	5
Phase I - Organizing	5
Figure 1: MAPP Diagram	6
Phase II - Visioning	7
Phase III- Four Assessments	8
Asset Mapping	8
Table 1: Regional Asset Summary.....	9
Health Status Indicators	10
Quality of Life Survey	10
Forces of Change.....	10
NPHPSP	11
Phase IV – Identifying Strategic Issues	12
Additional Assessment.....	12
Figure 2: Fluoridated water systems	12
Figure 3: Dental HPSAs	13
Phase V and Phase VI	13
Community Health Improvement Plan	14
Priorities, Goals, Strategies	17
Appendix A: Key Community Participants	APP 23
Appendix B: KHI Profile Summary	APP 24
Appendix C: Core Health Indictors	APP 25
Appendix D: Quality of Life Survey	APP 26
Appendix E: Forces of Change	APP 27
Appendix F:National Public Health Performance Standards Program	APP 28
References.....	APP 29

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Executive Summary

A family cheese factory, a nuclear power plant, cattle range in the flint hills, the Kansas City metropolitan area are all a part of the eight counties that make up East Central Kansas Public Health Region. For all of their differences the eight counties have many similarities, including a desire to improve the health status of the community by working together. The people of this community have learned to work together, across county boundaries, for the welfare of their constituents. Agencies concerned with poverty and aging, education and health recognize the efficiencies of addressing needs across the broader population of the region versus at the county level where it seems there are more roads than people. Much has been done to enhance the health of this population; more needs to be addressed.

Rooted in agriculture, the population has grown older as youth move to the cities for better employment opportunity. Family and religion remain an integral part of life, whether it is playing on the water at a local reservoir or working together to bring in the crops. Residents believe in the value of an education and struggle to keep the rural schools open. The economic downturn of 2008 left a population with a poverty rate slightly lower than the state, feeling a little poorer despite an unemployment rate lower than the national or state average.

The population of this region is not too different from the state as whole. The rate of low-birth weight infants is lower, yet the teen birth rate is higher than the state average. Crime rates are lower but traffic fatalities are higher. Each behavior and each outcome may vary considerably between counties and some from between the region and the state average. However, the one area that stands out among it all is the issue of access to care and services. The Core Indicators Data verifies that the region is significantly underserved in the areas of primary care, psychiatry and dentistry. The loss of small local businesses creates some difficulty in meeting basic needs for the people of the region. Yet, the assets found in neighbor helping neighbor and the availability of agricultural opportunity are rich. This CHA, when reviewed in its totality, provides evidence for areas of improvement weighted by the concerns and values of the population. The issues that stood out for the community were Oral Health, Nutrition, and Underemployment.

Hundreds of people contributed to this Community Health Assessment for the region which was completed in June, 2012. They gave of their time and shared their knowledge and their beliefs. We are grateful for these contributions and hopeful that this regional partnership brings new ideas and the promise of a healthier community in the future. Additional copies of this document are available on line at www.franklincoks.org or by contacting your local health department.

Background

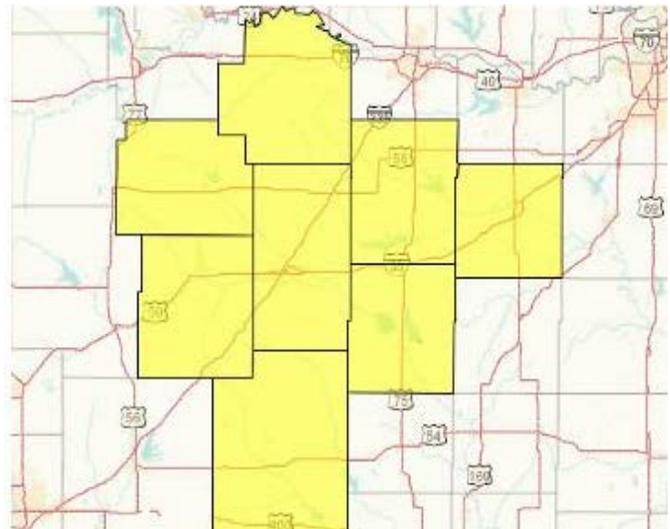
The East Central Kansas Public Health Coalition (ECKPHC) was formed in 2002 as an eight-county region created to assist local health departments in providing essential public health services to their communities. The member counties (Chase, Coffey, Franklin, Greenwood, Lyon, Morris, Osage, and Wabaunsee) have shared experience, knowledge, time and effort to reach a goal of enhancing public health service for all community members. One essential service is to “*Monitor health status to identify community health problems*”. In this endeavor, local health departments joined with additional community members to conduct a region wide health assessment (CHA) and to develop a region wide health improvement plan (CHIP). This document presents the findings of that effort.

The Region

The ECKPHC is a mostly rural area. Two larger cities are located in the region: Ottawa in Franklin County and Emporia in Lyon County. These two counties comprise over half of the entire regional population of the 108,436 residents (U.S. Census Bureau, 2006-2010 American Community Survey). Over one third (34.6%) of the population resides in the cities of Emporia (24,916ⁱ) and Ottawa (12,651ⁱⁱ).

The region covers 6,145 square miles, lying in the center of the highly traveled corridors between the major cities of Topeka, Wichita, and Kansas City. Residents are predominately white (over 90%) and non-Hispanic (over 85%), with the exception of Lyon County which has a white population of 79.2% and 25.4% Hispanic population. The black population is less than 3%, with other minorities comprising a smaller percentage.

The small, mostly rural population is served by small health departments with three to fourteen (FTE) employees. Collaboration is a long standing tradition between public health other local agencies and organizations. Further, public health is not alone in working regionally. The extension service, ECKAN, mental health agencies, Social and rehabilitation services, Area Agency on Aging, KSU extension and other groups work across county boundaries on a regular basis. Economic/trade areas also cross boundaries. The region used this foundation to bring partners together from across the region to provide this essential service and reduce redundancy and increase efficiency.



Why Regional?

All eight counties in the region have populations less than 40,000, the smallest being under 3,000. Data are often unavailable for small counties and when available, subject to high rate variability because of one or two case differences between time periods. Furthermore, public health and partners' small staff numbers to conduct the work facilitates distribution of work and functionally increases staff numbers available to work on the project. Finally, many local and state agencies and organizations work across county boundaries. The regional process reduces duplication of effort. A regional approach in Kansas serves to enhance data reliability and consistency. It is recognized that differences between counties could be lost when information is pooled in this manner. Therefore, the regional partners agreed to look at individual county information as well as regional information so that significant differences could be addressed by a county if so desired.

The Process

In July, 2011, the East Central Kansas Public Health Coalition received a grant from the National Association of County & City Health Officials to demonstrate a regional approach to conducting a Community Health Assessment and Community Health Improvement Plan. Sponsored by the Robert Wood Johnson Foundation, the grant provided significant monetary and technical support to the demonstration site over an 18 month time period. The grant enabled regional partners to successfully complete the process and develop this report.

The first steps for the process were to:

1. Identify one local partner from each county to serve on a core leadership team,
2. Select a community health assessment model to guide the process, and
3. Establish the structure for the regional work, including meeting times, objectives, and partner roles and responsibilities.

Phase I: Organizing

August 10, 2011 was the first meeting for the CHA CHIP Core Team. Each county was represented by two residents: one from the local health department and one partner organization. This team was identified as the leadership team for the process and called the "Core Team". Members and their agencies are listed in Appendix A. An effort was made to include a hospital representative from the counties with a local hospital in order to address the hospital requirements in the Affordable Care Act. The team met at a minimum monthly throughout the rest of 2011 and most of 2012 to guide the process.

The model selected by the Core Team for use was Mobilizing For Action Through Planning and Partnerships (MAPP). This model was developed by NACCHO in partnership with the Centers for Disease Control and Prevention (CDC) Public Health Practice Program Office. The model has six phases: Organizing, Visioning, The Four Assessments, Identifying Strategic Issues, Formulating Goals and Strategies, and the Action Cycle. The process is cyclical, with each phase informing the next and each assessment's results considered in light of the others. More information on MAPP can be found on the NACCHO website.



Figure 1: MAPP Diagram

The Core Team determined that the regional partners must agree on the definition of “Community” since several small towns, rural areas and counties were included in the project. Using brainstorming, large group discussion, and consensus, “Community” was defined as “All people who live, work, and play in our eight county region”. People who play in the region were important to include because several recreational areas, such as Pomona and Council Grove Lakes, bring people to the region for extended periods of time. Similarly, various businesses hire people who live outside the community but contribute and interact with those who live within the region. All are an integral part of the health of the community.

Core Team members identified potential partners throughout the community by using the Circle of Involvement worksheet which involves selecting individuals from various community sectors and the projected role in the process. The working list consisted of over two hundred community members who were asked to participate in various ways. Roles included, for example, informing and educating the community, conducting the assessments, or participating in the assessments. Information on the process was shared with the public through individual conversations, press releases and public meetings to create awareness and encourage involvement in the process.

Phase II: Visioning

A vision provides the picture of the community in the future. It also sets the structure for the process and a goal towards which to work. On November 16, 2011, 77 members of the community attended a visioning session in Emporia. A list of attendees is found in Appendix A. A definition of "vision", goals for the day and a review of the 2010 County Health Rankings followed by table discussions occurred in the morning. Following lunch, the participants at each table were asked to describe pictures of people we might find in our community and their health issues. Using this information, each table of participants talked about their vision of a healthy community. All responses were shared and the facilitators developed a vision statement. The statement and supporting information were returned to the Core Team following the visioning session for review. The final vision statement was sent to all participants and used to guide the remaining steps of the MAPP process.



Vision: A community that is sustainable and promotes a high quality of life.

This vision captures the desire of the community to retain population in the rural areas and support the infrastructure, employment and services necessary for all individuals to attain a high quality of life.

Phase III: The Four Assessments

The four MAPP assessments are intensive and require broad community involvement. To facilitate the work, subcommittees were formed by assigning Core Team members from two counties to each of the four assessments. The subcommittees were tasked with selecting and tailoring the assessment instruments for this region. Once the assessments were developed, the Core Team members reviewed and modified the instruments. The team members were given instructions for implementation and participated in the survey. Individual county Core Team members then assured that the assessments were implemented within their jurisdiction during the months of February and March, 2012. Data was collected for both the local level and regionally where possible. Local level results of all assessments are available from the local health department. Results of the Community Asset Mapping and National Public Health System Performance Assessment (NPHSP) were compiled and analyzed by the regional subgroups. Three assessments, (Health Status, Quality of Life Survey, and Forces of Change) were analyzed and reports developed by the Kansas Health Institute (KHI). Key findings are discussed in the [KHI summary report](#) (Attachment B).

Additional detail is found in each assessment report in the appendices.

Asset Mapping

Two methods were used to conduct the asset mapping. The first was individual counties providing asset lists and service providers for their county which were compiled by the Core Team subcommittee. These

were compared across counties and reviewed for gaps in local services. The list is available from the local health department. It may also be used to identify additional partners for future efforts. Second, a "sticky note" process was implemented at various locations and with a variety of community groups in each county. Participants were asked to write on the sticky note "one thing you would miss if it weren't available in the county" or "one asset found in the county". 680 community members responded. Health care organizations were most frequently mentioned. Respondents also recognized the value of agricultural and recreational attributes of the region. Education and small businesses were common responses. The full list is presented in Table 1: Regional Asset Mapping 2012.



REGIONAL ASSET MAPPING 2012*Responses to the question: What is one thing you would miss if it were not in our county?*

COMMUNITY		ENVIRONMENT	
Small Businesses	20	Air - fresh and clean	6
Chamber of Commerce	1	Farmland	1
Children	2	Grass - bluestem, native	6
Church	8	Highway	1
Community Pride Organizations	14	Lake	24
Cost of Living - lower	7	Open space - Flint Hills, land	19
Courthouse	6	Water - clean and amount	10
Extension Office	6		
Food - general	10	FAMILY	
Food Pantry	5	Family	13
Greenwood County Hotel	1		
Grocery Store	19	HEALTHCARE	
Help House	2	Assisted Living Center	1
History/Historical value	13	ER	1
Industrial Jobs	7	Healthcare - general answer	37
Library	12	Health Dept	51
Life Center/Recreation Center	13	Home Health	4
Location - close to other cities	4	Hospital	46
Lions Club	1	Meals on Wheels/Senior Bus Program	4
Memorial Hall	1	Nursing Home - Eureka	3
Ministerial Alliance	2	Pharmacy	2
Newspaper	2	Physical Therapy	1
Park	12	Physicians	15
People - friendly, helpful	44		
Post Office	6	OTHER	
Power Plant	48	Agriculture	22
Race Track - Eureka Downs	2	Cattle - ranching industry	8
Restaurants - places to eat	5	ECKAN	1
Salavation Army	2	Fairs	5
Schools	40	4-H activities	7
Senior Center	4	Recreation Activities	16
SOS	6	Rural Values	4
SRS	3	Saddle Club	1
Transportation	2	Sale Barn	1
University - Emporia State	9	Telephone Company	2
		Tourism	5
SAFETY			
Emergency Services - Fire, EMS,etc	10		
Law Enforcement	2		
Safe Community/Neighborhoods	12		
		TOTAL RESPONSES	680

Table 1: Regional Asset Mapping 2012

Core Indicators Profile

The regional team chose to utilize the core indicators selected by the Kansas Health Institute and Kansas Department of Health and Environment in a previous project. These indicators enabled partners to take a broad look at the region. The Core Team believed this was appropriate since this was the first regional effort and members wanted to have community feedback on issues before narrowing to more specific topics and indicators. Many of these indicators were available as a regional statistic, facilitating the regional process. Traditional data sources overall do not analyze data by Kansas public health regions and have to be examined county by county unless additional statistical assistance is possible. The Core Indicators Report (Attachment C) prepared by the Kansas Health Institute provides the detailed description.

Quality Of Life Survey (QoL)

The Core Team distributed the QoL survey as broadly as possible throughout the region. The survey was sent to core team members, list serves held by the Core Team, and links placed on Facebook and web pages. The instructions included asking the recipient to forward the survey to anyone they knew. Hard copies of the survey were available at local libraries, health departments, and other locations. News organizations advertised the survey and provided a link. A Spanish version was prepared for Lyon County residents due to the proportion of Spanish speaking individuals in that community. Those surveys were returned and entered by hand into Survey Monkey, where the other surveys were tabulated. The specific results are available in the Appendix D: QoL Analysis Report.

Forces Of Change (FOC)

The Forces of Change Assessment serves to evaluate opportunities and threats of current and anticipated events, policy or practices that will affect the health of the community. Key leaders from the region joined local Core Team members to brainstorm and discuss expected changes. Eight categories were used to help guide the conversation: Environmental, Political, Social, Economic, Technological, Scientific, Legal and Ethical. During discussions, it was frequently found that ideas could be categorized in more than one of the eight categories. Ideas were examined for the opportunities they presented as well as the threats to the way of life and health of the community. Community leaders identified unemployment and low-wage jobs as a concern. The potential effects of the Affordable Care Act were identified as a technological, political, and economic issue. Access to Care was repeatedly mentioned as an issue in the present and the future. More detail is available from the FOC Summary Report (Appendix E).

National Public Health System Performance Standards Assessment (NPHPSP)

The public health system is more than just the local or state public health department. The public health system encompasses all organizations within a community that address or provide services around health issues. Further it may include those organizations that impact health status through addressing social determinants such as unemployment or affordable housing. Each county called one or more meetings of community members with knowledge or involvement in the Ten Essential Services of Public Health. These meetings served to evaluate the performance of the system of public health relative to standards established in the instrument. The process has a benefit of educating community members on the wide array of responsibilities and partner roles in provision of public health. In general, each community committee reached consensus on the score for each measure. The scores were entered into the CDC system and a report generated for each county. For the region, the scores were averaged across all eight counties and entered into the system for a regional score. Local public health systems were strongest in diagnosing and investigating health problems and hazards (Essential Service #2) with 81 out of 100. The area with the greatest need for improvement was Essential Service #1: Monitor Health Status to identify problems (34 of 100). It was noted that the region was currently improving this level of service by conducting this CHACHIP. The full report is available in Appendix F: ECKPHC NPHPSP report.



Ten Essential Public Health Services

1. Monitor Health Status To Identify Community Health Problems (SCORE =34)
2. Diagnose and Investigate Health Problems and Health Hazards (SCORE = 81)
3. Inform, Educate, and Empower People about Health Issues (SCORE = 61)
4. Mobilize Community Partnerships to identify and Solve Health Problems (SCORE = 48)
5. Develop Policies and Plans that Support Individual and Community Health Efforts (SCORE = 53)
6. Enforce Laws and Regulations that Protect Health and Ensure Safety (SCORE = 64)
7. Link People to Needed Personal Health Services and Assure the Provision of Health Care when Otherwise Unavailable (SCORE = 71)
8. Assure a Competent Public and Personal Health Care Workforce (SCORE = 57)
9. Evaluate Effectiveness, Accessibility, and Quality of Personal and Population-Based Health Services (SCORE = 49)
10. Research for New Insights and Innovative Solutions to Health Problems (SCORE = 57)

OVERALL (AVERAGE) SCORE FOR THE REGION: 57 out of 100

PHASE IV (Identify Strategic Issues)

Phase IV process and details are presented in the Community Health Improvement Plan that follows. During the process it was determined that more information was needed on the issue of dental care. Those findings are presented here.

Additional Assessment: Oral Health

Oral health has received greater recognition in recent years as its relationship to other health concerns has been studied. Oral health impacts appearance, social acceptance, job opportunities and health issues ranging from halitosis to heart disease. Of interest to the Core Team were factors that impact oral health, including availability of dental providers, water fluoridation, insured population rates, oral health behaviors and tooth extraction. Dental problems were seen as one of the three most important issues in the community by only 4.7% of over 1000 respondents to the QoL survey. This may be a reflection of lack of media coverage of the issue as compared to nutrition and obesity, for example.

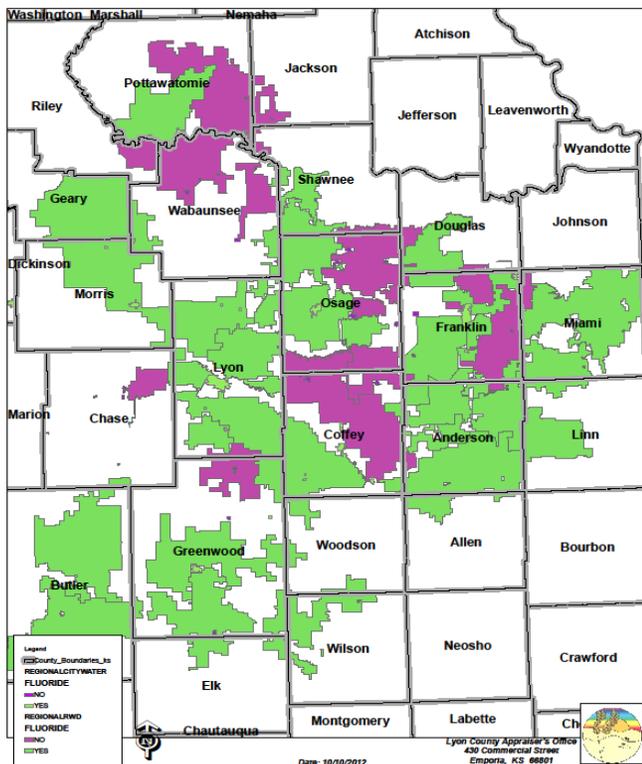


Figure 2: Fluoridated water systems

Mapping of water fluoridation for the region identified that less than half (43 of 90) of the water systems in the region were fluoridated. In addition, several areas are not served by public water systems; rather individuals are on well water with unknown levels of natural fluoridation.

Fluoride treatments and sealants, particularly for children, have helped bridge the gap in areas without water fluoridation. Unfortunately over 60% of screened children in grades 3-12 had not received sealants. The percent of children who had received fluoride treatments was not available. Either treatment may help prevent cavities among this population. Among children screened in grades K-12, 18.3% had obvious dental caries.

The provider to population ratio for the region was 50% higher than the state ratio as noted in the Core Indicator Report (page 39). A review of provider availability found that no providers practiced in two of the counties. Half of the counties received whole county Dental

Health Provider Shortage Area (HPSA) designations as of September 2012 (Figure 3). The other four had population designations (Kansas Department of Health and Environment, 2012). Less than half the providers accepted Medicaid patients according to health department staff reports.

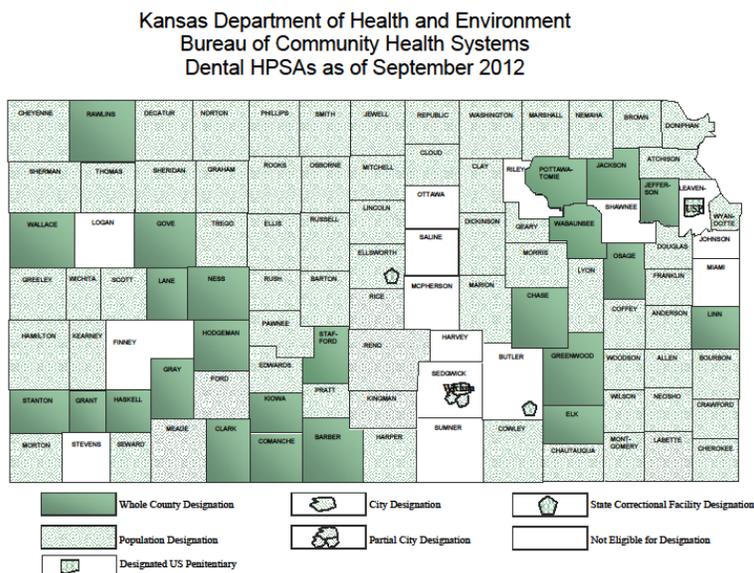


Figure 3

A survey was conducted by the Core Team to gain further information on adult dental issues. The survey was a convenience sample and cannot be generalized to the whole population. Nonetheless, some interesting information was gained that was used by the Core Team to refine their intervention decisions. 592 people were surveyed at locations throughout the region that the general population visited, including a convenience store, farm & ranch store and large general retailer. Eight respondents reported having dentures and therefore the answers were not useable. Of the 584 remaining responses, roughly 40% had not seen a dentist in the last year. Among that 40%, the most frequent reported reasons for not seeing a dentist was cost/no insurance (64%). Among all those answering the survey, 31.7% had had one or more teeth removed due to dental decay. Additionally, 31% of respondents brushed only one time per day and 62% did not floss daily. More information on the dental survey is available from Franklin County Health Department upon request.

Phase V (Formulating Goals and Strategies) and Phase VI (Action)

The Community Health Improvement Plan (CHIP) follows this work by gathering community members to review and determine priority areas on which to work. The results of Phase V are found in the 2012 CHIP plan. Phase VI will continue this work and be addressed elsewhere.

Community Health Improvement Plan

On June 14, 2012, sixty community representatives from the counties of Chase, Coffey, Franklin, Greenwood, Lyon, Morris, Osage, and Wabaunsee, met in Emporia to build for the first time a regional Community Health Improvement Plan for the East Central Kansas Public Health Coalition Region (ECKPHC), hereafter referred to as "the region". The regional approach was a demonstration project supported by Robert Wood Johnson Foundation, through the National Association of County and City Health Departments. The community members in attendance were tasked with reviewing the regional Community Health Assessment (CHA) that had been recently completed and selecting priorities for a five-year community health improvement plan (CHIP). The Priority Setting Session participant list is found in Appendix A.

Participants were given the 2012 Community Health Assessment (CHA) prior to the meeting for review and consideration via email. Printed copies were available at the priority setting session. Working in small groups, regional community members discussed and prioritized issues and then presented their reasoning orally to the whole group. Following the presentations the participants voted for the top issues. Core Team members reviewed and finalized the priority issue selection.



Unemployment and underemployment were identified as one of the two highest priorities. This belief was supported by the Quality of Life Survey where joblessness was one of the three most important issues in the community. It was noted that the unemployment rates in the region overall were lower than the state and national rates. Participants in the Forces of Change assessment recognized that unemployment rates in the region had not increased as sharply as in other portions of the state. At the same time, community members expressed the fear that residents were leaving the rural communities permanently or commuting out of the region for work to find better job opportunities. Jobs with adequate wages was seen by 49.6% of respondents as the most important factor for a high quality of life. Recognition of the effects of unemployment and low paying jobs on the health of community members was determined to be a priority for strategic planning.

A second priority identified was health behaviors. Discussion revealed that some groups had combined issues of adolescent pregnancy, substance abuse, and unintentional injuries as unhealthy behaviors, and others groups focused upon eating and exercise. Teen pregnancy rates (age 15-19), smoking rates, and physical activity levels as noted in the CHA, were similar to Kansas rates. The percent of individuals consuming 5 or more fruits and vegetables daily was 15.2% for the region compared to 18.6 for Kansas. Binge drinking was also reported by a smaller percent of respondents than in Kansas overall, 11.9% and 14.5% of adults respectively. Drug use was considered to be one of the most risky behaviors in the community (QoL, 2012). Specific “Unhealthful Behaviors”



identified from the discussion were a) eating behaviors, b) risky sexual behaviors, c) tobacco use, d) alcohol misuse, e) misuse/abuse of chemical substances, and f) lack of physical exercise.



Access to Care was identified as a top priority by 6 of the 8 priority session groups. More specific issues teased from “Access to Care” included a) access to dental services; b) transportation to primary care; c) preventative care specifically; d) home based services; and e) lack of providers . Data from the Health Status Profile showed that 18.3% of the population in the region in 2009 was uninsured, slightly above the Kansas rate.

The ratio of population to primary care physicians has consistently been higher than the state over the last 10 years, and 34% higher than the state ratio in 2010. Dental and Mental Health provider ratios were also well above the state. There were Health Provider Shortage Area (HPSA) designations throughout the region.

Following detailed analysis of each of the priority issues, the Core Team voted on the importance and feasibility of addressing the issues. Placement for each criterion was determined by a vote of those present at the meeting. The resulting assignment of issues is seen below (Table 3). The classification does not mean that any item is unimportant or not

feasible, it only signifies what the group felt would be more important and feasible at this time. Consideration was given to other projects, media, events, and collaborations occurring in the region, in addition to the statistical data and community interests found in the CHA.

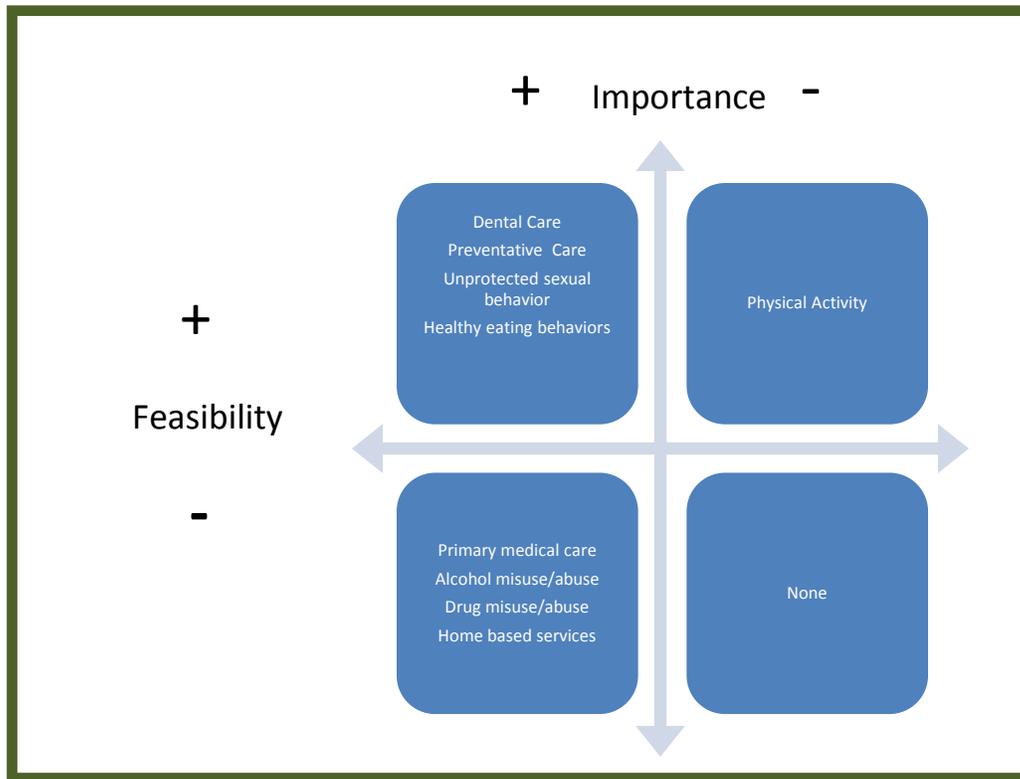


Table 3: Feasibility/Importance Matrix

In the final analysis of priorities, the Core Team elected to address two priorities: Oral Health and Healthy Eating Behaviors. The impact of underemployment and poverty were not dismissed as a priority. Rather, the Core Team and community partners understand that this social determinant underlies many behaviors and ability to access care and thereby impacting individual and community well-being. It was a consideration in all strategies planned for the two priorities selected. The team believed that this first regional effort must remain manageable and not duplicate other efforts in the community.

The Core Team elected to align regional objectives with Healthy People 2020 Objectives. The goals, objectives, indicators, and strategies proposed for community effort are listed below. Many community partners from area agencies and many individuals participated in discussion groups within each county to identify roles and responsibilities for implementation of strategies that address the issues. Lead individuals and organizations who volunteered to lead the various interventions are identified in the plan that follows.

Priorities, Goals, Objectives, Strategies

Priority 1: Oral Health

Goal: Improve Oral Health of Community Members

Appearance of individuals with poor dental care and loss of teeth can impact employment. It also can hinder socialization of the individual with chronic pain, halitosis, or obvious decay. Among older adults, absence of teeth and poor fitting dentures hinder nutritional intake and are frequently an issue for the older population. Infections from tooth decay, periodontal disease and other illnesses have been shown to affect the outcomes of other physical health problems, such as diabetes.

To the region's advantage, the Flint Hills Community Health Center in Lyon County has a dental clinic and has potential to expand outreach clinics to other counties in the region. As a Federally Qualified Health Center, it accepts all patients on a sliding fee scale based upon income. The distance across the region makes traveling to Emporia in Lyon County difficult and a barrier to accessing services for other individuals to receive care. Expanding dental coverage and availability of services is necessary.



Healthy
People
2020
Oral Health
Objectives

Objective 1: Reduce the proportion of adults with untreated dental decay (Healthy People 2020: OH-3)

Objective 2: Increase the proportion of local health departments that have oral health prevention or care programs. (Healthy People 2020: OH-10-2)

Objective 3: Increase the proportion of children, adolescents and adults who used the oral health care system in the past 12 months. (Health People 2020: OH-7)

	By December, 2013	By December 2014	By December 2015	By December 2016-2017
STRATEGY	<p>Conduct Regional Educational campaign on need for dental care</p> <p>Advocate/support statewide effort for mid level dental provider licensing</p>	<p>Provide educational materials and hygiene kits for dental care to low income youth and adults</p> <p>Expand Health Department Services in each county to include screening and fluoride treatments</p> <p>Advocate/support statewide effort for mid level dental provider licensing</p>	<p>Increase the number of local dental providers who accept Medicaid/SCHIP</p>	<p>Establish one new dental clinic/provider in region</p> <p>Link screening and sealant services with every school district</p>
INDICATORS	<p>20% of population will be able to identify the campaign.</p> <p>60% of key leaders will identify oral health as a significant issue for the community.</p> <p>100% of dental providers participate in interviews on reasons not accepting public health insurances and attitudes toward allied dental professionals.</p>	<p>25% of recipients of dental kits and educational materials will report positive change in dental hygiene</p> <p>30% of local dental providers express support for mid level licensing</p> <p>Eight local health departments provide screenings/fluoride on a walk in basis at least one day a week</p> <p>Increase of dental clients in HDs by 20%.</p>	<p>Three additional dental providers will accept Public Insurance</p> <p>5% increase in adult reports of seeing dental care provider in previous year</p>	<p>One new dental provider in a provider shortage area that accepts public insurance</p> <p>100% of public elementary schools have annual or biannual screening/treatment services available</p>

RISK and Contributing FACTORS For poor dental health	Lack of knowledge	Lack of dental insurance High cost of dental care Insufficient number of providers	Billing issues, low payment Non-Acceptance of public insurance	Parental work demands Limited time off Cost Lack of dental insurance Availability of dental providers within 30 miles
EVIDENCE BASEⁱⁱⁱ	Bailit 2012; Worley 2012, Bolin 2008, Galloway 2002	Bailit, 2012a	Effects on financial status of providers uncertain	Beazoglou 2012
LEAD AGENCY(S)	Public Health Coalition;	Public Health Coalition; KANCARE MCOs; Bureau of Oral Health-KDHE; ECKAN; KS Dept of Aging and Disability Services local office KSU extension-Wabaunsee Co	Public Health Coalition, Bureau of Oral Health-KDHE	Flint Hills CHC; ECKAN; Public Health Coalition
RESOURCES	\$3000 advertising fund	Delta Dental Grant United Insurance Co. SCION, DentaQuest	KanCare Add-ons for adult dental	Flint Hills CHC Long Range Plan Douglas Co Dental Clinic Public Insurance will pay health departments



Priority 2: Healthy Nutrition

Goal: Improve the nutritional intake of the population

ECKPHC population does not differ from the general population of Kansas and many other areas in the United States when it comes to healthy eating and exercise. The percent of the population that was determined to be overweight or obese was 65.2% in 2009, based upon self reported heights and weights (BRFS). Despite the belief of QoL survey respondents that access to healthy food (3.5%) and hunger (7.1%) were not as much a problem as other issues, being overweight and poor eating habits were seen by 46.8% and 28.4% of respondents respectively as one of three most important risky behaviors in the community. Frequently mentioned in the Forces of Change Assessment were a loss of local grocery stores and higher

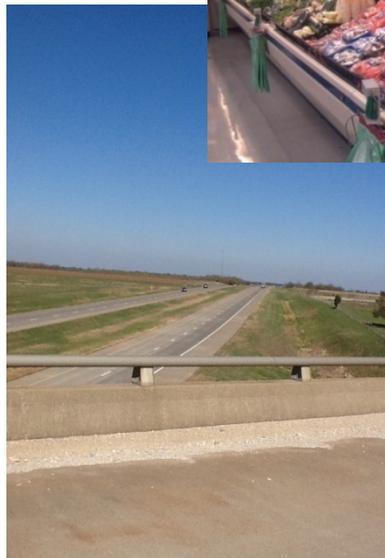


food prices, inflation and other elements of increasing costs along with the issues of low paying jobs and unemployment. These factors impact the ability of the population to eat healthy foods. In the 2009-2010 school years, 49.1% of all public school students in the region were eligible for Free or Reduced-Price Meals. This is significantly higher than the state. The median household income of much of the region's residents is below the state average. An asset as noted in the asset

mapping was the agricultural area that would provide opportunity for local food production and distribution.

Fruits and vegetables were consumed 5 or more times per day by only 15.2% of adults responding to the BRFS (2009). Access to healthy foods is limited by the distance to grocery stores and other sources of healthy foods, despite being a farming community. The highest density of farmers markets was .35/1000. Two counties are without a farmer's market. Grocery store density is as low as .15/1000 population to a high of .75/1000. An additional concern is that in two of eight counties, over 5% of the population was over a mile from a grocery store and without a car.

(www.KansasHealthMatters.org)



The WIC program in each county health department has an emphasis on fruits and vegetables and quality educational programs for clients. This is an asset that will help to meet the healthy eating objectives.

Healthy
People
2020

Healthy
Nutrition

Objectives

Objective 1: Increase the proportion of Americans who have access to a food retail outlet that sells a variety of foods that are encouraged by the Dietary Guidelines for Americans. (Healthy People 2020 NWS-4)

Objective 2: Increase the contribution of fruits to the diets of the population aged 2 years and older. (Healthy People 2020 NWS-14)

Objective 3: Increase the variety and contribution of vegetables to the diets of the population aged 2 years and older. (Healthy People 2020 NWS-15)

	By December, 2013	By December 2014	By December 2015	By December 2016-2017
STRATEGY	<p>Plan for and develop community gardens in easily accessed locations</p> <p>Prepare and distribute “How to eat healthy on a dime” educational materials throughout the region</p>	<p>Plan for and establish school gardens/greenhouses</p> <p>Expand utilization of vouchers and credit/debit systems at farmer’s markets</p>	<p>Establish a mobile and/or convenience store healthy foods options</p> <p>Create alternative meal choices for older adults through use of vouchers/discounts based upon healthy food choices in deli or other meal locations</p>	<p>Plan for and develop community gardens in easily accessed locations</p>
INDICATORS	<p>At least 3 new community gardens will be developed in the small rural areas of the region.</p> <p>10% of population surveyed will have received</p>	<p>Every school district will have at least 1 garden/greenhouse for students.</p> <p>One farmer’s market in each county will accept credit/debit systems and</p>	<p>Four lunch locations other than Senior Centers will accept vouchers/discounts for seniors selecting the healthy choice menu.</p> <p>75% of convenience stores</p>	<p>Increase access to community gardens for 25% of the population</p>

	educational materials. 5% of population surveyed will report having used the information	vouchers	and similar businesses will have healthy food options available	
RISK and Contributing FACTORS poor food choices	Lack of knowledge Distance to healthy food vendors Cost	Distance to healthy food vendors Cost	Distance to healthy food vendors Cost	Distance to healthy food vendors Cost
EVIDENCE BASE	Recommended Community Strategies and Measurements to Prevent Obesity in the United States, MMWR, July 24, 2009 58(RR07);1-26 ^{iv}	Recommended Community Strategies and Measurements to Prevent Obesity in the United States, MMWR, July 24, 2009 58(RR07);1-26	Recommended Community Strategies and Measurements to Prevent Obesity in the United States, MMWR, July 24, 2009 58(RR07);1-26	Recommended Community Strategies and Measurements to Prevent Obesity in the United States, MMWR, July 24, 2009 58(RR07);1-26
LEAD AGENCY(S)	KSU extension-Frontier & Greenwood Co , Public Health Coalition	Ransom Memorial Hospital Communities in Schools	East Central Kansas Area Agency on Aging; Greenwood Co Home Health Agency	Public Health Coalition/Healthy Communities Sub-committee
RESOURCES	KHF/KSU grants Richmond water supply	Potential KHF Healthy Communities grant	In kind donations	Rural community governance Local Community Foundations

Appendix A: Key Community Partners

Visioning and Priority Setting Participants

Chase County

Susan Alexander, Funeral Director
Janice Glanville, SOS, Inc
Nancy Huth, USD 284

Coffey County

Kenneth Combes, County Commission
Jody Jeffers, COF Training Services
Gene Merry, City of Burlington
Pam Rice, USD 243
Kimberly Robrahn, County Commission
Sharon Sharon, CC Health Dept.

Franklin County

Ryan Cobbs, USD 290
Ed Coulter, Ottawa Family Physicians
Diane Drake, Elizabeth Layton Center
Peggy McFadden, Homeless Shelter
Rebecca McFarland, KSU Extension -Frontier
Norman Reed, Farmer
Jeanny Sharp, Ottawa Herald
Danon Taylor, USD 290 student
Tom Weigand, Chamber of Commerce
Kenny Woods, Franklin Community Foundation

Greenwood County

Larry Coleman, Resident
Kacey Countryman, USD 389
Macy Gaines, RCIL
Martha Heffron, New Beginnings
Shannon Hughes, GC Health Dept
Roseann Knight, Eureka Nursing Center
Marshall Kreger, ARC, Lions Club
Ian Martell, Eureka City Admin.
Tracy McCoy, GW Co. Home Health
Lucas Moody, Mid-Ks CAP
Cindy Pereira, Economic Development
Debbie Reaves, SOS, Inc.
Ed Riley, Greenwood Co. Hospital
Donna Whitehead, Resident

Lyon County

Scott Briggs, County Commission
Amanda Cunningham, Mental Health Center of ECK
Phillip Davis, Flint Hills CHC
Nancy Grove, Emporia Medical Arts
Wes Jones, Mental Health Center of ECK
Kathy Palafox, USD 253
Shanti Ramcharan, Emporia State University
Vicki Seems, ECK Area Agency on Aging
Doug Stueve, Resident
Sharon Tidwell, Jones Foundation
Jami White, Newman Regional Hospital
Kendra White, Lyon County

Morris County

Larry Buss, United Methodist Church
Cynthia Engle, Council Grove Mayor
Vern Hay, County Commission
Laura Marks, KSU Extension –Flint Hills
Ross Olson, Emergency Management
Don Patterson, Council Grove Business
Dana Reddick, USD 417
Lori Tubach, SOS, Inc.
Beth Watts, Council Grove Health Center
Dale Weimer, Resident

Osage County

Jeff King, Drug Free Osage County
Ken Kuykendall, County Commission
Carl Meyer, County Commission
Michael Pruitt, County Commission
Vida Lewis, Cotton O'Neil Clinic

Wabaunsee County

Shirley Bowen, Resident
Janelle Lucas, WIC Health Department
Rev. Ron Rather, Trinity Lutheran
Sally Short, Resident
Ervan Stuewe, Wabaunsee Co. Signal-Enterprise
Sandra Williams, Resident
Jackie Wilt, Resident
Kathy Ure, Washburn School of Nursing



Appendix B: KHI Summary Report

East Central Kansas Public Health Coalition Community Health Assessment Summary of Findings

Local health departments from the eight counties in the East Central Kansas Public Health Coalition (ECC) are conducting a Community Health Assessment as a regional collaborative effort. Three assessment approaches have been employed to gather and analyze information related to community health within the region:

- 1) A data profile providing historical and current information on a key set of Core Indicators.
- 2) Forces of Change exercises, conducted at the regional and county levels.
- 3) A Community Survey soliciting input from residents about their perceptions of quality of life in the community and important needs and issues.

Data collection has been largely completed by ECC team members. Assistance has been requested from the Kansas Health Institute in analyzing and synthesizing results of the three assessment approaches. Detailed reports for each of the three assessments accompany this summary.

The three assessments provide a broad view of health and health-related issues within the region. At the regional level, some recurrent themes emerge across the assessments:

Positive benefits of rural life – Survey respondents consistently expressed satisfaction with quality of life in their communities when responding to questions about whether the community was a safe place to live, a good place to raise children, a good place to retire, etc. Low crime rates, room for growth and emerging community collaborations were mentioned in the Forces of Change assessments. Data from the Core Indicators assessment verify the perception of lower violent crime rates within the region.

Jobs – Concerns about unemployment, jobs and adequate wages surfaced as a predominant theme across the assessments. Median household incomes in most counties within the ECC region are lower than the state median. However, several ECC counties had lower poverty and unemployment rates than the state as a whole. Participants in the Forces of Change assessments also noted an unskilled workforce and difficulty in finding qualified candidates to fill open jobs. This apparent mismatch could present an opportunity for community improvement through the development and implementation of workforce training programs tailored to the needs of community employers.

Community demographics and infrastructure – Concerns about an aging and shrinking population were mentioned in the Community Survey and Forces of Change assessments. Data from the Core Indicator Assessment verify that the regional population is slightly older than that of Kansas overall (with the notable exception of Lyon County) but may help to dispel concerns about population loss,

as the region overall had only a 1 percent decline in population over the last decade. Concerns were also identified with maintaining availability of critical community infrastructure, such as medical services, post offices, schools and grocery stores.

Access to health care services – Concerns about access to health care services, particularly mental health services, were cited in the Forces of Change assessments, and satisfaction with the local health care system was rated lower than other factors, although still positive, on the Community Survey. Data from the Core Indicators assessment verify that the ECC region is significantly underserved in the areas of primary care, psychiatry and dentistry.

Other prominent regional issues emerged from one of the three assessments but were not cross-cutting. From the Community Survey, respondents were generally positive about the quality of life but were significantly less positive about economic opportunity and their perceived ability to make their communities better places to live. The Core Indicators assessment reveals higher rates of mothers smoking during pregnancy, increased mortality rates related to traffic injuries, lower rates of seat belt use while driving or riding in cars and higher percentages of housing units built prior to 1950 as areas where the ECC region differs from statewide rates.

Although the Community Health Assessment is being conducted at the regional level, many of the measures included in the three assessments show significant variability among the eight counties included in the region and suggest that some county-specific prioritization and planning of interventions may be warranted. Some of those county-level distinctions are highlighted below.

Chase County – Health care providers are in short supply in Chase County, where available data indicate that only one part-time primary care physician, no dentists and no psychiatrists were practicing during 2010. The county also has a high proportion (52.5 percent) of available housing that was built prior to 1950, which increases the potential for lead exposure. Inadequate housing was also identified as an important issue by Chase County respondents to the Community Survey. Chase County survey respondents were more pessimistic about their community's economic opportunity and potential for improvement than respondents from other portions of the ECC region. They also cited alcohol dependency as an important risky behavior more often than respondents in other ECC counties.

Coffey County – Coffey County had the highest age-adjusted (all causes) mortality rate and the highest age-adjusted cancer mortality rate within the ECC region, with both rates also exceeding statewide rates. Cancers were identified as an important concern by Coffey County respondents to the Community Survey. Additionally, a higher proportion of deaths in Coffey County were related to unintentional injuries than in other ECC counties. An estimated 23 percent of Coffey County adults were binge drinkers in 2009, compared to a regional rate of 11.9 percent and a statewide rate of 14.5 percent. Participants in the Coffey County Forces of Change exercise identified high divorce rates

and the ease with which divorce could be obtained in the county as concerns that were not mentioned in other counties. Coffey County respondents to the Community Survey also cited divorce more frequently than residents from other ECC counties as one of the most important risky behaviors in the community.

Franklin County – Franklin County was the only county within the ECC region that experienced population growth between 2000 and 2010. The age distribution of the Franklin County population is also somewhat younger than that of most counties in the ECC region. For the 2010-2011 school term, Franklin County had a school dropout rate (grades 7 -12) significantly higher than other ECC counties and the statewide rate, with 42 students dropping out. Franklin County had the highest unemployment rates within the ECC region during 2009 and 2010 and the highest reported rate of violent crime within the ECC region in 2009.

Greenwood County – The age composition of the Greenwood County population is slightly older than that of most other counties in the ECC region. From 2006 to 2010, Greenwood County consistently had the lowest median household income and the highest rates of child poverty of all counties in the ECC region. Nearly half (45.5 percent) of all Greenwood County births during 2009 were to unmarried mothers, compared to 37.8 percent across the ECC region. The county had the lowest percentage of physically active adults (37.7 percent) and the highest rates of adult obesity (49.3 percent) within the ECC region. Greenwood County had the highest ratio within the region of population to dentists and is a designated Dental Health Professional Shortage Area. Greenwood County respondents to the Community Survey identified jobs with adequate wages as an important community factor for quality of life and cited joblessness as an important issue in the community more often than other ECC respondents.

Lyon County – The demographic composition of the Lyon County population is significantly different than the remainder of the ECC region, with a younger age distribution and the highest percentage of Hispanic ethnicity. In nearly one of five (18.1 percent) Lyon County households, a language other than English is spoken at home. From 2006 to 2010, Lyon County had the highest poverty rates in the region, and had the highest percentage of children who were eligible for free or reduced-price school meals during the 2009-2010 school year. A smaller proportion of Lyon County adults had achieved at least a high school education than adults in other portions of the ECC region.

Morris County – In Morris County, nearly one in five (19.4 percent) households were headed by single females with children, a significantly higher percentage than the 7.4 percent in the ECC region overall and the 7.3 percent statewide. The county also had the highest teen pregnancy rate in the ECC region (14.1 percent), which is identified as an important issue through both the Core Indicators data and responses to the Community Survey. Morris County had the highest percentage (40.2 percent) of adults who rated their general health status as fair or poor and the highest percentage of adults (17 percent) who reported being unable to obtain needed medical care because of costs.

Osage County – Age-adjusted (all causes) mortality rates were somewhat higher in Osage County than in other ECC region counties or the state as a whole, and the proportion of deaths related to cerebrovascular disease was higher in Osage County than other ECC counties. Osage County had the highest percentage of adults who are current smokers of all counties in the ECC region, and a rate of binge drinking that exceeded regional and statewide rates.

Wabaunsee County – Wabaunsee County residents had the highest median incomes and lowest poverty rates in the ECC region. The county also had the lowest rates of low birth weight, teen pregnancy, births to unmarried women and adult smoking rates in the region, and the smallest percentage of adults who rated their general health status as fair or poor. Lack of access to medical and dental services was cited as a concern in the Forces of Change exercise. That concern is validated by data from the Core Indicators report that show no dentists or psychiatrists practicing in the county and a ratio of more than 6,500 county residents for every full-time equivalent of primary care physician in the county.

Taken together, the results of the three assessment approaches provide important insight into the health status and needs of the communities within the East Central Kansas Coalition and will provide a solid foundation from which the region's stakeholders may begin to identify priorities and intervention strategies.



Appendix C: Core Health Indicators

East Central Kansas Public Health Coalition Community Health Assessment Core Indicators Profile

Introduction

The purpose of the Core Indicators profile is to provide a snapshot of key measures of health status within the community. In conjunction with information collected in other aspects of the Community Health Assessment (CHA), the data included in this profile will be utilized by members of the CHA Team to develop a comprehensive understanding of health in their community and to begin to identify specific community health priorities.

The measures included in this profile are based upon those identified by the Kansas Multi-State Learning Collaborative Project (MLC-3) and are grouped into 10 domains:

1. Demographics
2. Education
3. Economic Status
4. Maternal and Child Health
5. Mortality
6. Health Behaviors
7. Disease and Poor Health
8. Violence and Injuries
9. Access to Health Care
10. Environment

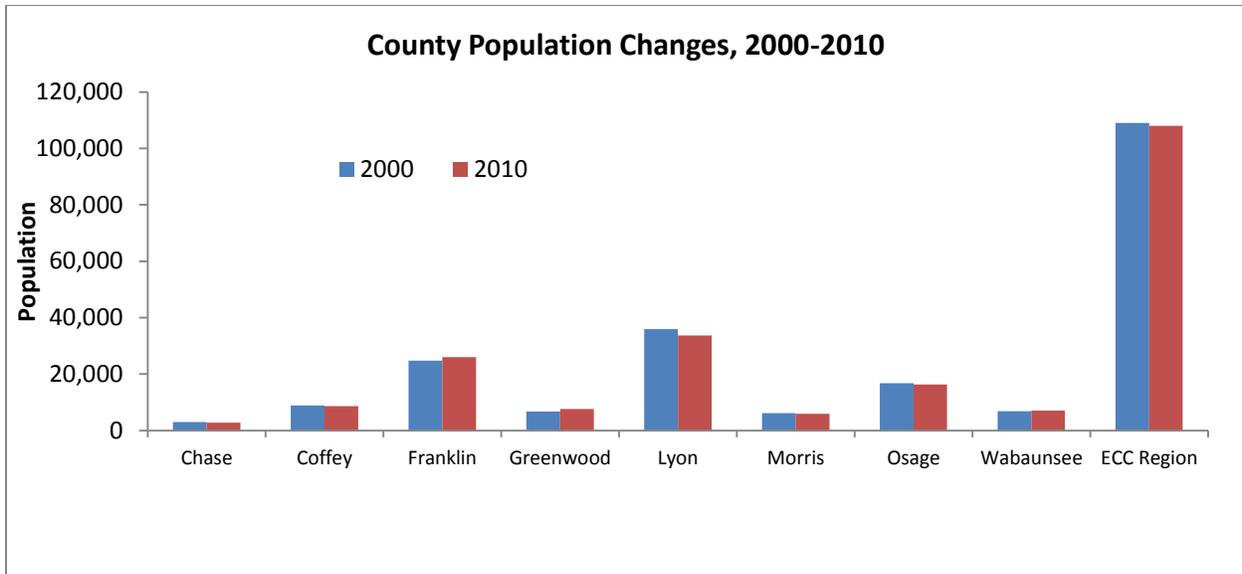
Where possible, data are presented for each of the eight counties in the East Central Kansas Public Health Coalition, as well as for the region and state. Due to the small population size of some counties within the East Central Coalition (ECC), data for some indicators were not available for all counties.

1. Demographics

Demographics describe the characteristics of a population and include population counts, distributions of population by age and racial/ethnic mix, and household composition.

Population

Overall, the ECC region experienced a small (1 percent) decrease in total population between 2000 and 2010. Within the region, all counties experienced small decreases except Franklin County, where population expanded by nearly 5 percent.

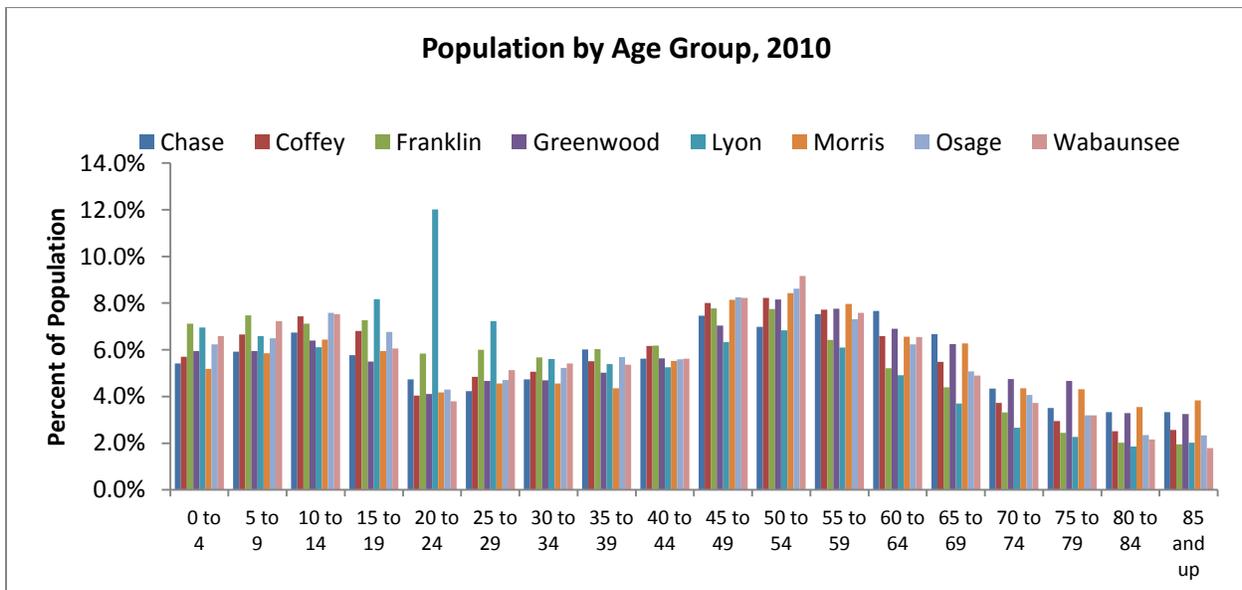


Year	Chase	Coffey	Franklin	Greenwood	Lyon	Morris	Osage	Wabaunsee	ECC Region
2000	3030	8865	24785	6689	35935	6104	16712	6885	109005
2010	2790	8601	25992	7673	33690	5923	16295	7053	108017

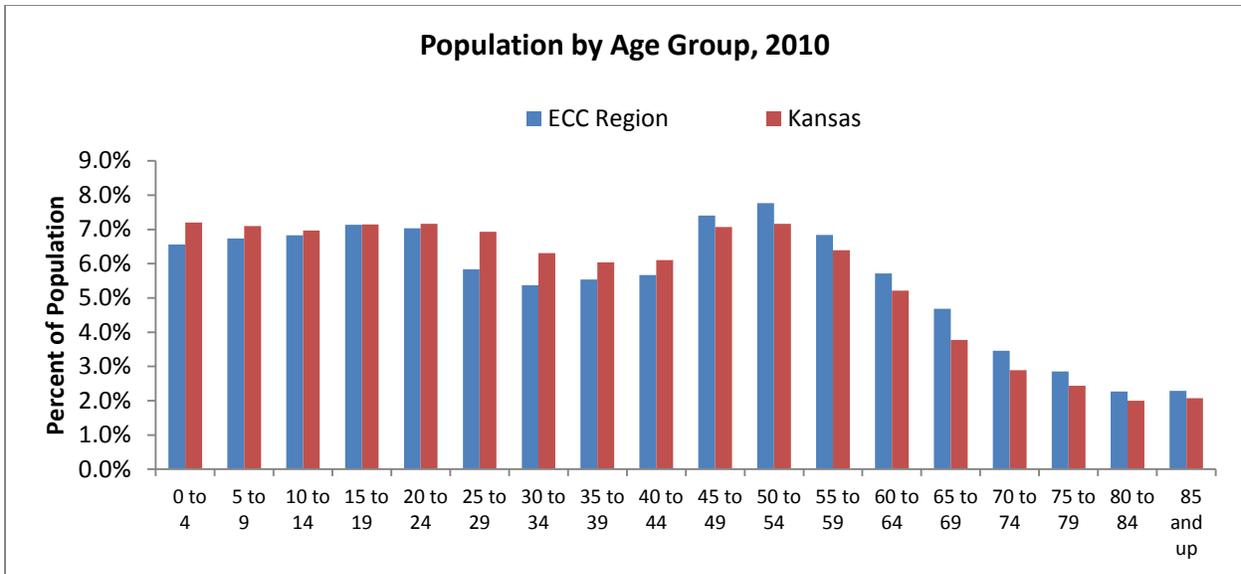
Source: U.S. Census Bureau, 2000 and 2010 Decennial Census counts

Population by Age

Within the ECC region, age distribution is fairly uniform across counties, with the exception of Lyon County. Lyon County has a younger population than the remainder of the region, with larger proportions of the Lyon County population between the ages of 15 and 29 years. The regional population is somewhat older than that of the state overall.



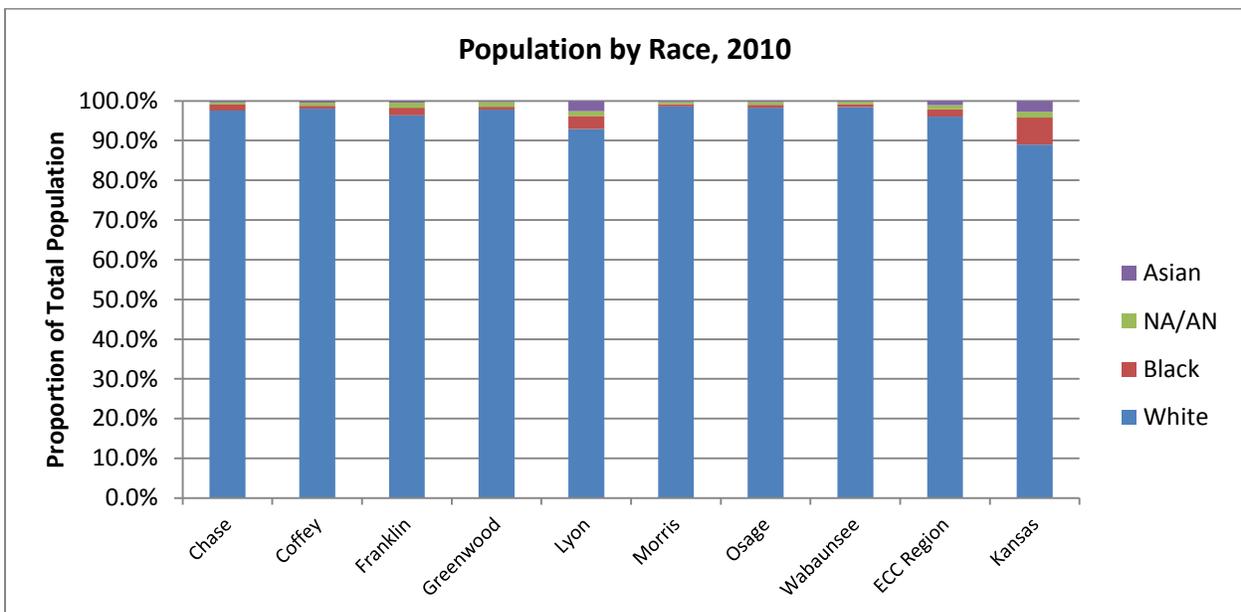
Source: U.S. Census Bureau, 2010 Decennial Census



Source: U.S. Census Bureau, 2010 Decennial Census

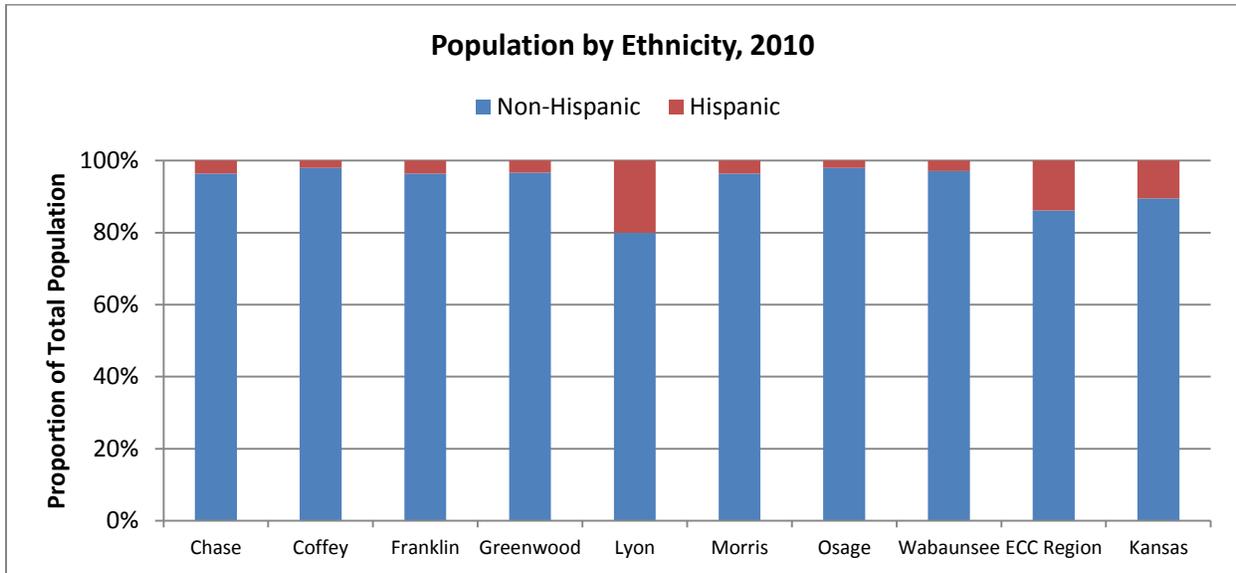
Population by Race

In terms of race and ethnicity, the population of the ECC region is somewhat less diverse than that of Kansas overall. Lyon County stands out among the region as having a population that is more diverse, and has a Hispanic population proportion that exceeds that of the state.



Source: U.S. Census Bureau, 2010 Decennial Census

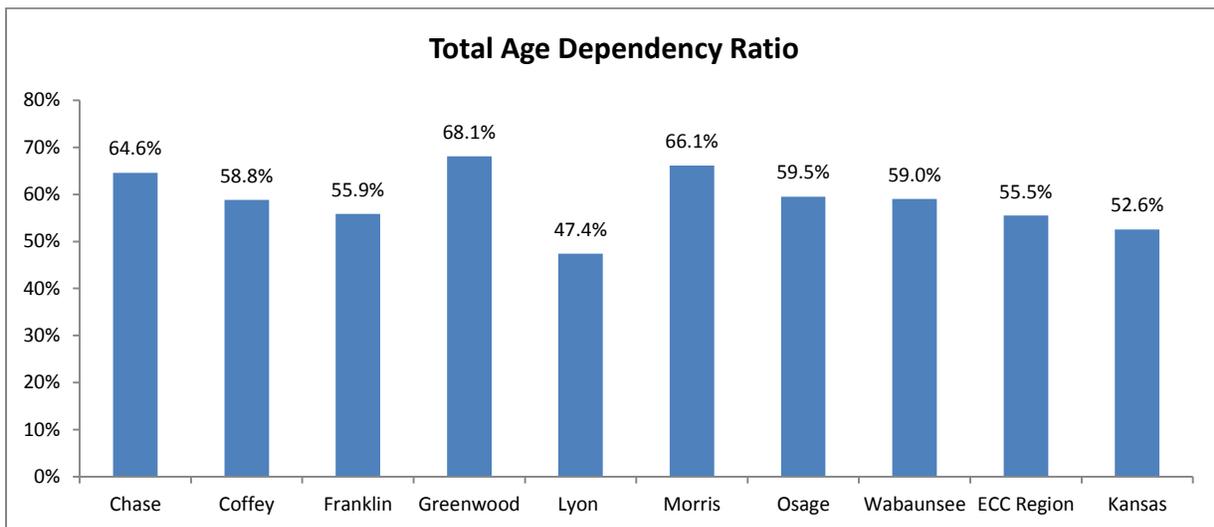
Population by Ethnicity

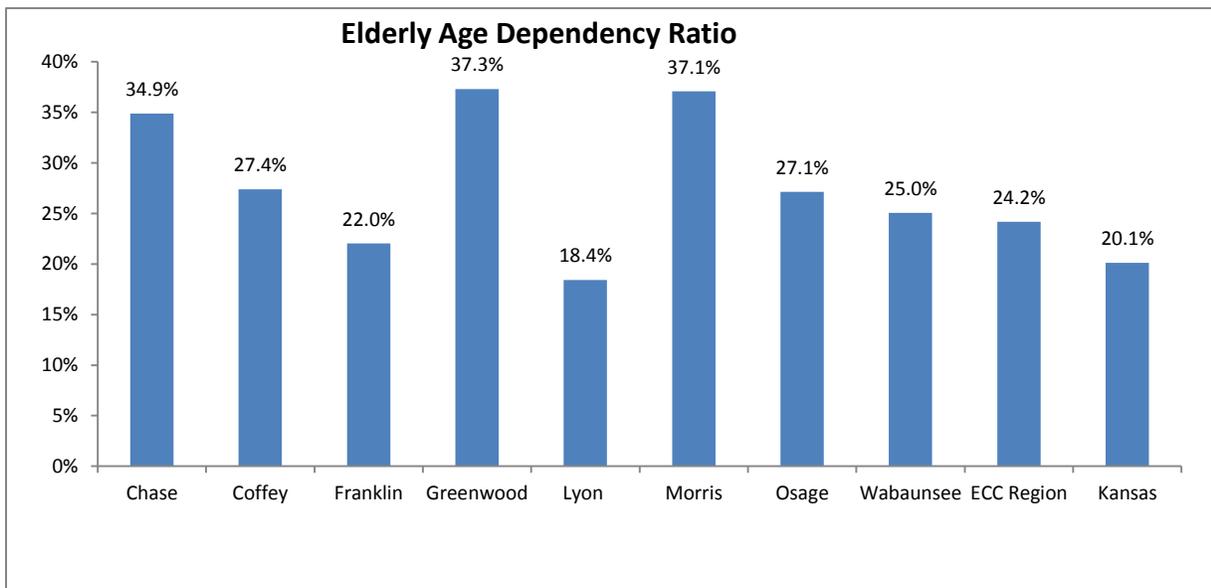
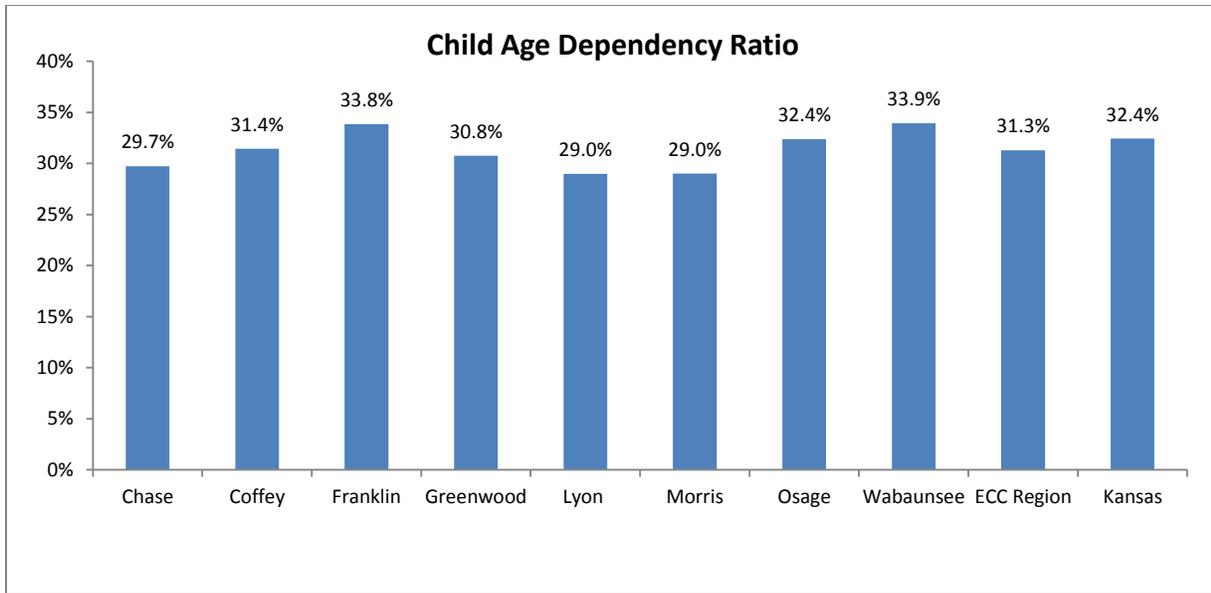


Source: U.S. Census Bureau, 2010 Decennial Census

Age Dependency Ratios

The age dependency ratio measures pressure on the productive portion of the population, and compares the number of young (age 0 to 14) or older (age 65+) people to the number of individuals of working age (15-64 years). Within the ECC region, Lyon County has lower age dependency ratios than other counties due to its larger proportion of working-age population.

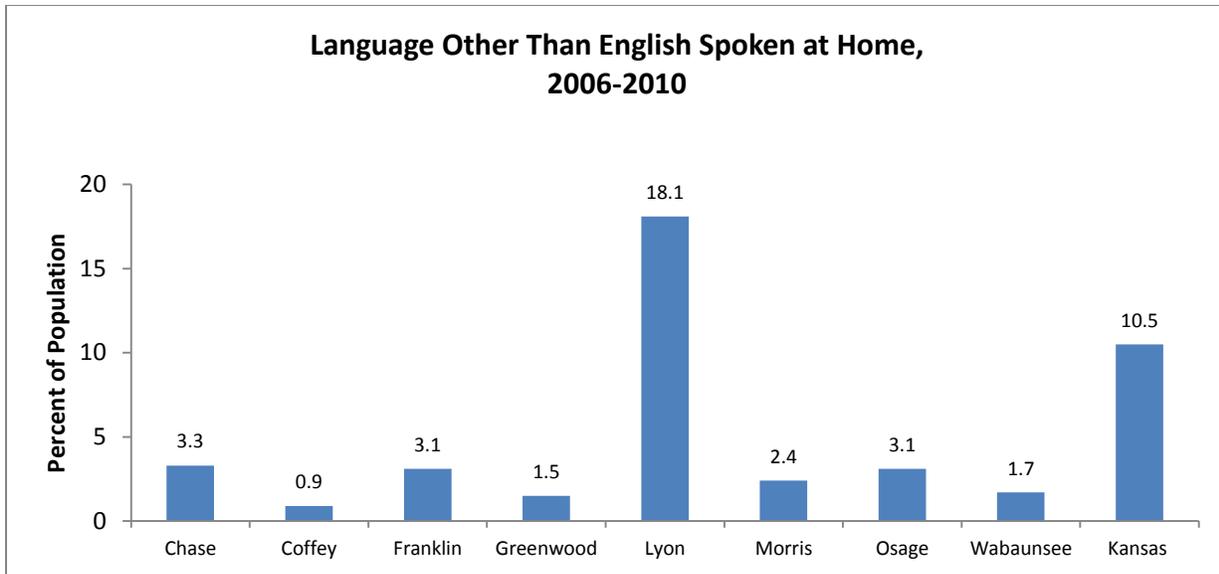




Source: U.S. Census Bureau, 2010 Decennial Census

Languages Spoken at Home

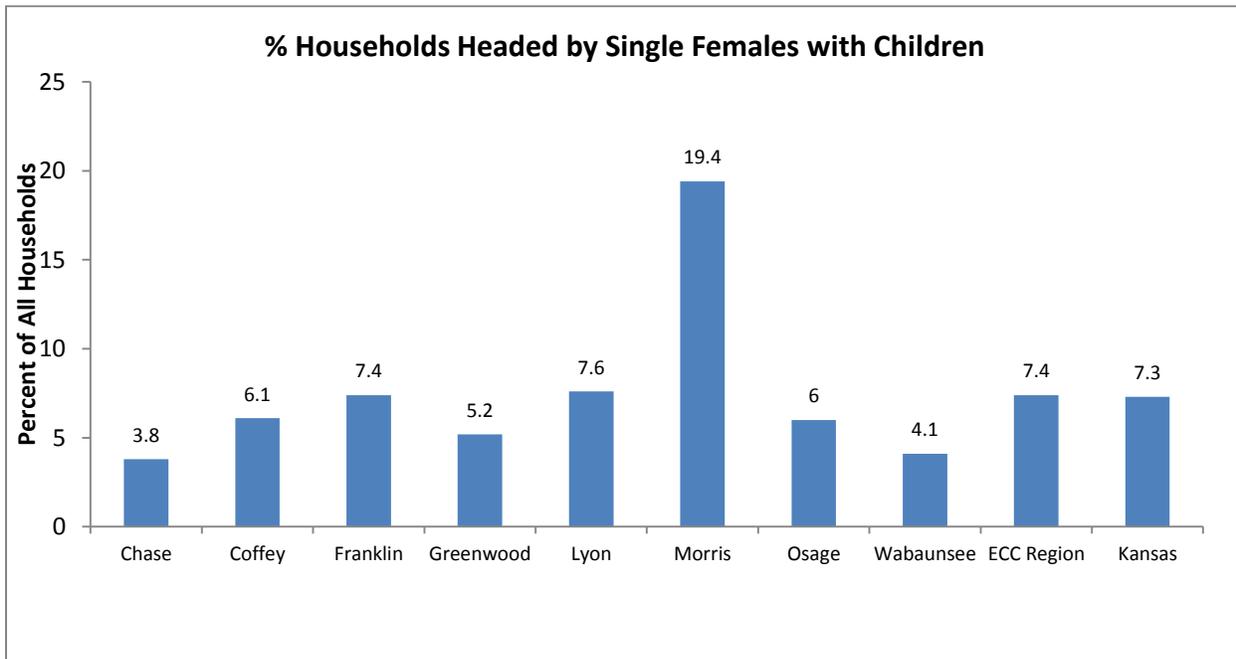
Lyon County is the only county in the ECC region where a significant proportion of households speak a language other than English at home. This probably reflects the higher proportion of Hispanic individuals among the Lyon County population.



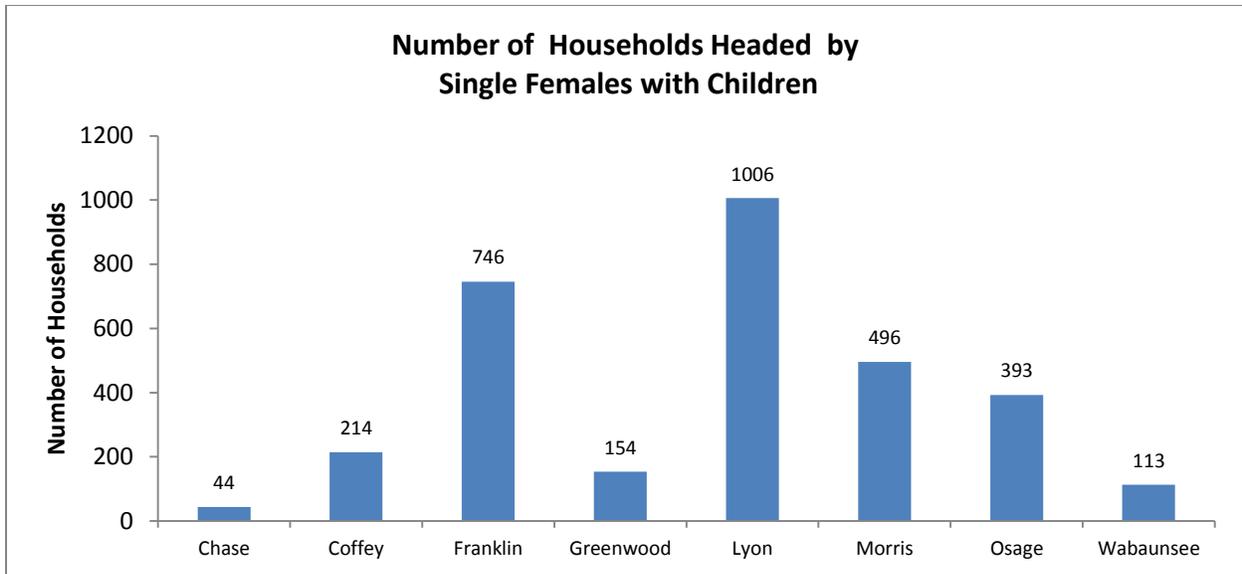
Source: U.S. Census Bureau, <http://quickfacts.census.gov/qfd/states/20000.html>

Single-Parent Households

Single-parent households, particularly those headed by women, are at increased risk for economic difficulties, food insecurity and the need for assistance from safety-net services. Within the ECC region, most counties have proportions of single-mother households that are similar or below that for the state. Morris County is an exception, with nearly one in five households composed of single women with children. In terms of absolute numbers (counts), higher numbers of single-mother households are found in Franklin and Lyon counties.



Source: U.S. Census Bureau, 2010 Decennial Census

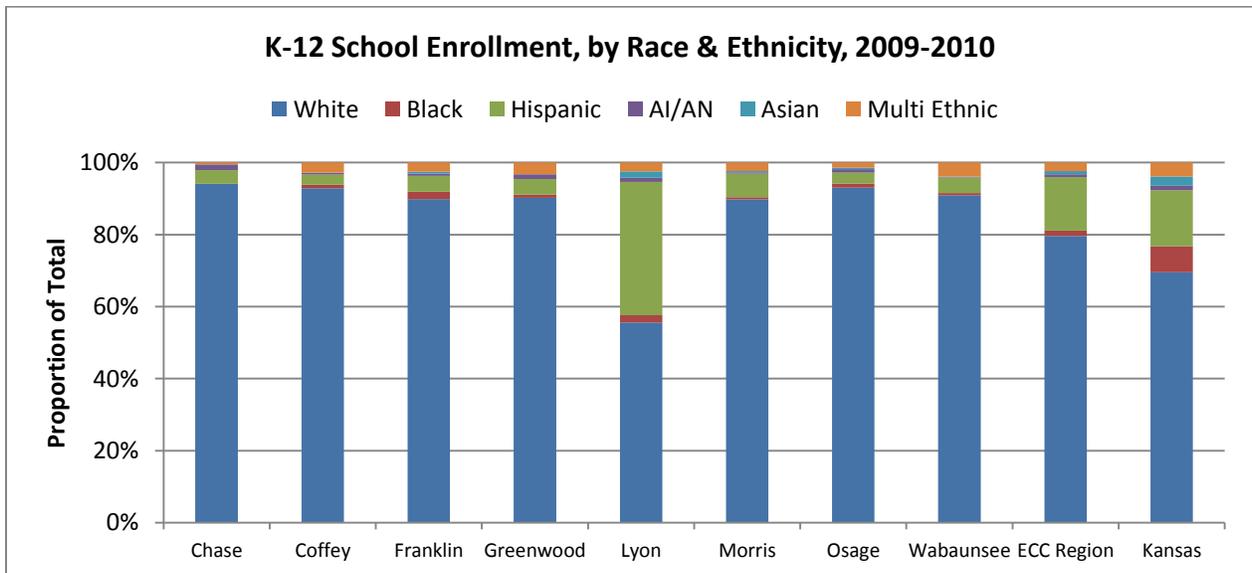


Source: U.S. Census Bureau, 2010 Decennial Census

2. Education

School Enrollment by Race and Ethnicity

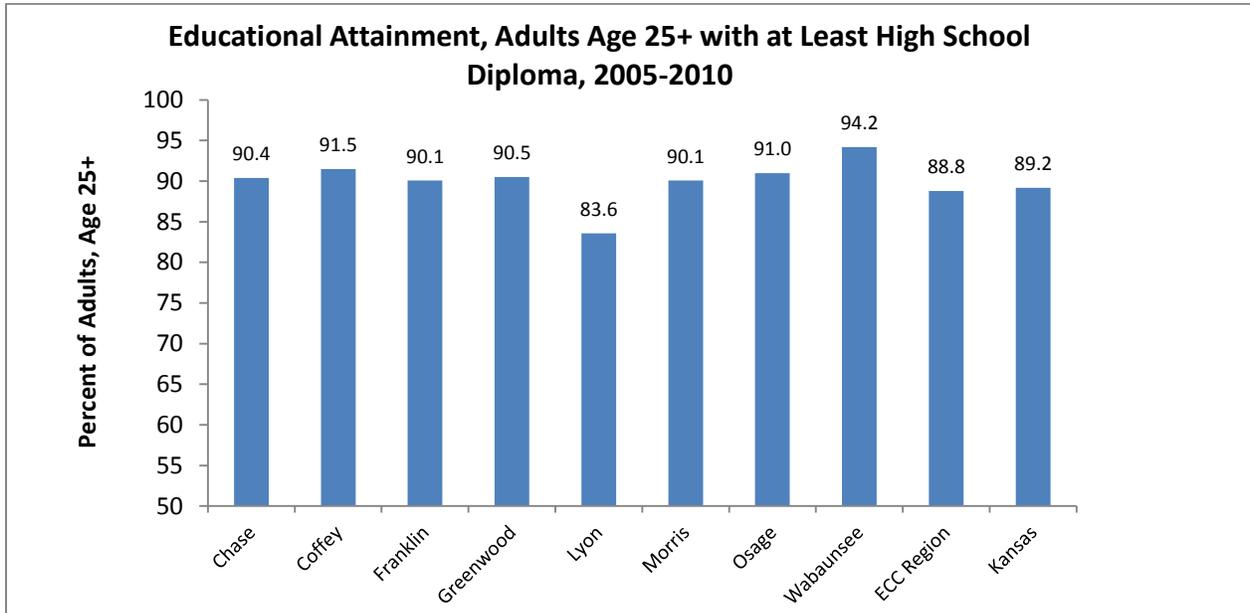
The racial/ethnic composition of school-age children within the region mirrors that of the overall county populations. The high proportion of Hispanic ethnicity among Lyon County students is notable, with Hispanic children accounting for 37 percent of the total student population.



Source: Kansas State Department of Education, K-12 Statistics

Educational Attainment

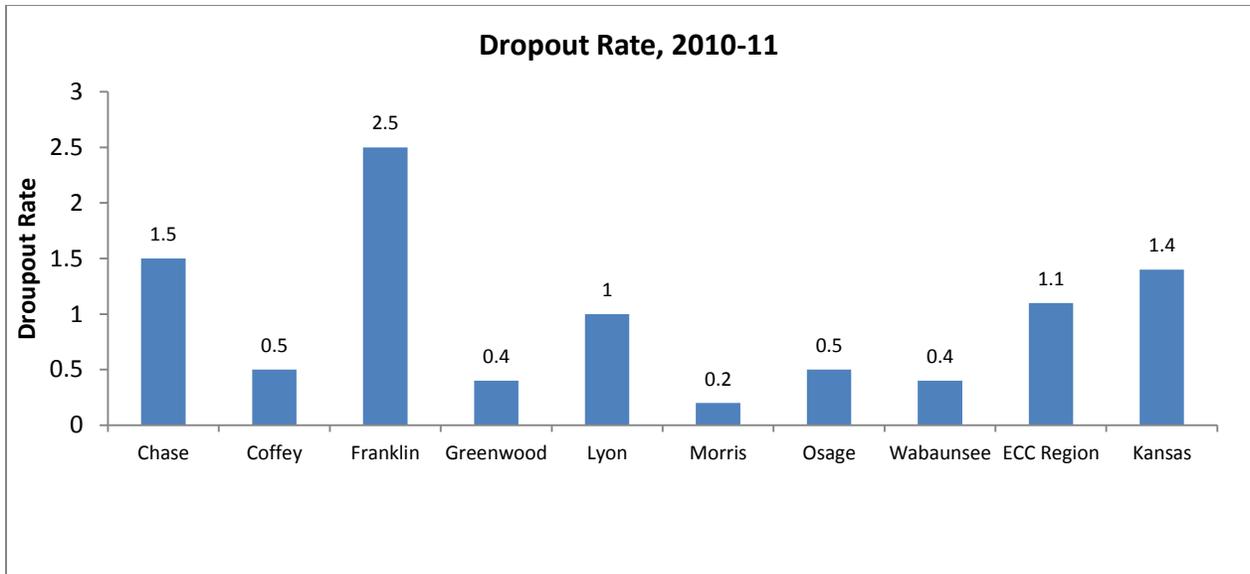
Educational attainment levels of the adult population are closely tied to employability and earnings potential. At the regional level, educational attainment is similar to that of Kansas overall. There is, however, variation in educational attainment levels among the counties that comprise the region. Adults residing in Lyon County had the lowest rates of high school graduation within the ECC region.



Source: U.S. Census Bureau, American Community Survey 5-year Estimates, 2005-2010

Dropout rate

While the educational attainment measure reflects the educational accomplishments of adults age 25 years and older, the dropout rate reflects what is happening with youth currently within the K-12 school system. The dropout rate is calculated as the number of dropouts for grades 7 through 12, divided by count of enrollment for those grades in the same enrollment year. Franklin County stands out among the counties of the ECC region, with a dropout rate that exceeds the statewide rate. Forty-two Franklin County students dropped out during the 2010-2011 school term.



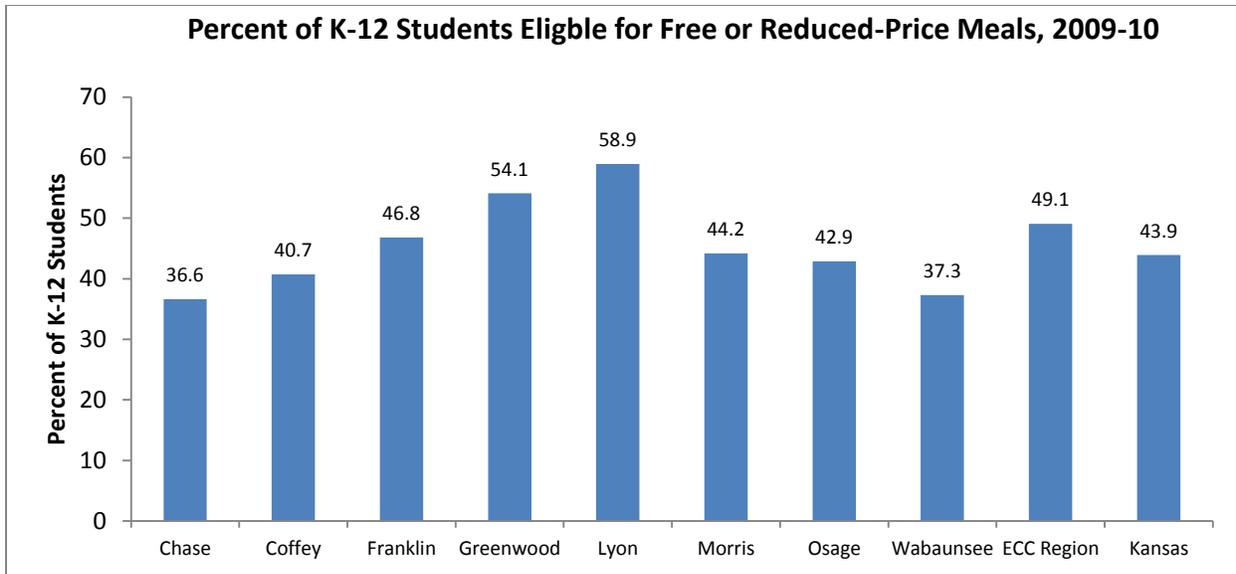
	Chase	Coffey	Franklin	Greenwood	Lyon	Morris	Osage	Wabaunsee	ECC Region
Dropout Rate, 2010-11	1.5	0.5	2.5	0.4	1	0.2	0.5	0.4	1.1
Grade 7-12 enrollment	200	625	1681	446	2379	465	1282	446	7524
# Dropouts	3	3	42	2	23	1	6	2	82

Source: Kansas State Department of Education, K-12 Statistics. (2009-10 enrollment counts substituted for Chase County, as 2010-11 enrollment data not available)

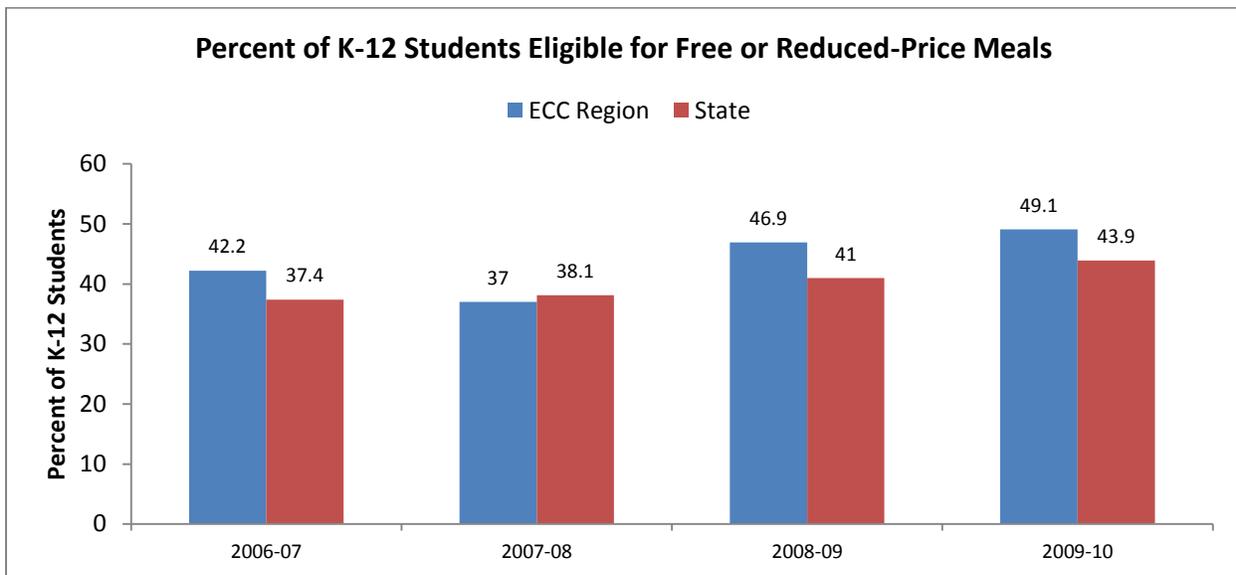
Eligibility for Free and Reduced-Price School Meals

Children from households with incomes below 185 percent of the Federal Poverty Level are eligible for either free (if household income is below 130 percent of the Federal Poverty Level) or reduced-price school meals. For many low-income children, these federally subsidized meals provide a critical nutritional resource. Families that depend upon subsidized school meals to help feed their children may experience difficulty in feeding everyone during summer recess and other extended periods when school is out of session.

The percentage of ECC students eligible for free or reduced-price school meals during the 2009-2010 school year was slightly higher than the statewide rate. Within the ECC region, county-level eligibility rates ranged from 36.6 percent to 58.9 percent of students.



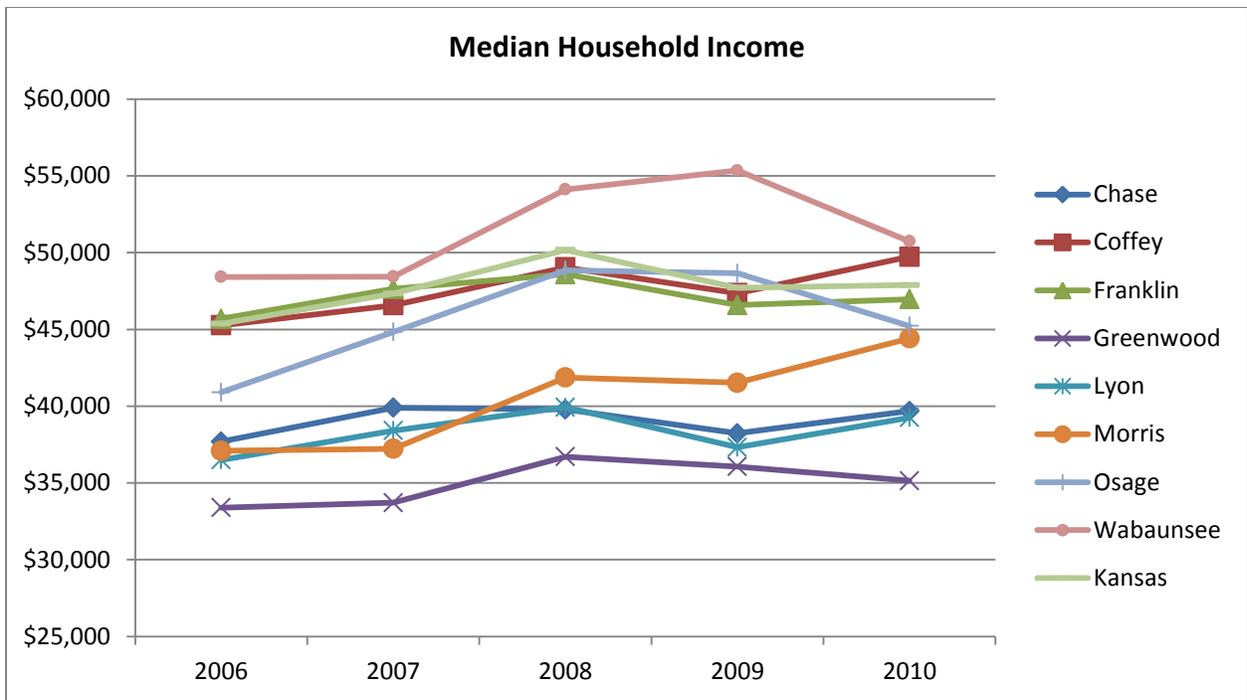
Source: Kansas State Department of Education, K-12 Statistics



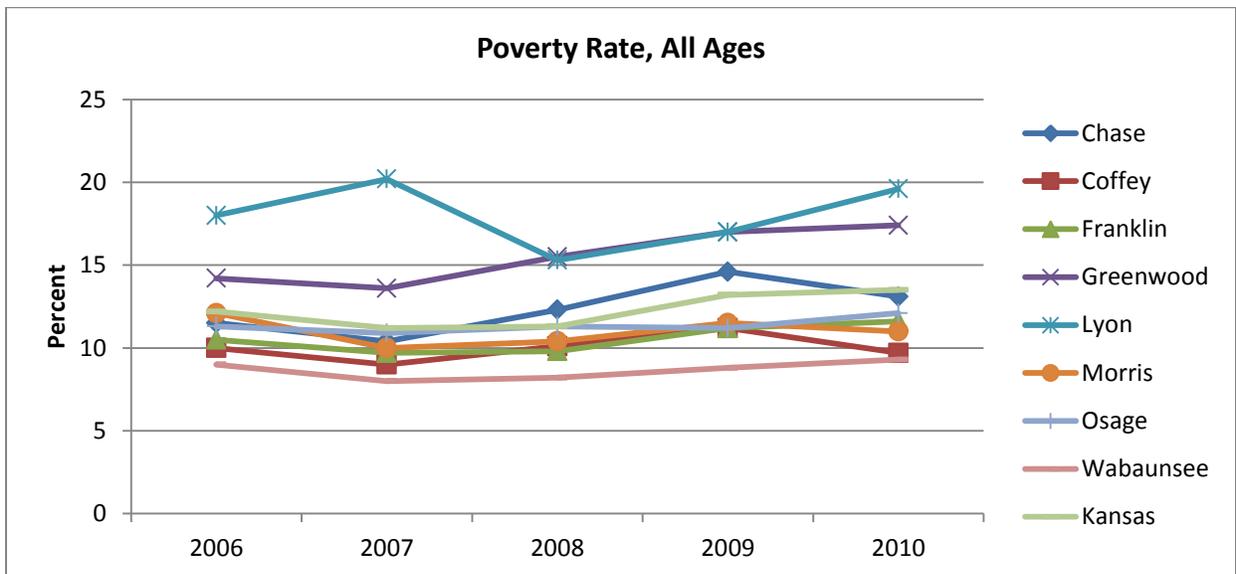
Source: Kansas State Department of Education, K-12 Statistics

3. Economic Status

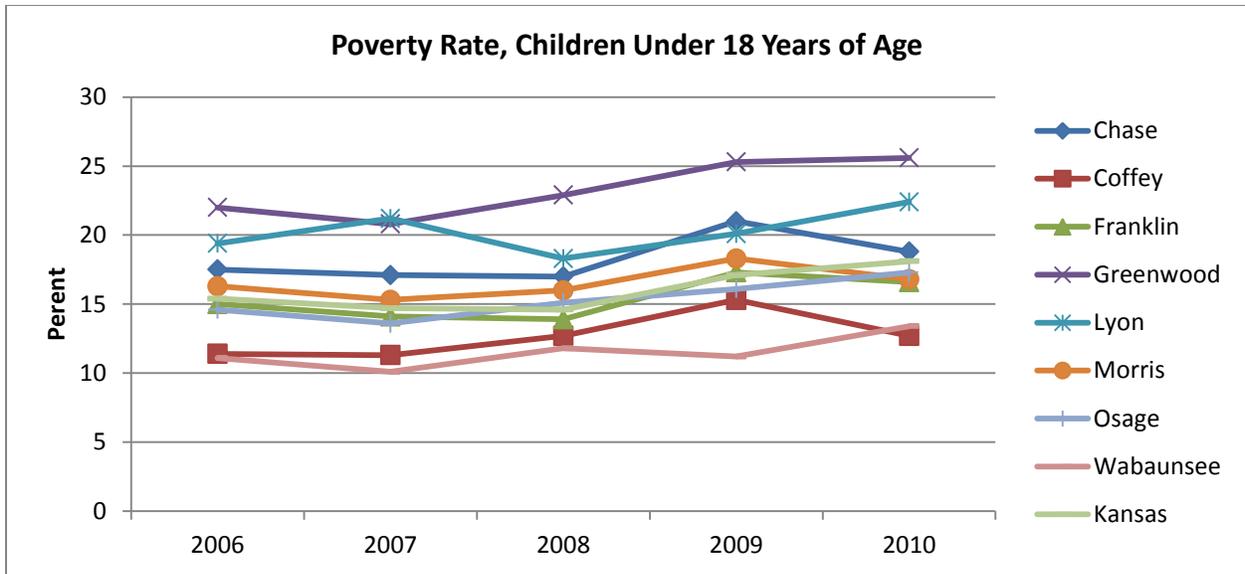
In terms of median income, poverty and unemployment rates, counties within the ECC vary widely. Wabaunsee County residents consistently had the highest median income levels and lowest poverty rates from 2006 to 2010. Greenwood County residents consistently had the lowest median incomes and some of the highest poverty rates.



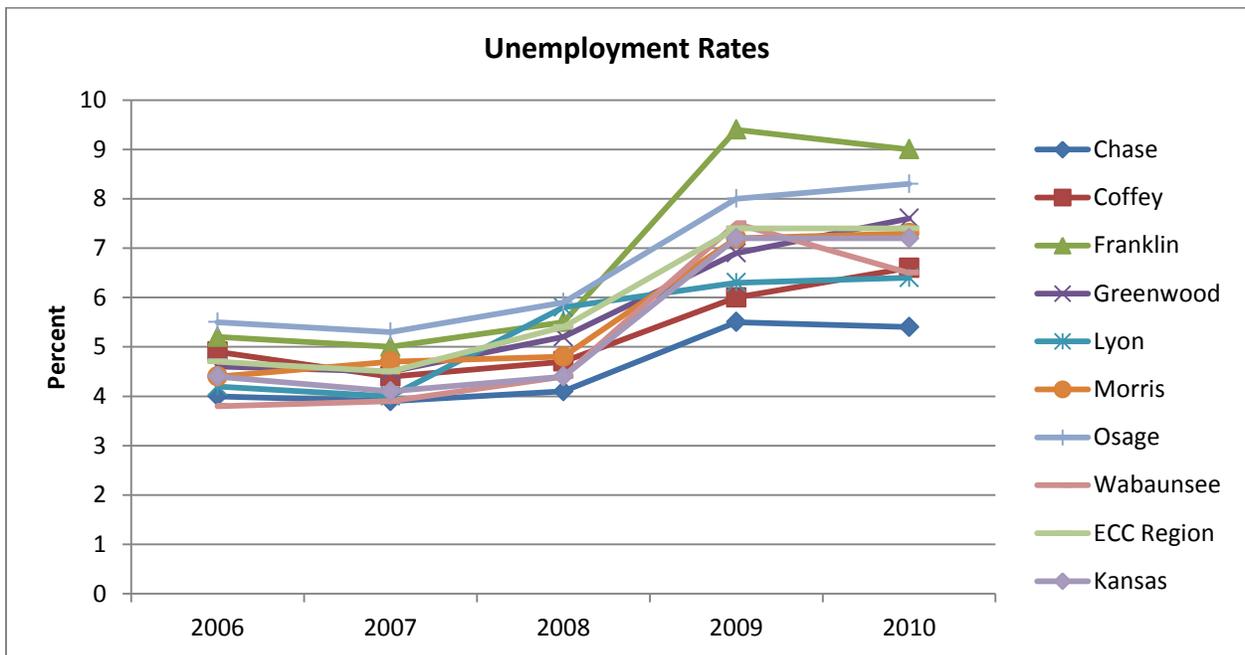
Source: U.S. Census Bureau, Small Area Income and Poverty Estimates



Source: U.S. Census Bureau, Small Area Income and Poverty Estimates



Source: U.S. Census Bureau, Small Area Income and Poverty Estimates

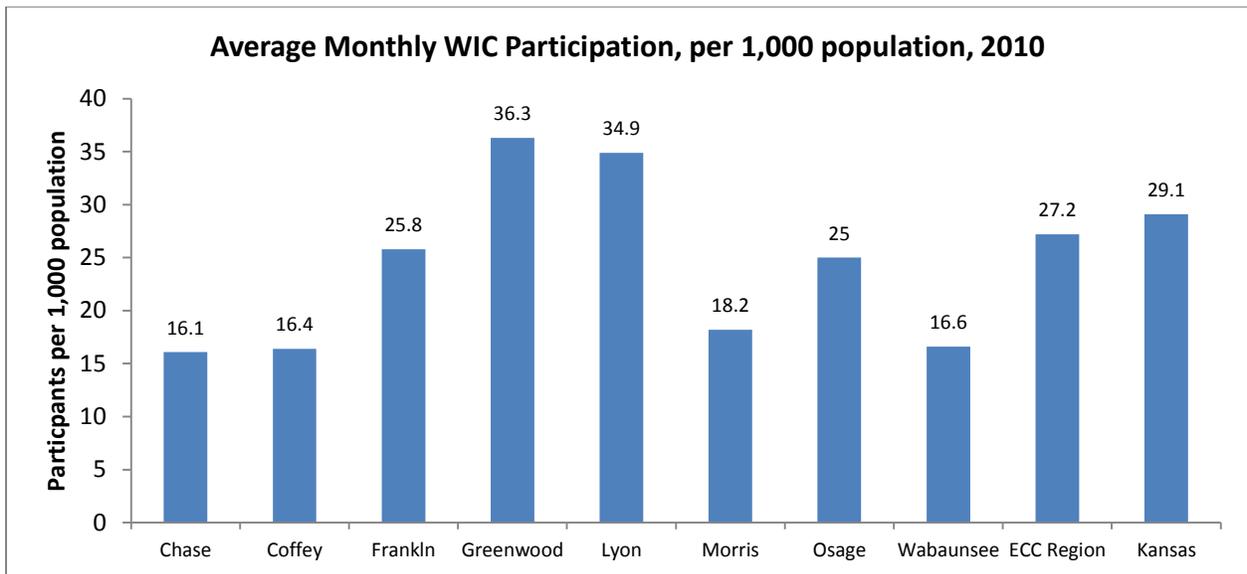


Source: U.S. Bureau of Labor Statistics

WIC Participation Rate

The Special Supplemental Nutrition Program for Women, Infants and Children (WIC) provides nutrition education services and vouchers for the purchase of specified food items to low-income pregnant and lactating mothers and infants and children age 0 to 5. Qualifying households must have incomes below 185 percent of the Federal Poverty Level.

The Kansas Health Matters data system includes WIC “participation rates,” calculated as the average number of women and children participating monthly, divided by the total population in thousands. These suggest that rates of WIC participation in Greenwood and Lyon counties are higher than the state rate and lower than the state rate in Chase, Coffey, Morris and Osage counties. Some caution should be applied, however, in interpreting these rates because the denominator used in the calculation may not closely correlate to the population that would actually be eligible for participation (pregnant, postpartum or nursing mothers and infants and children age 0 to 5, with household incomes less than 185 percent of the Federal Poverty Level).

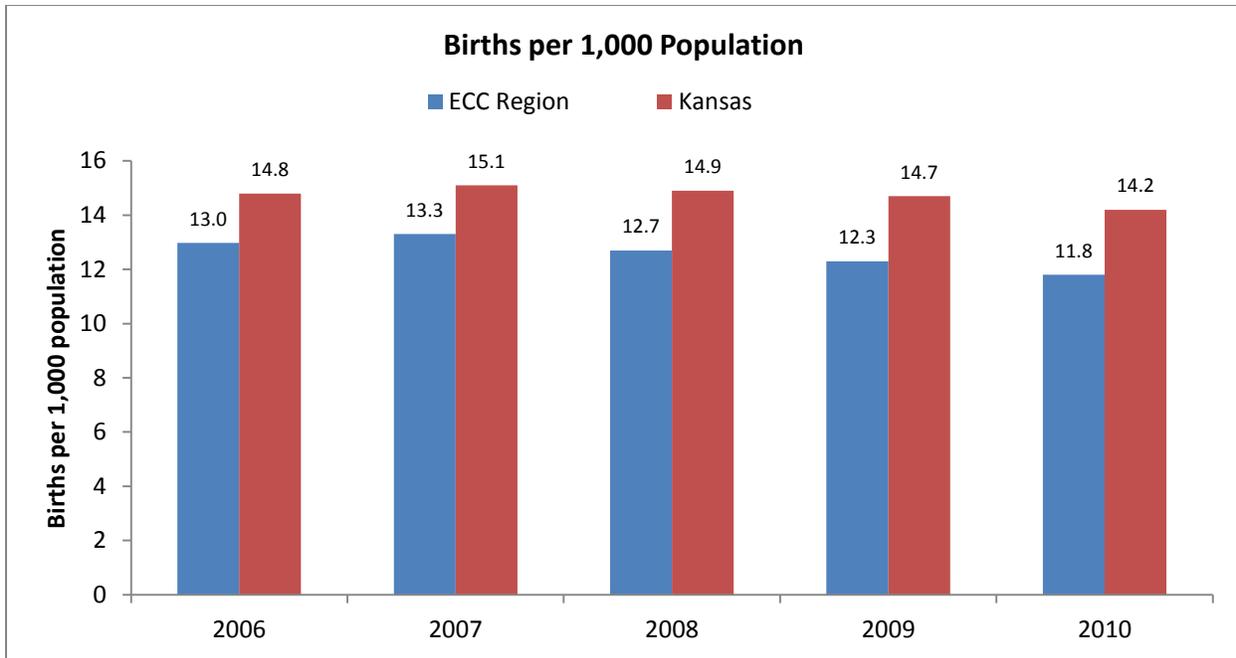


Source: Kansas Health Matters, www.kansashealthmatters.org

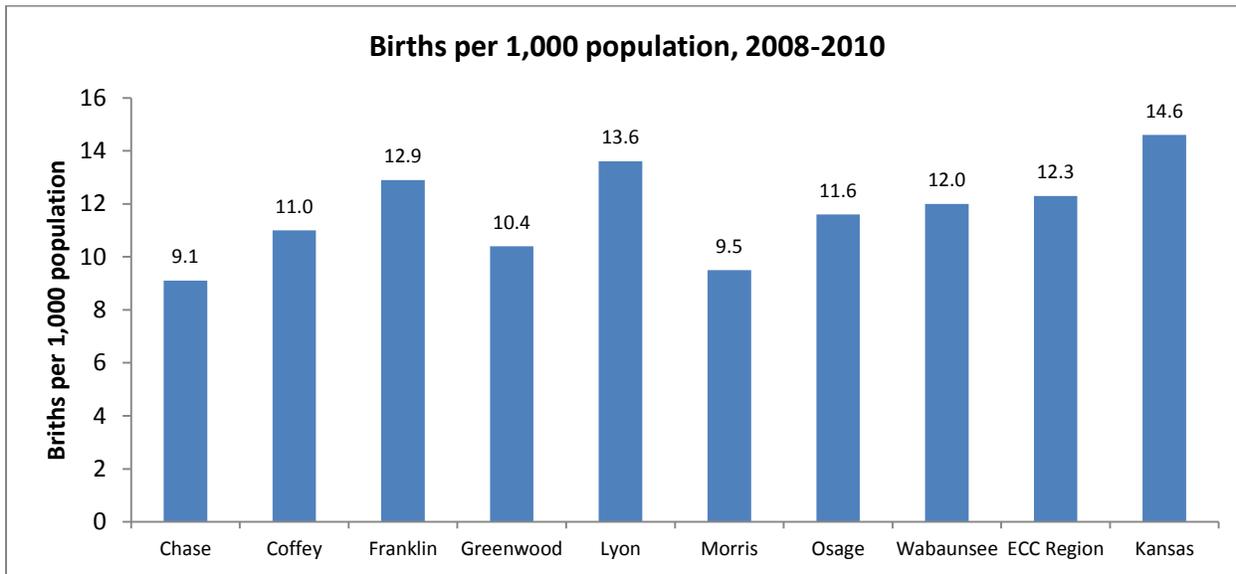
4. Maternal and Child Health

Birth Rate

The birth rate is usually the dominant factor in determining the rate of population growth. It is dependent upon two population characteristics: level of fertility and age structure of the population. Birth rates for the ECC region as a whole are somewhat lower than rates for the state, and have been declining in recent years with a pattern similar to that observed at the state level. Within the ECC region, Lyon County had the highest birth rates, probably related to the younger population of that county.



Kansas Department of Health & Environment, Annual Summary of Vital Statistics, 2010



Kansas Department of Health and Environment, Annual Summary of Vital Statistics, 2010

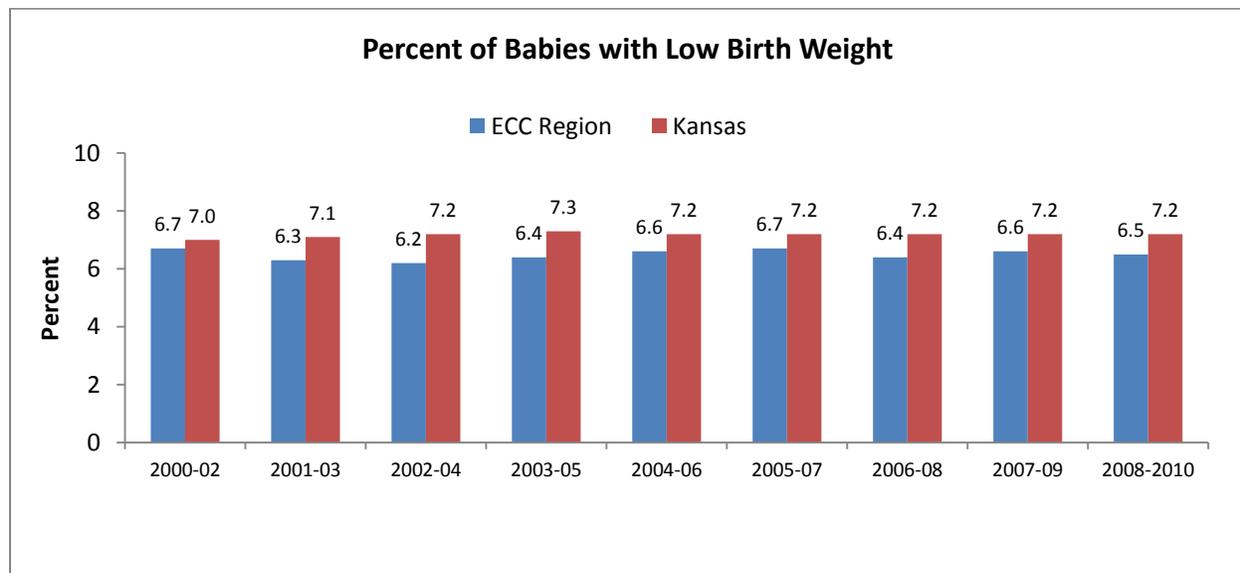
Number of Births, by Year and County

	2006	2007	2008	2009	2010
Chase	33	25	29	24	23
Coffey	90	90	99	74	106
Franklin	383	358	333	352	337
Greenwood	75	84	86	66	58
Lyon	538	556	494	474	426
Morris	48	67	58	58	54
Osage	189	185	203	177	185
Wabaunsee	79	97	83	89	77
ECC Region	1435	1462	1385	1314	1266

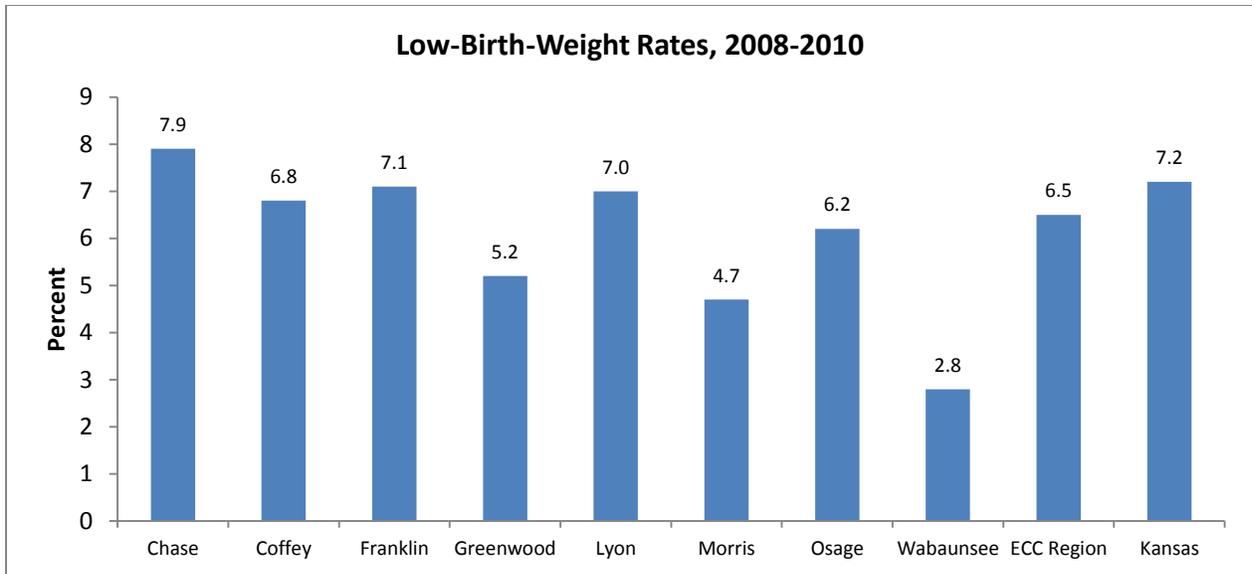
Low-Birth-Weight Rate

Infants born weighing less than 2,500 grams (5 pounds, 8 ounces) are termed “low birth weight.” Babies born with a low birth weight are more likely than babies of normal weight to require specialized medical care and are at increased risk for infant death or long-term disability. Low birth weight is often associated with premature birth.

Since 2000, rates of low birth weight in the ECC region have been consistently below those in Kansas overall. Within the ECC region, significant variability is observed in county rates, with Wabaunsee County having the lowest rate at 2.8 percent. Some caution should be observed in interpretation of the county-level rates, as the rates may be unstable due to small numbers of both births and low-birth-weight events.



Source: Kansas Health Matters, www.kansashealthmatters.org

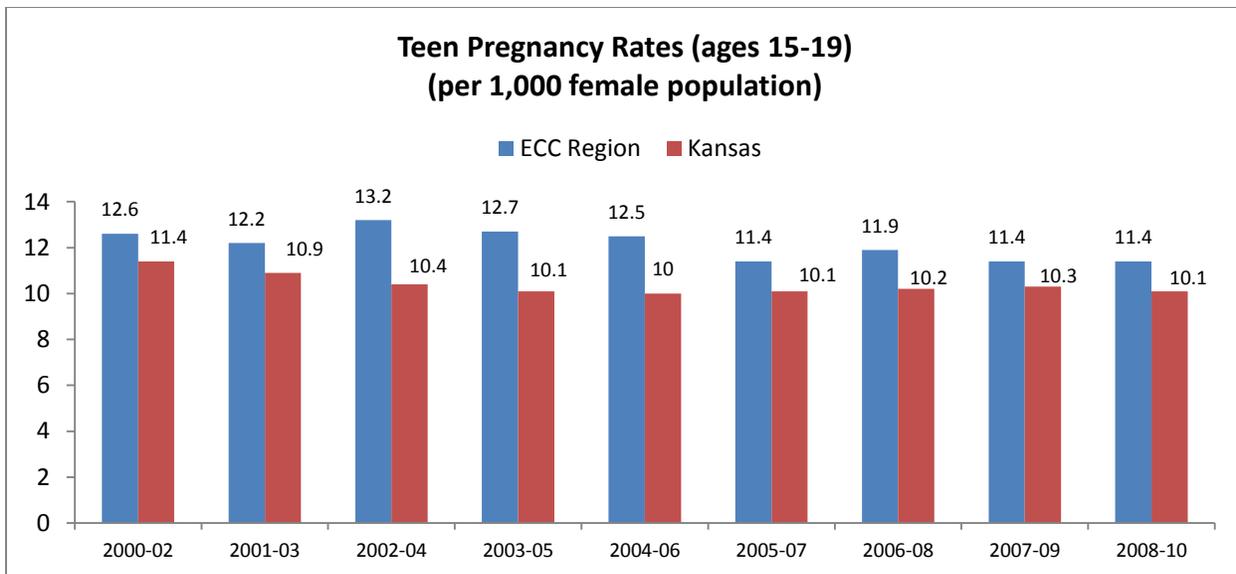


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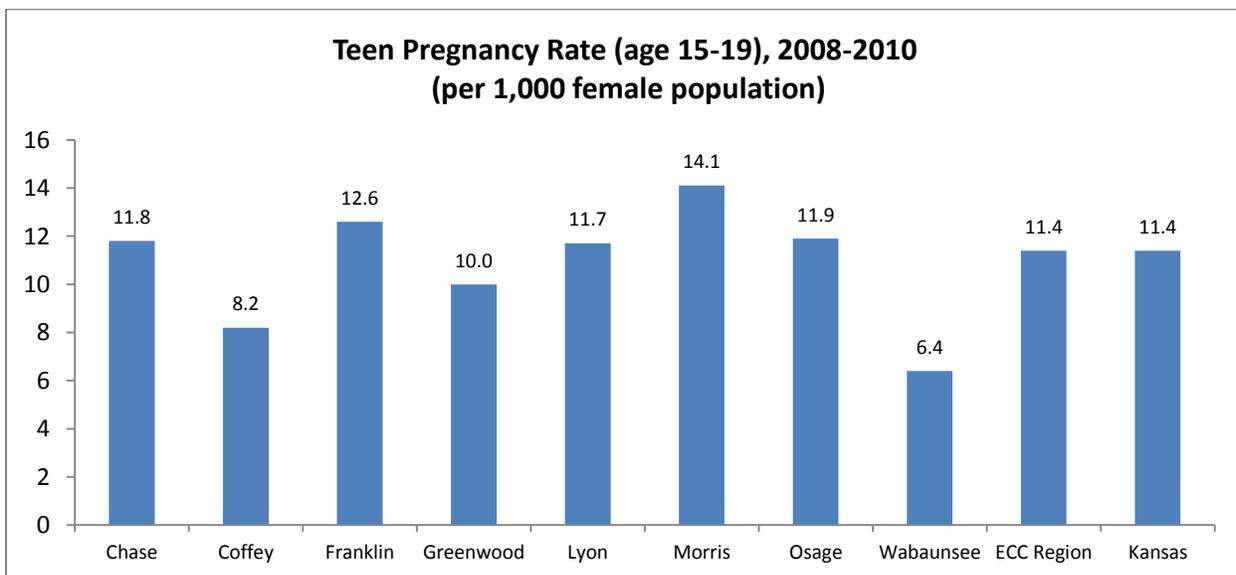
Teen Pregnancy Rate

The teen pregnancy rate is defined as the percent of births in which mothers were 15 to 19 years of age. Eighty-two percent of pregnancies to mothers ages 15 to 19 are unintended, and the negative consequences associated with unintended pregnancies (birth defects, low birth weight, poor mental and physical health during childhood, lower educational attainment, more behavioral issues in teen years) are greater for teen parents and their children. Teen mothers are less likely to graduate from high school or attain a GED by the age of 30. They also earn an average of \$3,500 less than mothers who delay childbearing until their 20s and receive nearly twice as much federal aid for nearly twice as long.

Since 2000, rates of teen pregnancy within the ECC have consistently exceeded those of the state. Within the ECC region, considerable variation is observed. Again, caution should be observed in interpreting county rates due to small numbers.



Source: Kansas Health Matters, www.kansashealthmatters.org

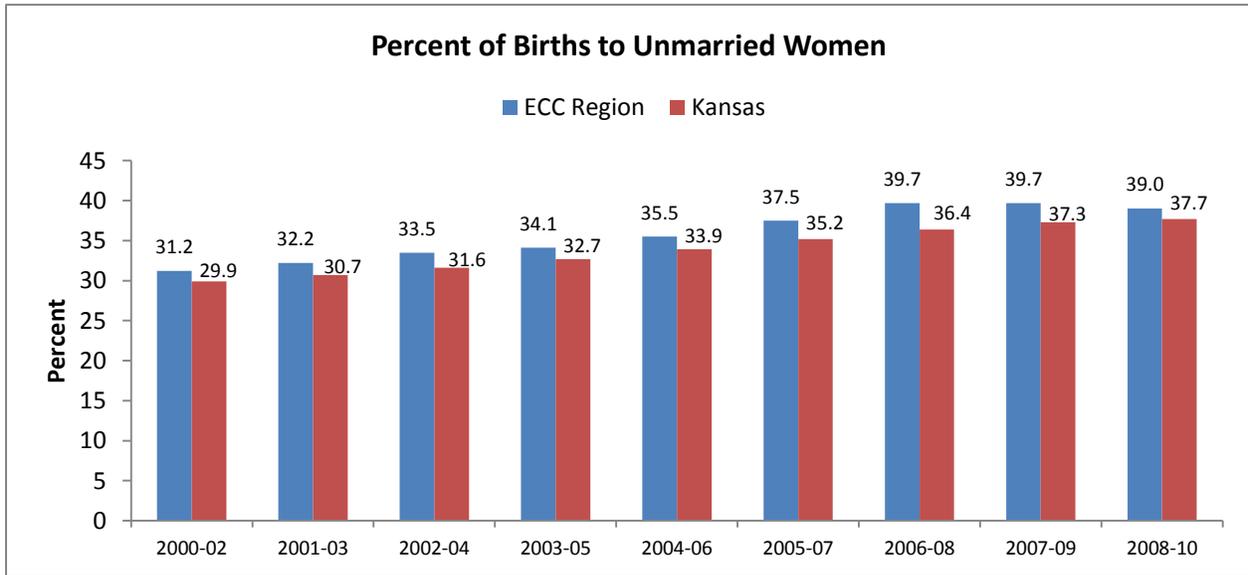


Kansas Department of Health and Environment, Annual Summary of Vital Statistics, 2010

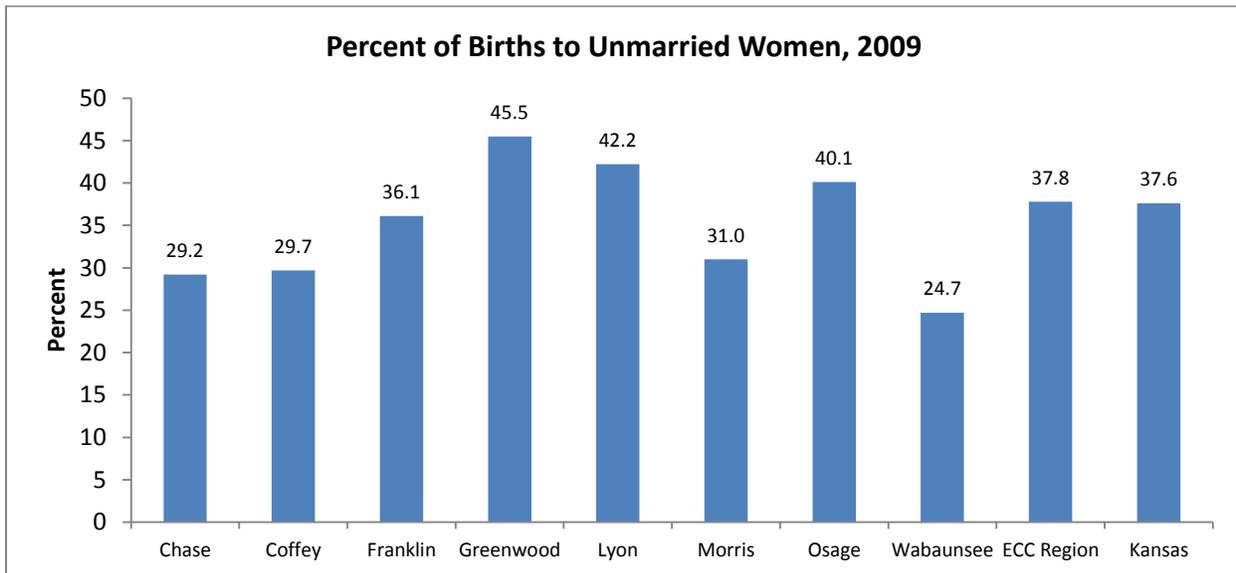
Births to Unmarried Women

This measure describes all births to mothers who reported not being married at the time of the birth. Unmarried births include both planned and unplanned pregnancies, to mothers of all ages.

The proportion of births to unmarried women has been increasing in recent years, both at the state level and within the ECC region. Within the ECC region in 2009, rates of births to unmarried women varied from 24.7 percent in Wabaunsee County to 45.5 percent in Greenwood County.



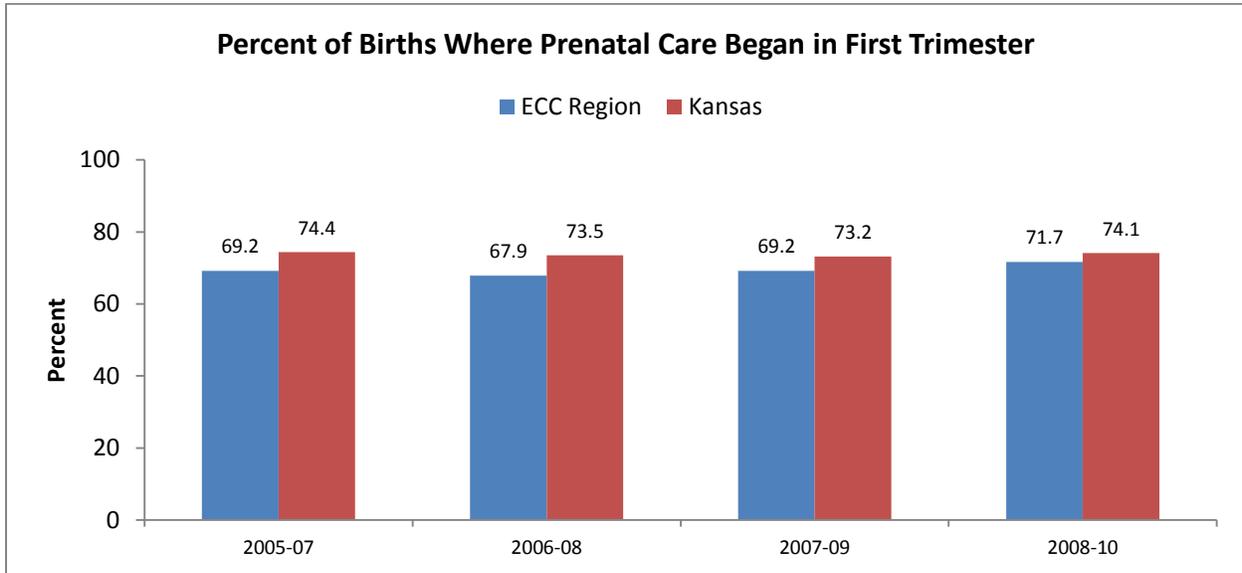
Source: Kansas Health Matters, www.kansashealthmatters.org



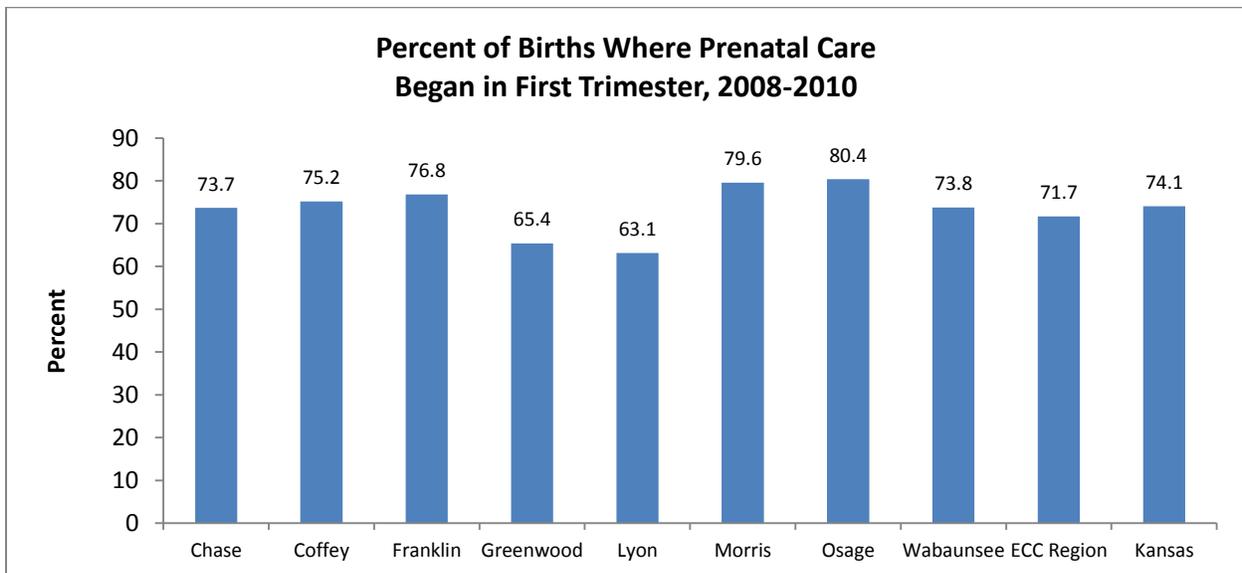
Source: Kansas Health Matters, www.kansashealthmatters.org

Prenatal Care Beginning in First Trimester

Early access to prenatal care (i.e. in the first trimester of pregnancy) allows women and their health care providers to identify and, when possible, treat or correct health problems that can be detrimental to healthy fetal development. Across the ECC region, rates of prenatal care during the first trimester are slightly below those for the state.



Source: Kansas Health Matters, www.kansashealthmatters.org



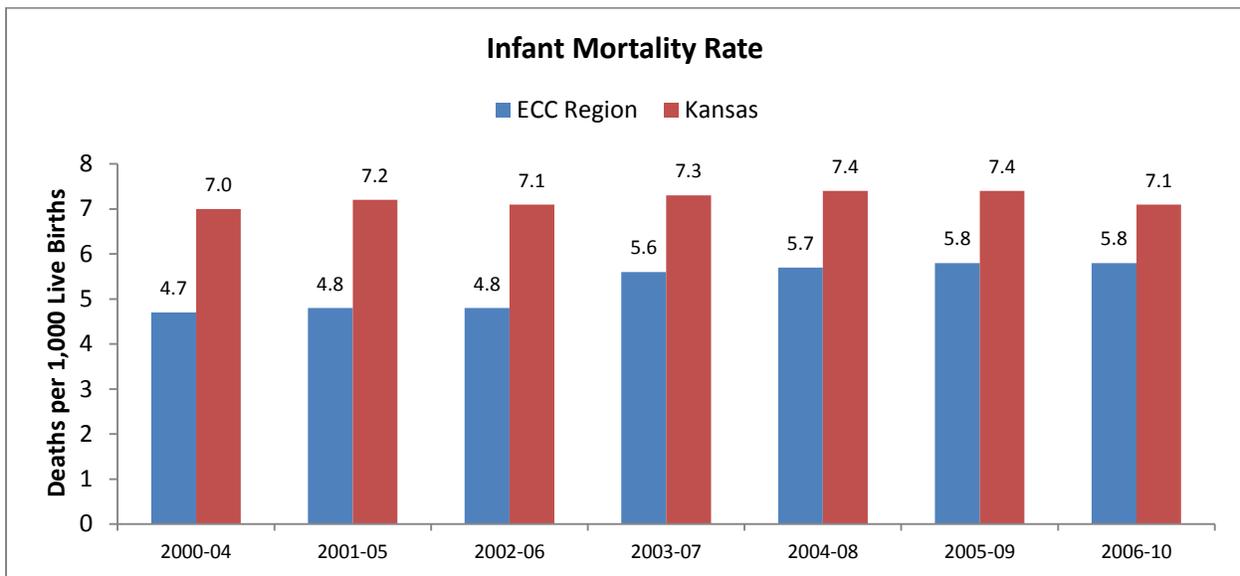
Kansas Department of Health and Environment, Annual Summary of Vital Statistics, 2010

Infant Mortality Rate

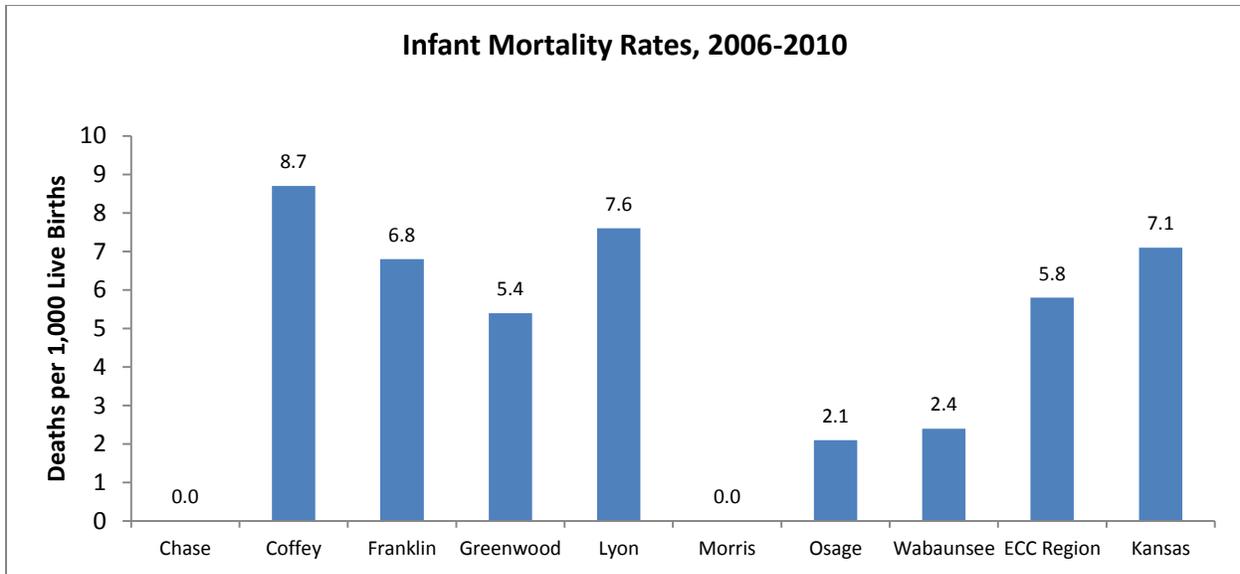
The infant mortality rate is defined as the rate of infant deaths (prior to 1 year of age) per 1,000 live births. Leading causes of death among infants are birth defects, pre-term delivery, low birth weight, sudden infant death syndrome (SIDS) and maternal complications during pregnancy. The Healthy People 2020 target is 6.0 infant deaths per 1,000 live births.

Since 2000, infant mortality rates within the ECC region have been consistently lower than those of Kansas overall. Within the region, infant mortality rates between 2006 and 2010 ranged from a low of 0.0 in Chase and Morris counties to 8.7 percent in Coffey County. Caution should be applied in interpreting these county-level rates due to small numbers of births and infant deaths at the county level.

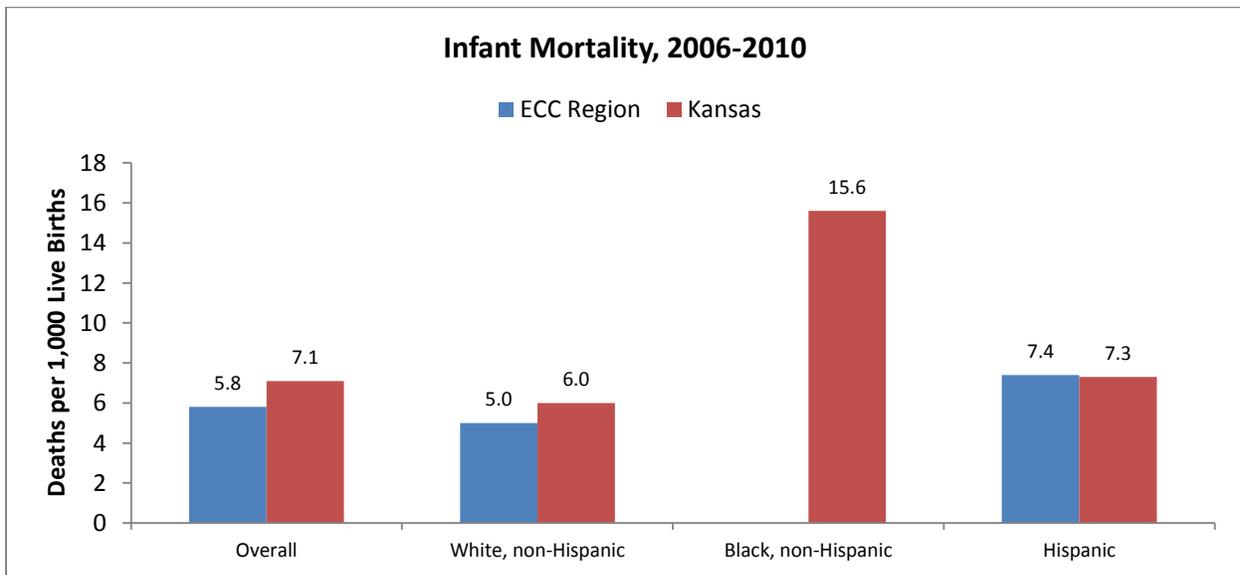
When broken out by racial/ethnic categories, infant mortality rates for population subgroups within the ECC region closely mirror those at the state level, with slightly increased infant mortality rates observed among the Hispanic population. Infant mortality rates for black, non-Hispanics are not available for the ECC region due to small numbers.



Source: Kansas Health Matters, www.kansashealthmatters.org; Kansas Department of Health and Environment, Annual Summaries of Vital Statistics, 2004-2010



Kansas Department of Health & Environment, Annual Summary of Vital Statistics, 2010



Source: Kansas Health Matters, www.kansashealthmatters.org

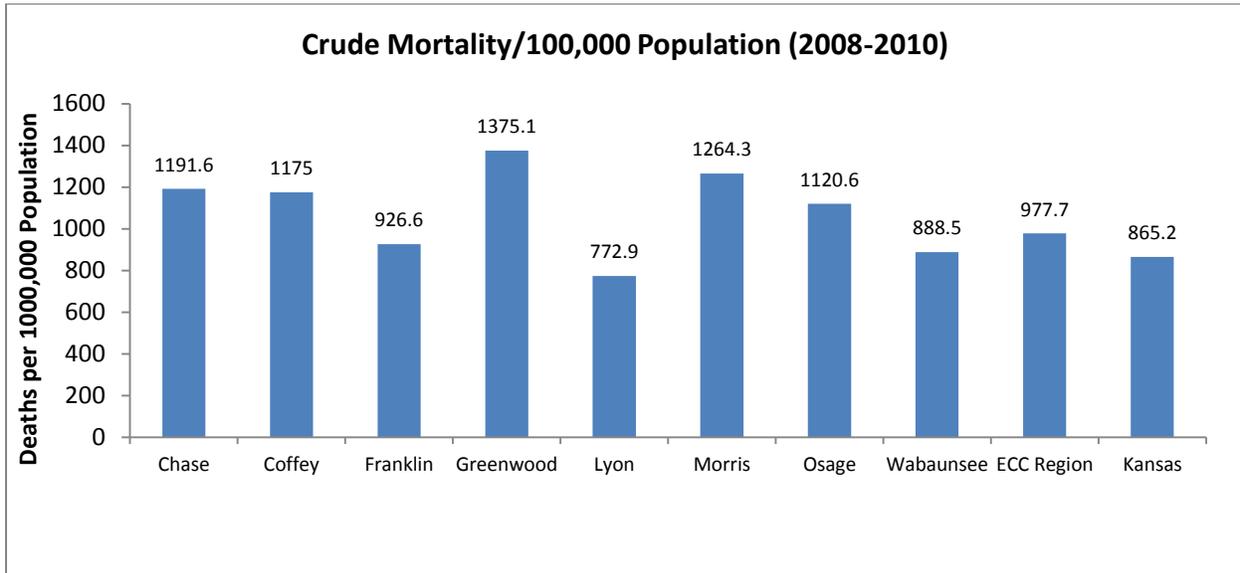
5. Mortality

Overall Mortality Rate (Crude and Age-Adjusted)

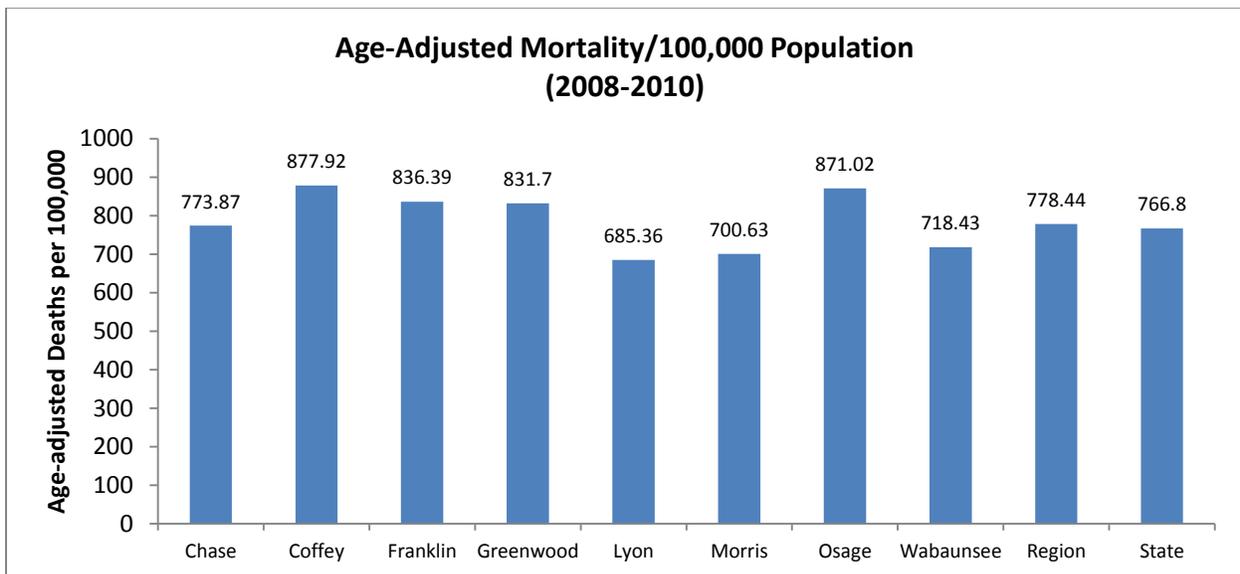
Mortality rates are calculated as the number of deaths in a defined time period, per 100,000 people. Although many factors affect the risk of death, age is by far the strongest. Because populations often differ in age composition, it is important to control for differences in age distributions by “age-adjusting” death rates when making comparisons among geographic regions.

When reviewing unadjusted (crude) mortality rates for counties in the ECC region, the majority of counties appear to have higher death rates than that of Kansas during the same timeframe. Lyon County has the lowest crude mortality rate, probably related to its younger population.

Age-adjustment of the county mortality rates reduces the apparent differences among counties, as well as between the ECC region and Kansas rates.



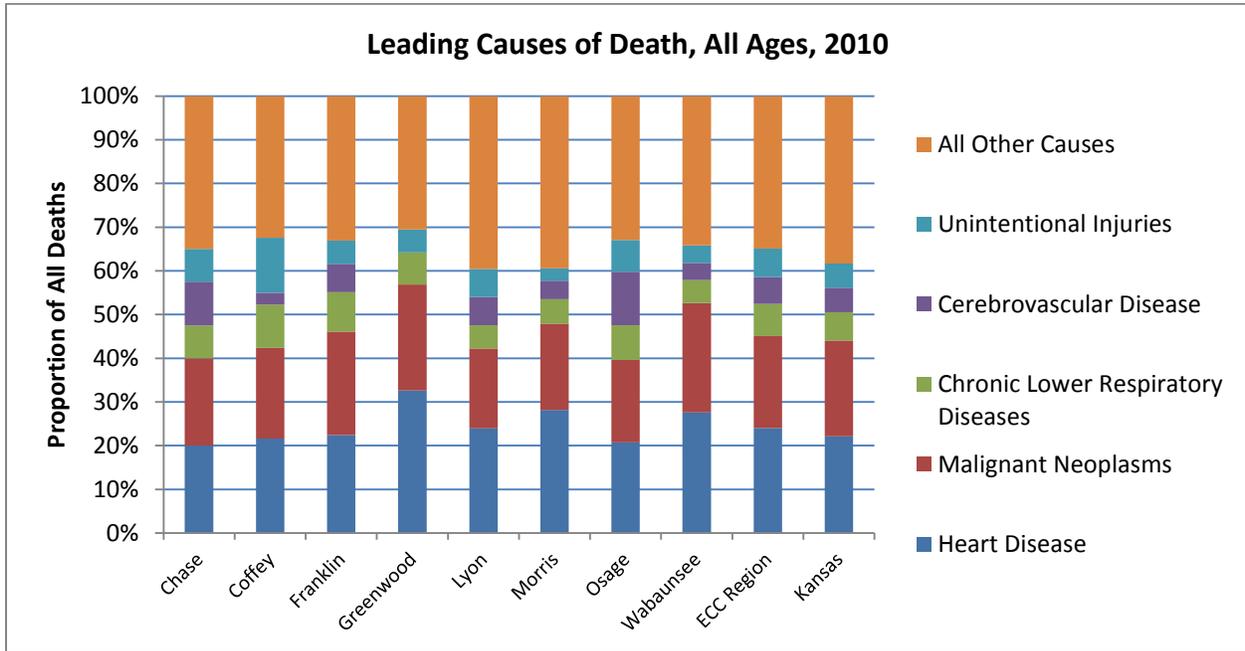
Source: Kansas Department of Health and Environment, Kansas Information for Communities system



Source: Kansas Department of Health and Environment, Kansas Information for Communities system

Leading Causes of Death

The leading causes of death among Kansas residents in 2010 were heart disease, malignant neoplasms (cancer), chronic lower respiratory diseases, cerebrovascular disease (stroke) and unintentional injuries. Proportions of total deaths attributable to each of these five causes were fairly similar across the counties comprising the ECC region.



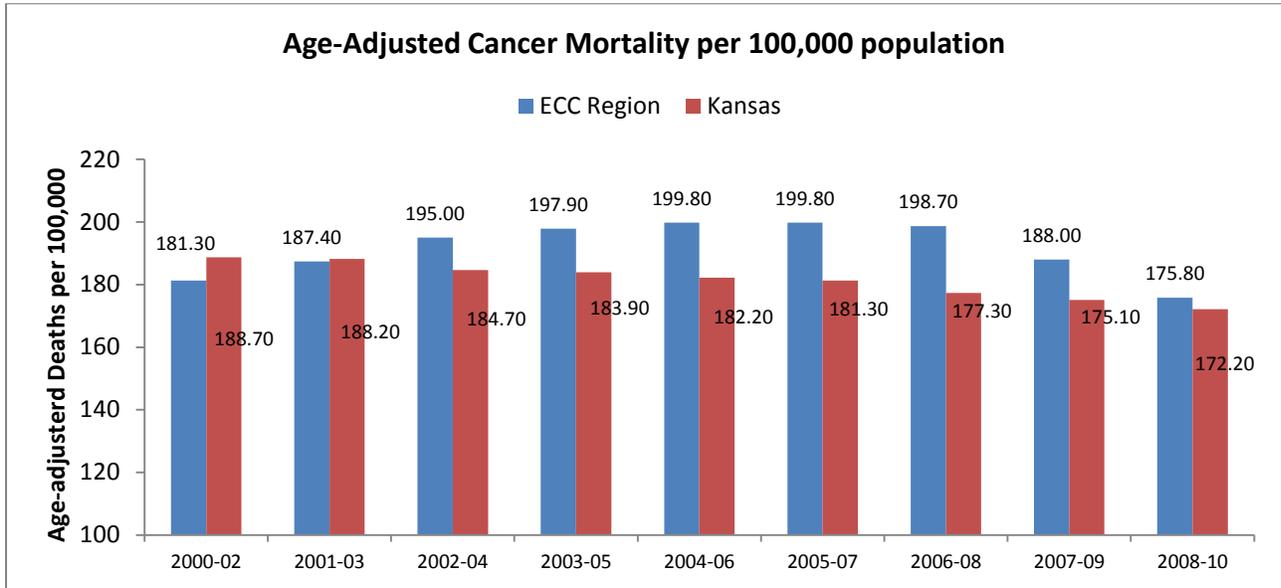
# of Deaths, 2010	Chase	Coffey	Franklin	Green wood	Lyon	Morris	Osage	Wabaun see	ECC Region	Kansas
Heart Disease	8	24	55	31	63	20	34	21	256	5404
Malignant Neoplasms	8	23	58	23	48	14	31	19	224	5359
Chronic Lower Respiratory Diseases	3	11	22	7	14	4	13	4	78	1581
Cerebrovascular Disease	4	3	16	0	17	3	20	3	66	1367
Unintentional Injuries	3	14	13	5	17	2	12	3	69	1346
All Other Causes	14	36	81	29	104	28	54	26	372	9371
Total Deaths	40	111	245	95	263	71	164	76	1065	24428

Source: Kansas Department of Health & Environment, Annual Summary of Vital Statistics, 2010

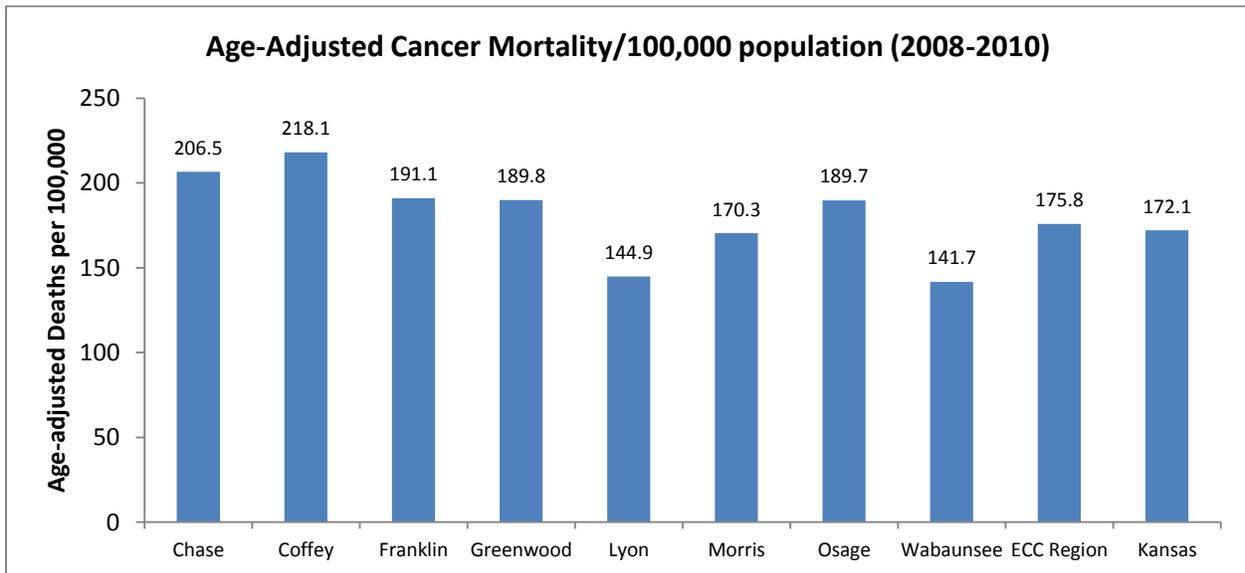
Cancer Mortality

Cancer (malignant neoplasms) is the second leading cause of death in the United States, Kansas and the ECC region. Since 2000, age-adjusted rates of cancer mortality have been gradually declining in Kansas. Within the ECC region, cancer death rates increased between 2002 and 2005 and exceeded the Kansas

rates. Since 2005, ECC cancer death rates have declined, and most recent rates are approaching those of the state.



Source: Kansas Health Matters, www.kansashealthmatters.org



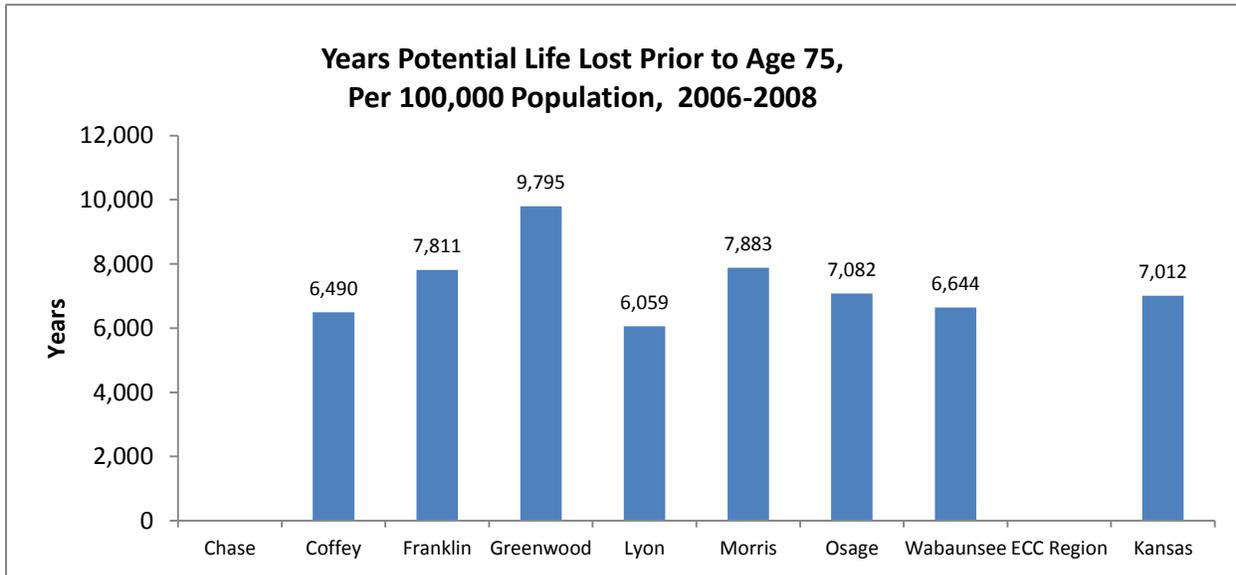
Source: Kansas Health Matters, www.kansashealthmatters.org

Years of Potential Life Lost

Years of Potential Life Lost (YPLL) is an estimate of premature mortality. It represents the number of years a person would have lived if he or she had not died before a predetermined age, in this case 75 years. On a population level, the measurement gives more weight to deaths occurring among younger

people, and therefore YPLL is an alternative measure to death rates. Rates presented here represent YPLL per 100,000 population for 2006-2008.

Of the counties within the ECC region, Greenwood County had the highest YPLL rates. Data were not available for Chase County or the ECC region.

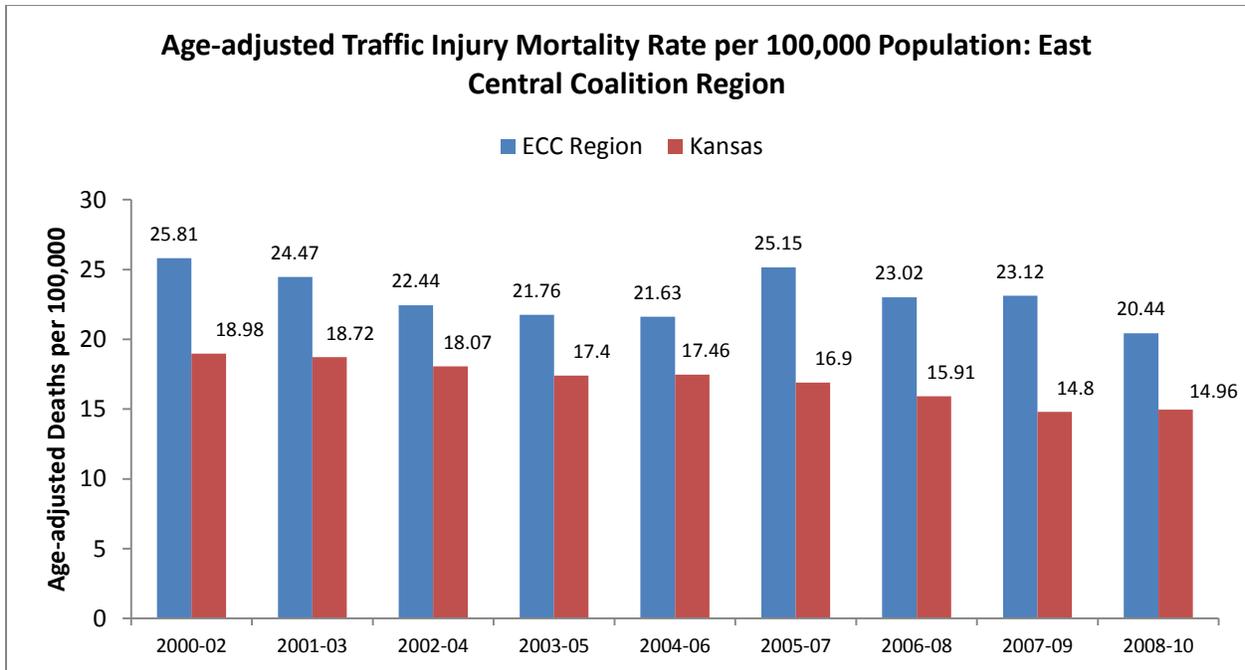


Source: County Health Rankings 2012, www.countyhealthrankings.org

Deaths from Motor Vehicle Accidents

This indicator shows the death rate per 100,000 population due to on- or off-road accidents involving a motor vehicle. Motor vehicle-related injuries kill more children and young adults than any other single cause in the United States. Deaths from boating accidents or airline/airplane crashes are not included in this measure.

Within the ECC region, age-adjusted rates of deaths due to motor accidents have consistently exceeded state-level rates since 2000. Due to small numbers, comparable county-level rates are not available.



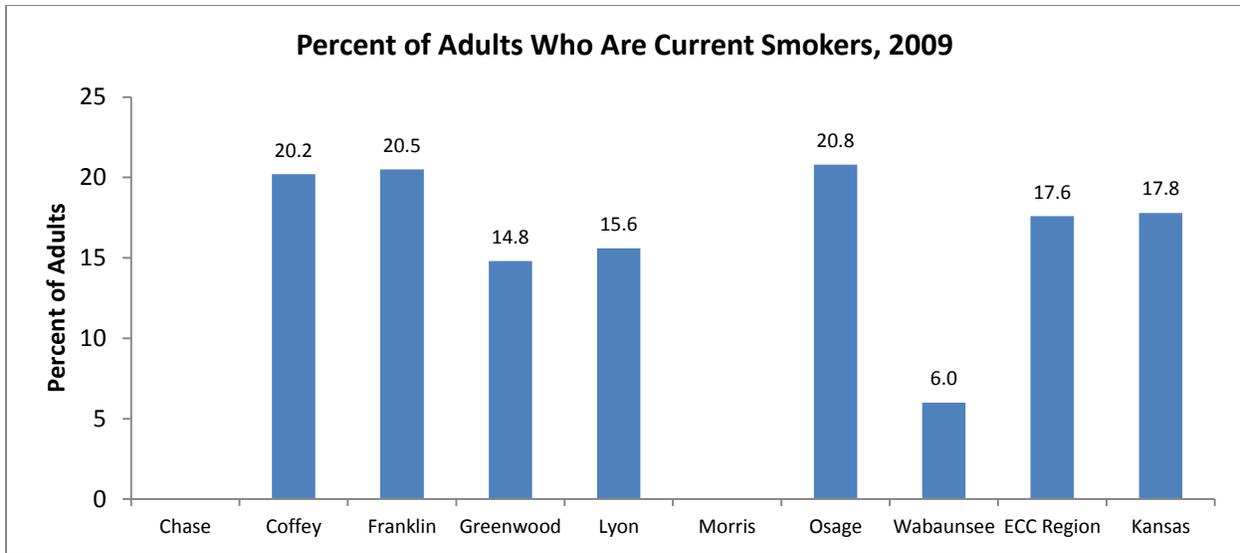
Source: Kansas Health Matters, www.kansashealthmatters.org

6. Health Behaviors

Tobacco Use - Percentage of Adults Who Are Current Smokers

Tobacco use is one of the most preventable causes of illness and death in the United States. Approximately one-third of all tobacco users will die prematurely because of their tobacco use. Locations with high smoking prevalence will also have greater exposure to secondhand smoke for non-smokers, which can cause or exacerbate a wide range of adverse health effects, including cancer, heart disease, respiratory infections and asthma. The Healthy People 2020 national target is to reduce the proportion of the adult population age 18 and over who smoke cigarettes to 12 percent.

Across the ECC region, 17.6 percent of adults were smokers during 2009, a rate nearly equal to the state rate of 17.8 percent. Within the ECC region, county-level smoking rates ranged from 6.0 percent in Wabaunsee County to 20.8 percent in Osage County. Data were not available for Chase and Morris counties due to small population sizes.

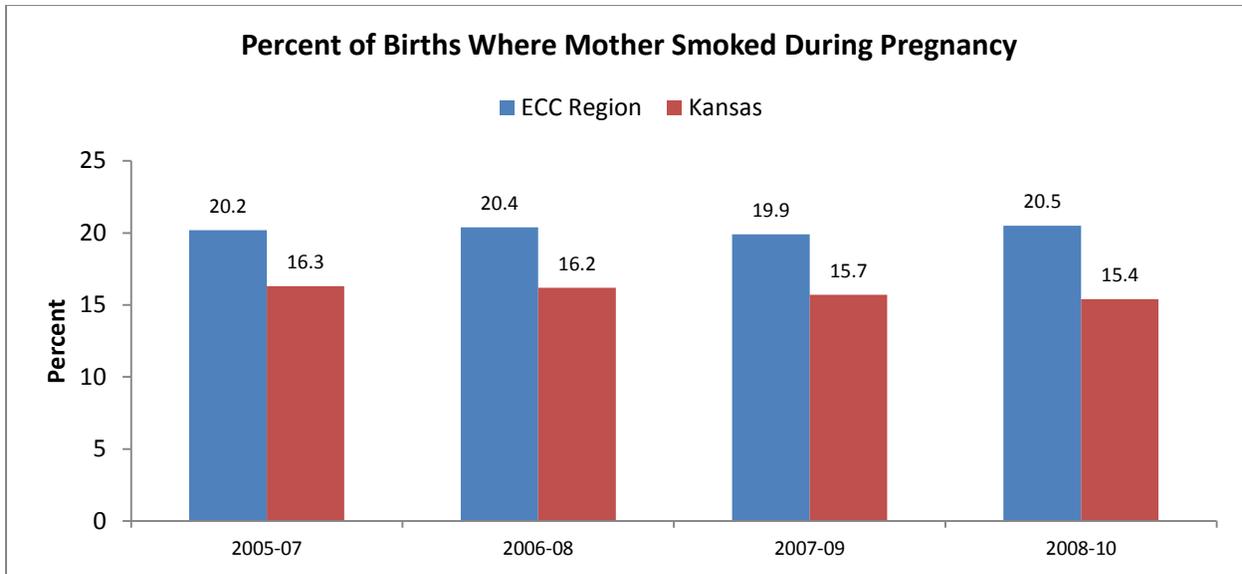


Source: Kansas Health Matters, www.kansashealthmatters.org

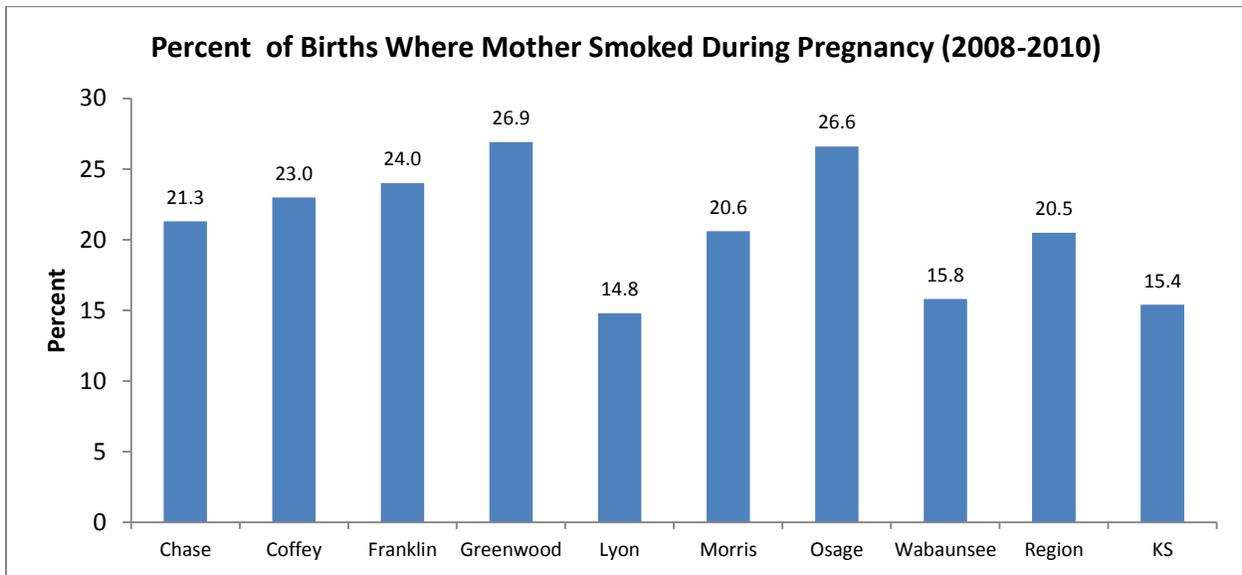
Tobacco Use – Smoking During Pregnancy

Smoking during pregnancy adversely affects the health of both the mother and her baby. Maternal smoking can result in miscarriages, premature delivery and sudden infant death syndrome. Smoking during pregnancy nearly doubles a woman’s risk of having a baby with low birth weight, which is a key predictor for infant mortality. Maternal smoking also increases the risk for a preterm delivery.

Across the ECC region, rates of smoking during pregnancy have consistently exceeded state-level rates since 2005. Within the region, county-level maternal smoking rates from 2008 to 2010 varied from 14.8 percent in Lyon County to 26.9 percent in Greenwood County.



Source: Kansas Health Matters, www.kansashealthmatters.org

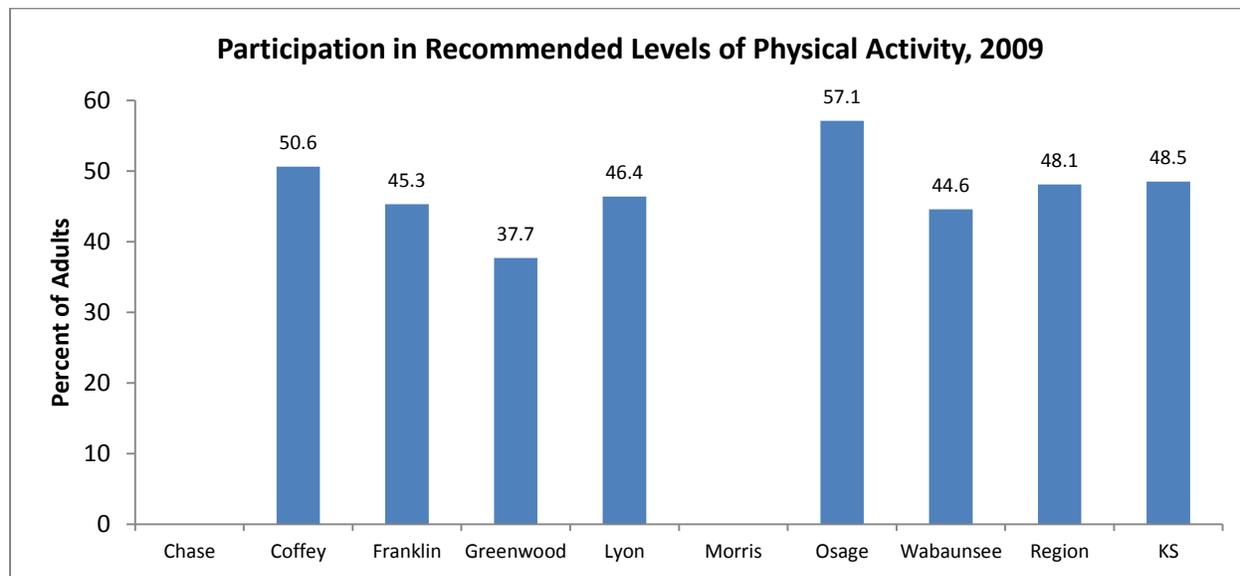


Source: Kansas Health Matters, www.kansashealthmatters.org

Physical Activity

Research has shown that active adults may reduce their risk of many serious health conditions including obesity, heart disease, diabetes, colon cancer and high blood pressure. In addition, physical activity reduces the symptoms of anxiety and depression, improves mood and feelings of well-being, and promotes healthy sleep patterns. This indicator measures the percentage of adults 18 years and older who engage in moderate physical activity for at least 30 minutes five days per week or vigorous physical activity for at least 20 minutes three or more days per week.

At the regional level, 48.1 percent of adults met the recommended levels of physical activity, a level nearly equal to the statewide rate of 48.5 percent. Within the ECC region, physical activity rates ranged from 37.7 percent in Greenwood County to 57.1 percent in Osage County. Data were not available for Chase and Morris counties.

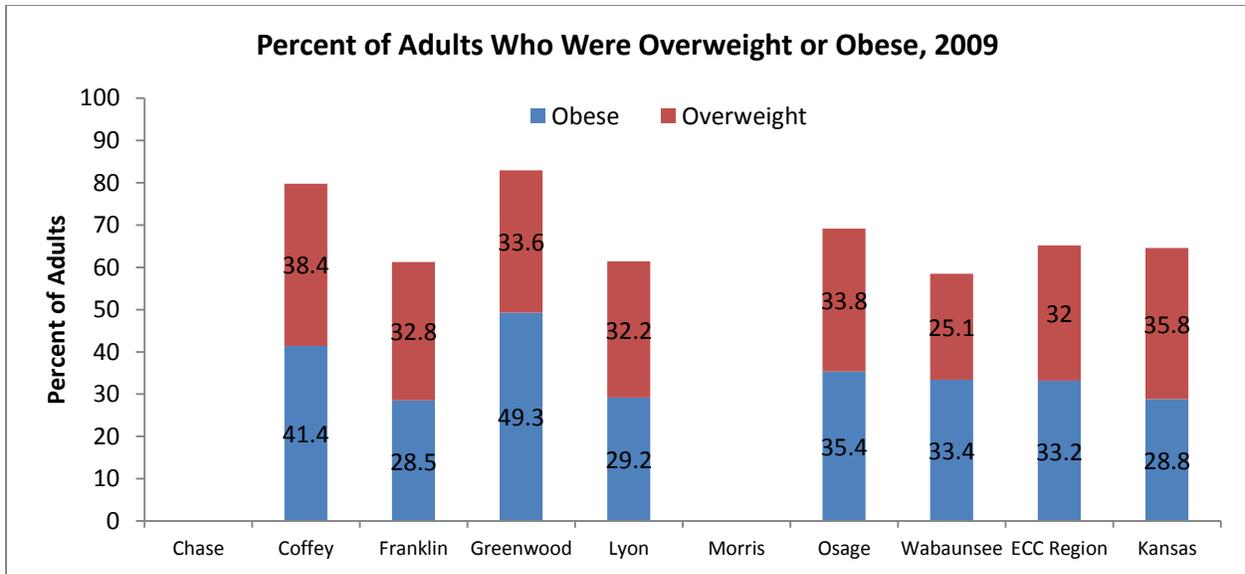


Source: Kansas Health Matters, www.kansashealthmatters.org

Overweight and Obesity Rates (Adults)

The percentage of residents who are overweight or obese is an important indicator of the overall health of a community. Being overweight affects quality of life and puts people at risk for developing many diseases, especially heart disease, stroke, diabetes and cancer. The percentage of adults who are overweight or obese is determined according to the Body Mass Index (BMI), which is calculated by taking a person’s weight and dividing it by their height squared in metric units. A BMI between 25 and 29.9 is considered overweight; a BMI equal to or greater than 30 is considered obese.

At the regional level, the percentages of adults age 18 and over who were either overweight or obese in 2009 was similar to state levels, with a slightly larger proportion falling into the obese category in the ECC region. Among counties in the ECC region, Greenwood County had the highest share of obese and overweight residents, totaling nearly 83 percent of the population.

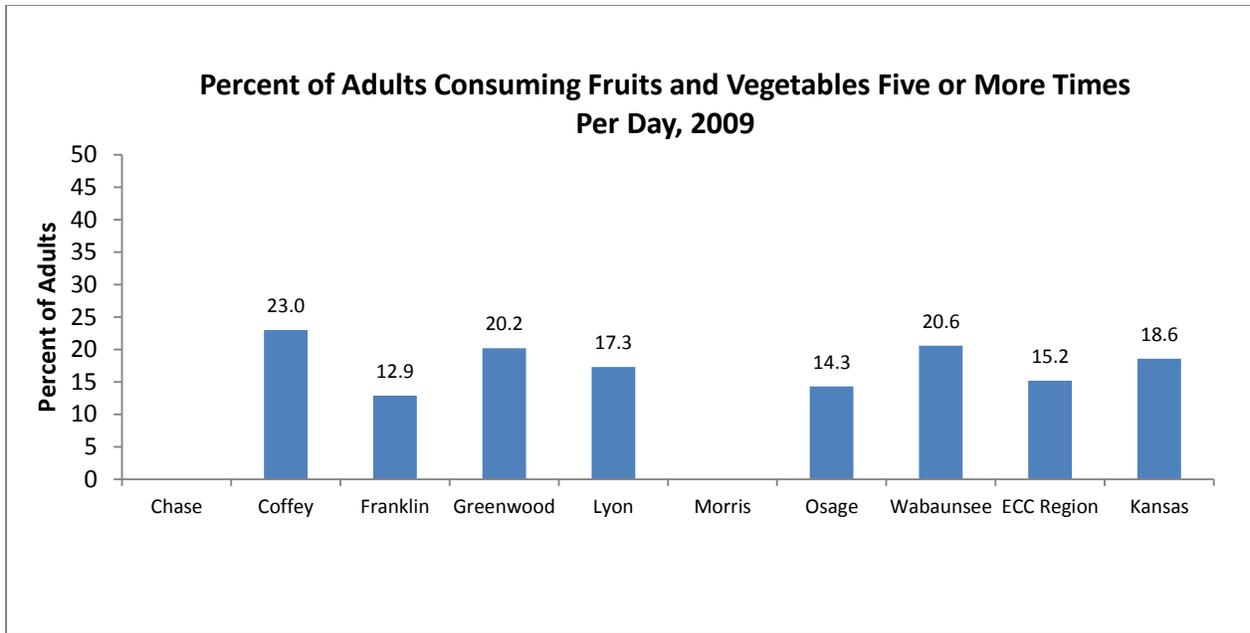


Source: Kansas Health Matters, www.kansashealthmatters.org

Healthy Eating

A healthy, balanced diet is essential in order to maintain a healthy weight and prevent chronic disease. Numerous studies have demonstrated clear linkages between the amount and variety of fruits and vegetables consumed and rates of chronic diseases, especially cancer. The USDA currently recommends four and one-half cups (nine servings) of fruits and vegetables daily for people who need a 2,000-calorie diet, with higher or lower amounts depending on caloric needs.

At the state level, only 18.6 percent of Kansans consumed the recommended amounts of fruits and vegetables on a daily basis during 2009. At the regional level, only 15.2 percent of residents met the recommended amounts. Within the ECC region, county-level consumption rates varied, but in each county, less than one-quarter of residents reported eating the recommended number of servings of fruits and vegetables. Data were not available for Chase and Morris counties.

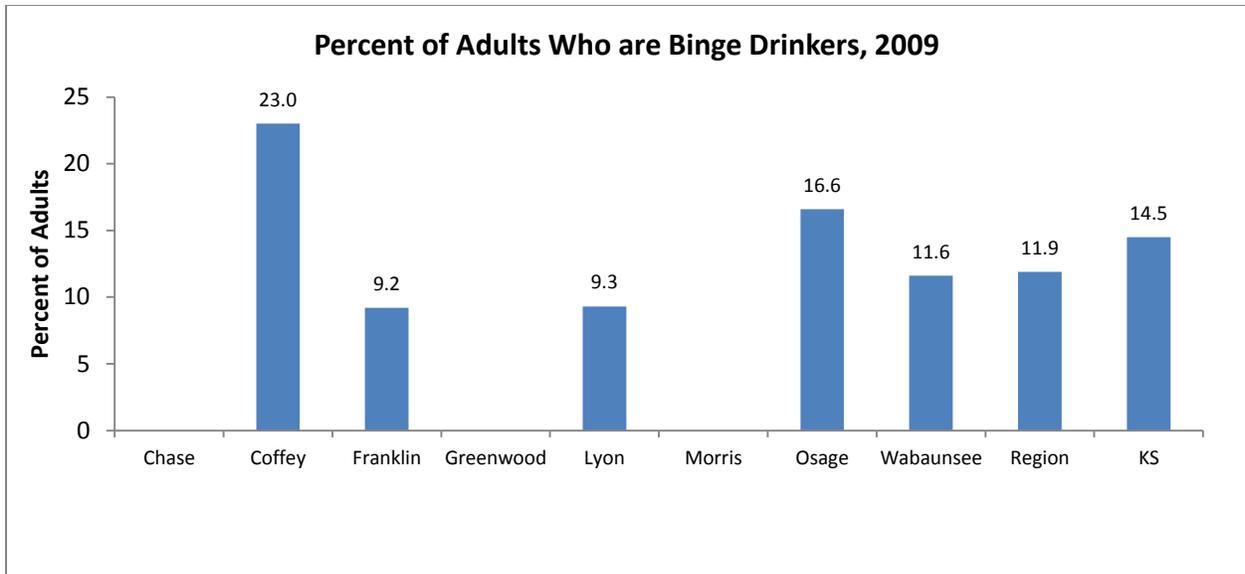


Source: Kansas Health Matters, www.kansashealthmatters.org

Binge Drinking

This indicator shows the percentage of adults 18 years and older who reported binge drinking during the 30 days prior to the Behavioral Risk Factor Surveillance Survey interview. Male binge drinking is defined as five or more drinks on one occasion, and female binge drinking is four or more drinks on one occasion. Alcohol abuse is associated with a variety of negative health and safety outcomes. The Healthy People 2020 national health target is to reduce the proportion of adults age 18 and older engaging in binge drinking during the past 30 days to 24.3 percent.

Across Kansas, rates of binge drinking among adults are already well below the national target, with a statewide rate of 14.5 percent in 2009. The ECC regional rate was even lower, at 11.9 percent. Within the ECC region, Coffey County stands out with a binge drinking rate of 23.0 percent. Data were not available for Chase and Morris counties.



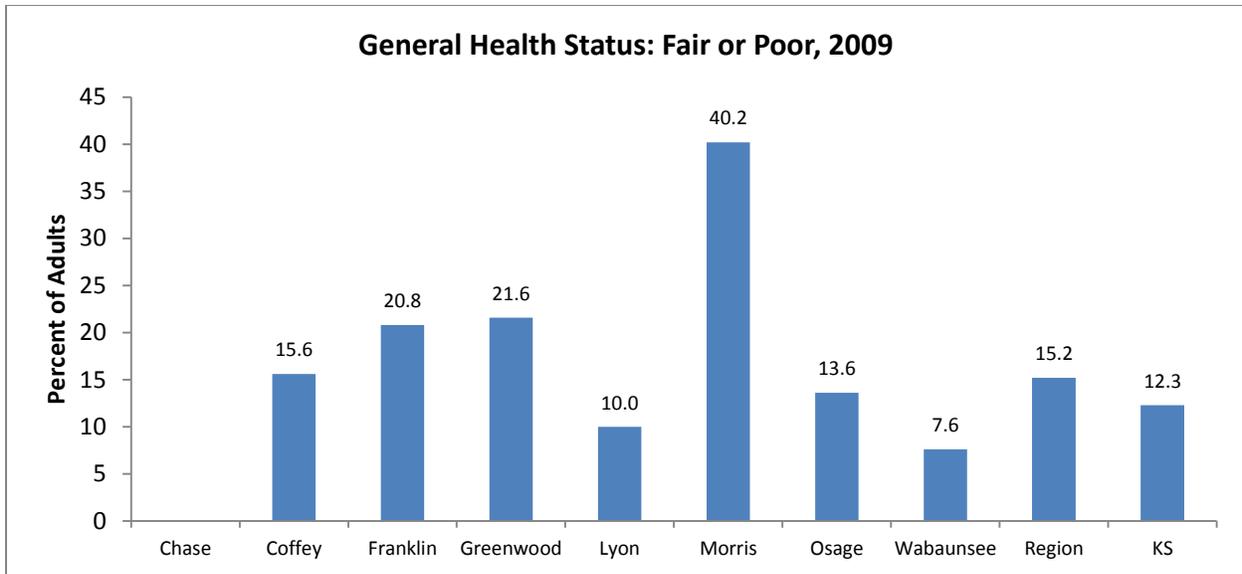
Source: Kansas Health Matters, www.kansashealthmatters.org

7. Disease and Poor Health

Self-Perceived General Health Status Fair or Poor

This indicator shows the percentage of adults age 18 and older answering poor or fair to the question: “How is your general health?” People’s subjective assessment of their health status is important because when people feel healthy, they are more likely to be happy and participate in their community socially and economically. Healthy residents are essential for creating a vibrant and successful economy.

In 2009, 15.2 percent of residents of the ECC region rated their general health as fair or poor, a rate that exceeded the statewide level of 12.3 percent. Within the ECC region, Franklin, Greenwood and Morris counties stand out with rates that appear to be significantly above the state level. Morris County, with 40.2 percent of residents reporting fair or poor general health status, may merit attention, although this rate is likely based upon a limited sample size and may be an imprecise estimate. Data was not available for Chase County.

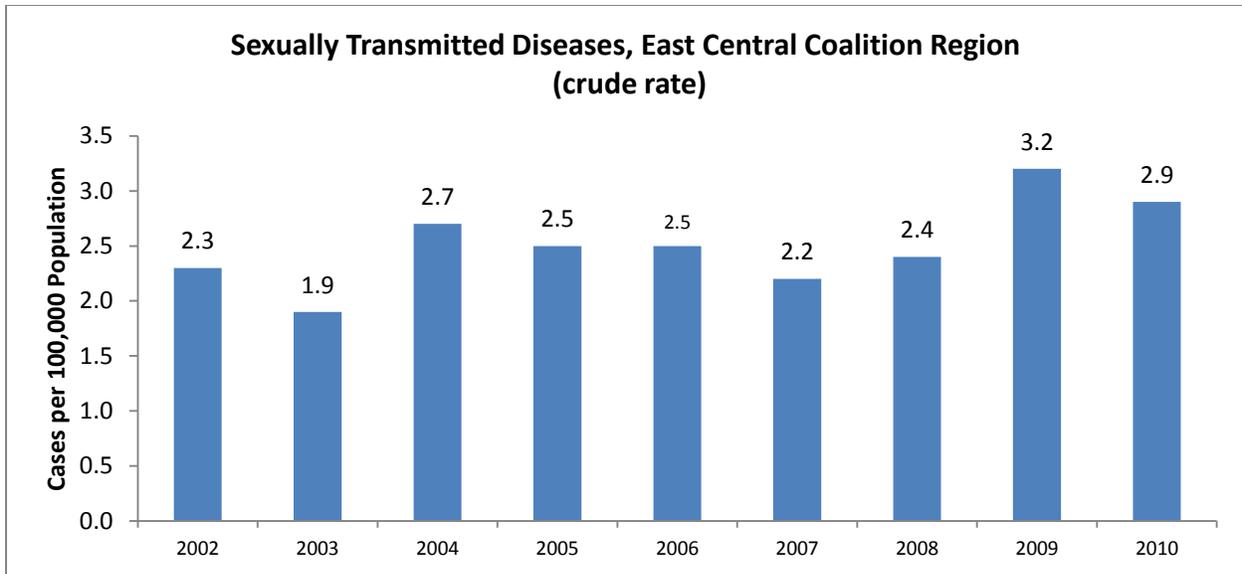


Source: Kansas Health Matters, www.kansashealthmatters.org

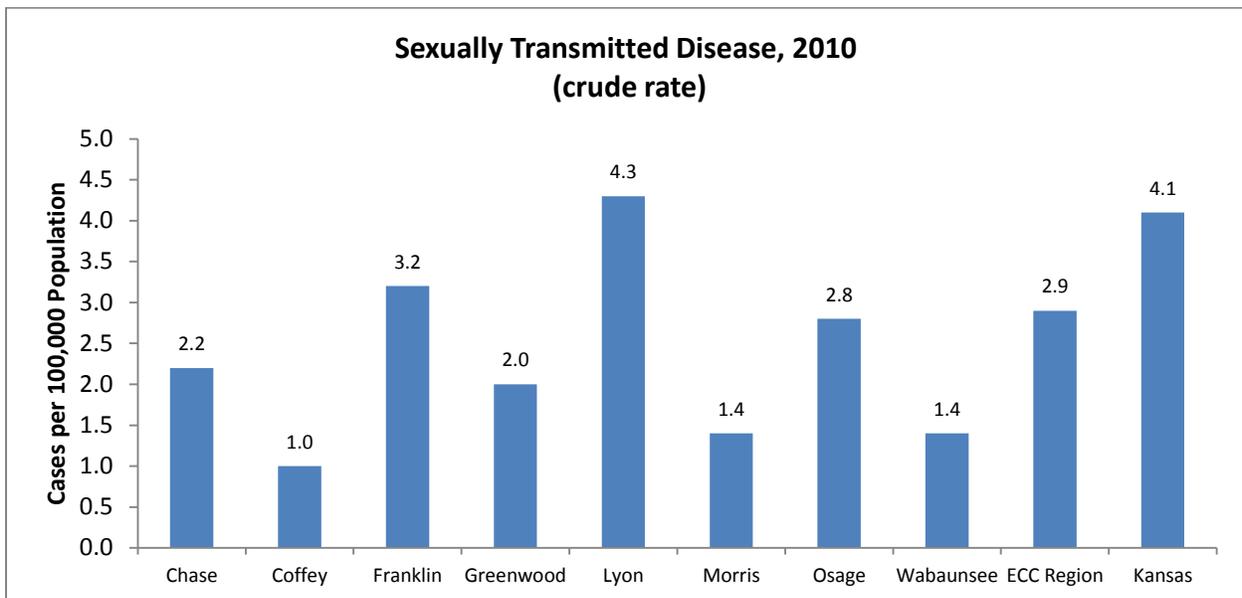
Sexually Transmitted Disease

This indicator shows the crude incidence rate per 1,000 population due to sexually transmitted diseases (STDs). Because many STDs go undiagnosed, the reported cases of chlamydia, gonorrhea and syphilis represent only a fraction of the true burden of STDs in the United States. Untreated STDs can lead to serious long-term health consequences, especially for adolescent girls and young women, and are a significant cause of infertility among women.

In 2010, the crude STD incidence rate across the ECC region was 2.9, compared to a statewide rate of 4.1. Within the ECC region, all counties except Lyon had STD incidence rates lower than the state rate. Lyon County had a rate of 4.3, slightly higher than the state rate.



Source: Kansas Health Matters, www.kansashealthmatters.org



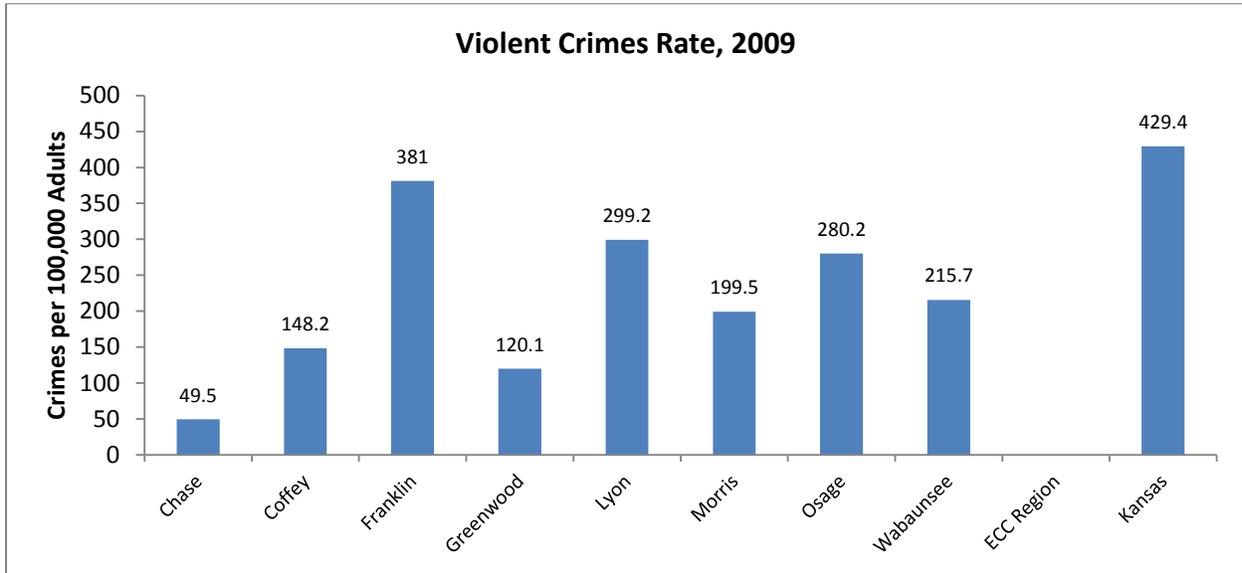
Source: Kansas Health Matters, www.kansashealthmatters.org

8. Violence and Injuries

Violent Crime

Violent crimes can significantly affect the health of community residents, both in terms of physical injuries and quality of life. During 2009, all counties within the ECC region had rates of violent crime that were below the statewide rate for Kansas. Chase County had the lowest rate, at 49.5 crimes per

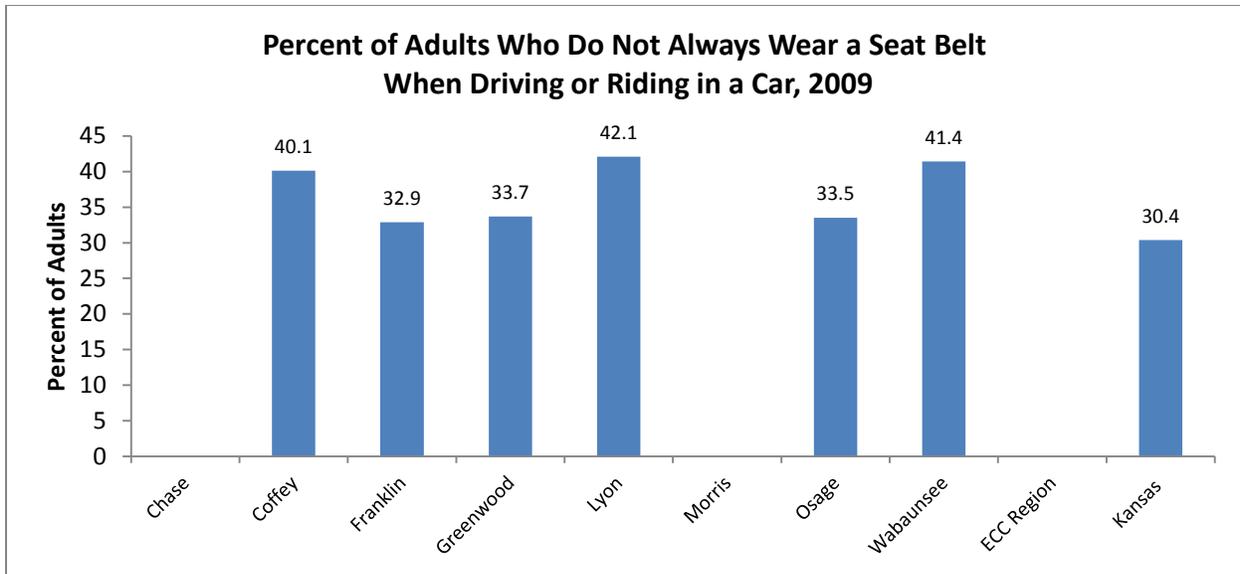
100,000 adult population. Franklin County had the highest rate, at 381 crimes per 100,000 adults. Data at the regional level were not available.



Source: <http://atlas.khi.org/cartto.php>

Seat Belt Use

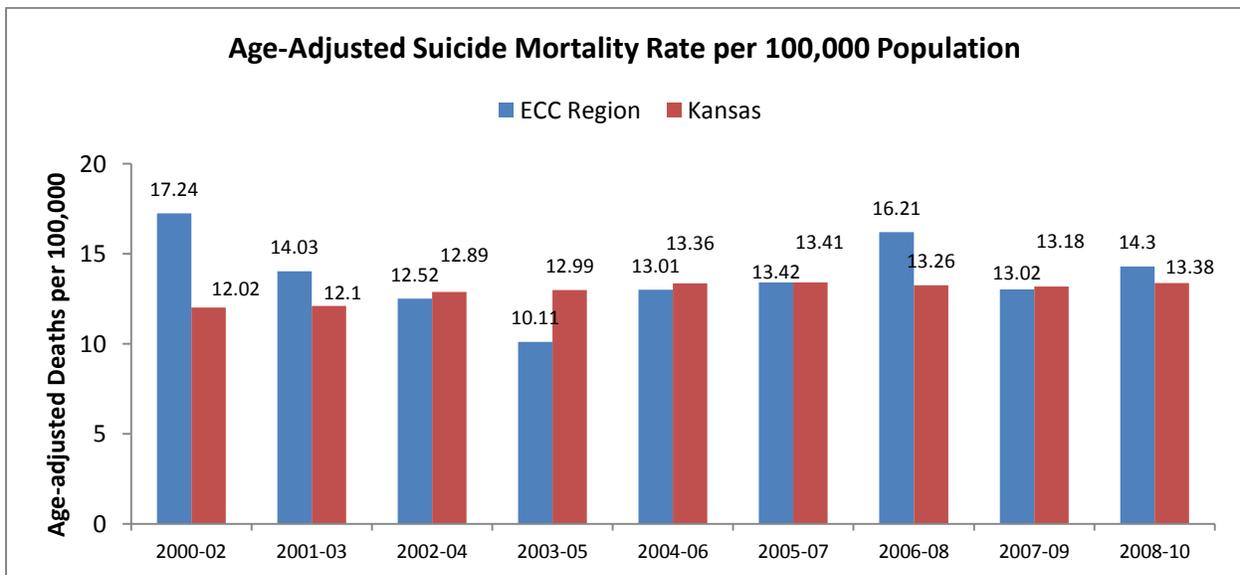
This indicator shows the percentage of adults who did not answer “always” when questioned about their seat belt use when driving or riding in a car. Results indicate that rates of seat belt use in the counties in the ECC region are somewhat lower than the statewide rate, with 33 to 42 percent of adults admitting to not always wearing a seat belt. Data were not available at the regional level, or for Chase or Morris counties.



Source: <http://atlas.khi.org/carto.php>

Suicide (All Ages)

This indicator shows the total age-adjusted death rate per 100,000 population due to suicide. For most years since 2000, rates of suicide have been similar between the ECC region and the state of Kansas. Comparable county-level rates were not available.

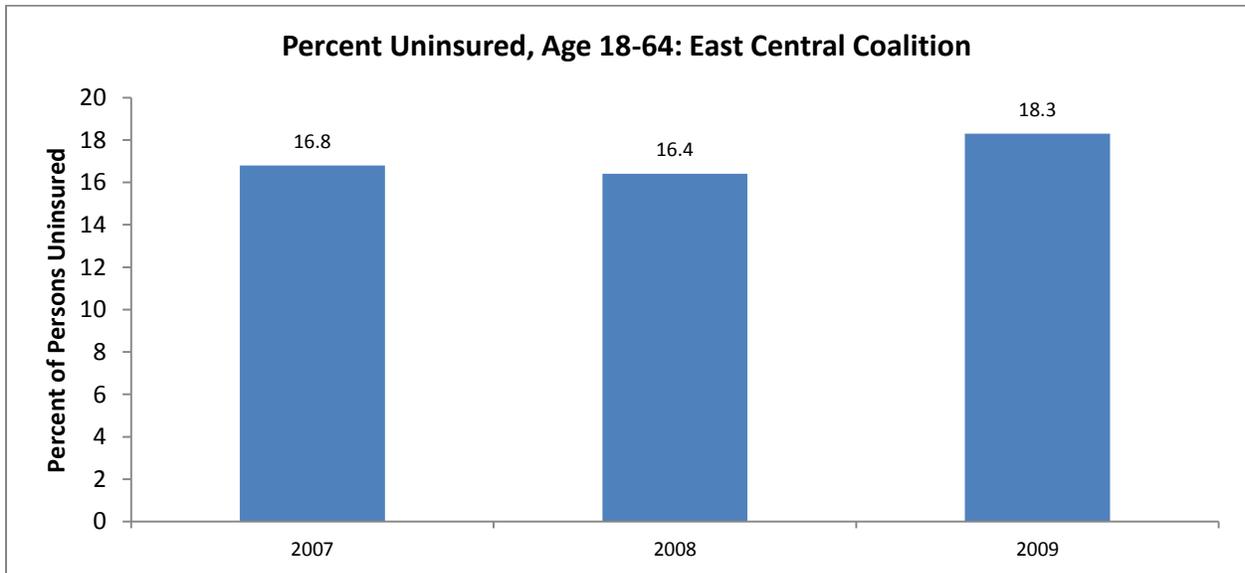


Source: Kansas Health Matters, www.kansashealthmatters.org

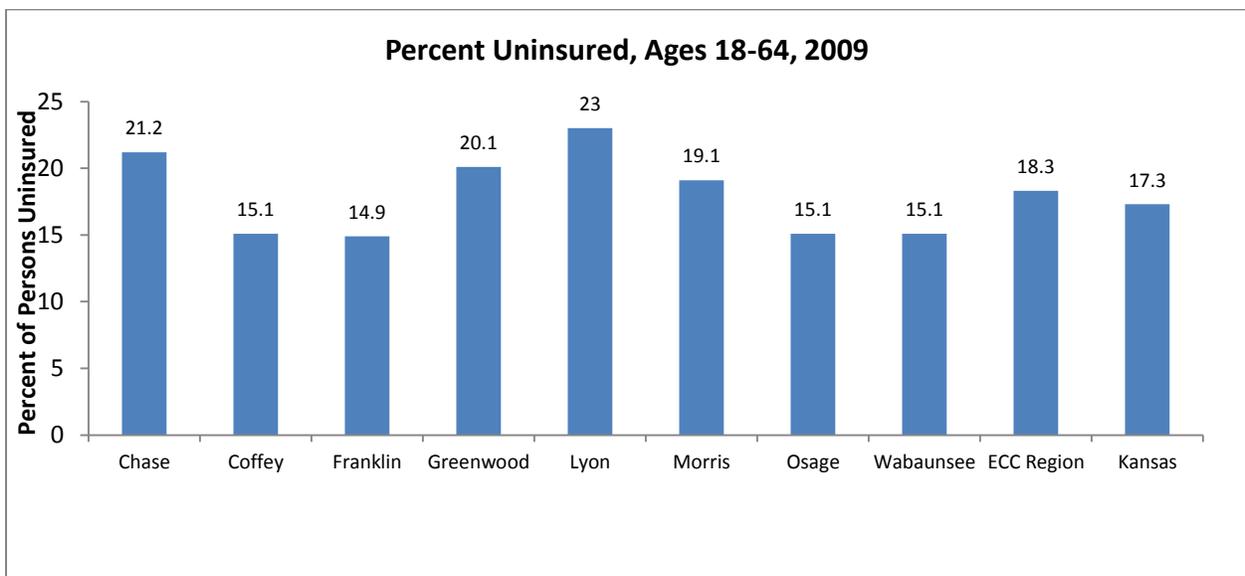
9. Access to Health Care

Uninsurance

This indicator shows the estimated percentage of people age 18 to 64 who lack health insurance of any type. Lack of adequate health coverage makes it difficult for people to get the health care that they need or to pay for the health care that they do receive.



Source: Kansas Health Matters, www.kansashealthmatters.org

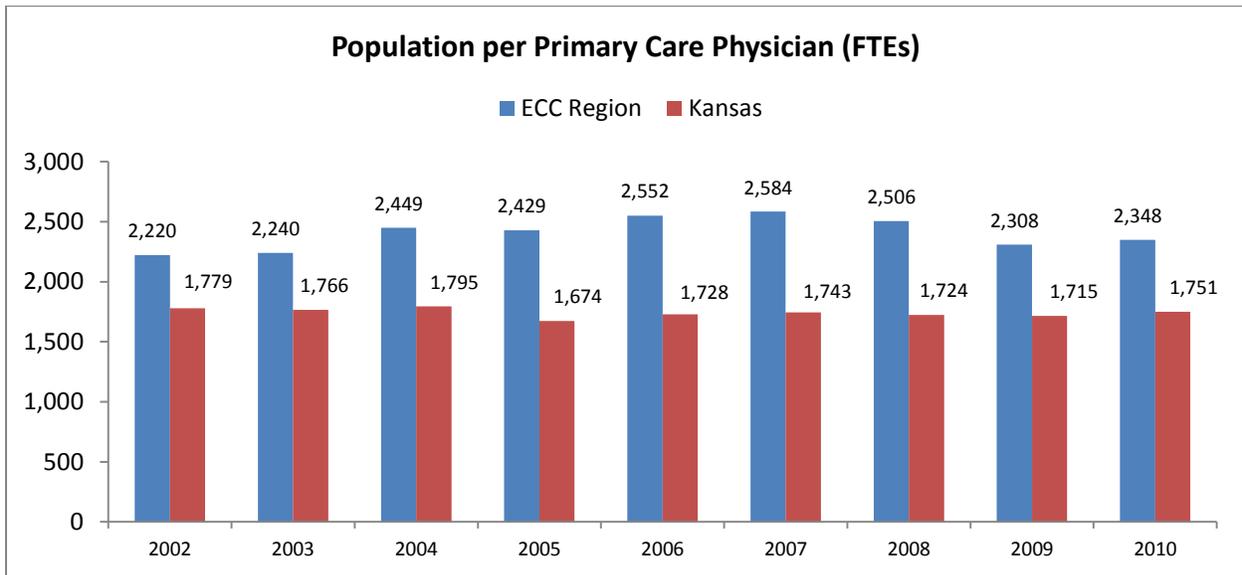


Source: Kansas Health Matters, www.kansashealthmatters.org

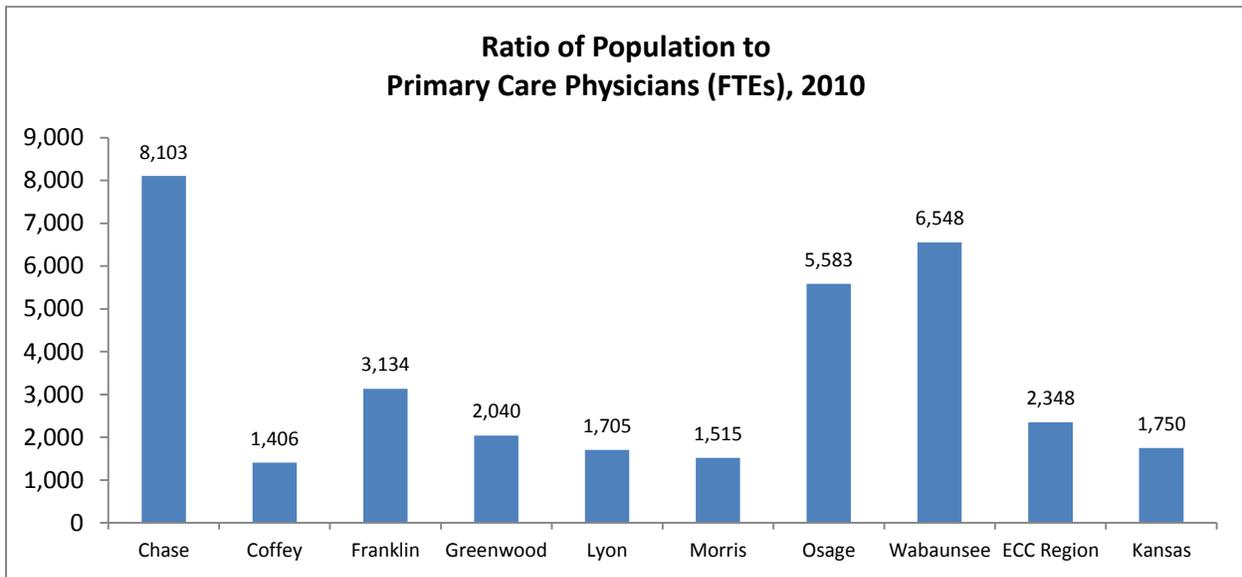
Primary Care Physician Ratio

This measure describes the ratio of population in a county to the number of primary care physicians practicing there. Primary care physicians play a key role in providing and coordinating high-quality health care and preventive services. As defined by the Kansas Department of Health and Environment, areas with a full-time equivalent (FTE) ratio for primary care physicians greater than 2,695 are considered medically underserved.

Four counties within the ECC region (Chase, Franklin, Osage and Wabaunsee) met the state's definition of medically underserved in 2010.



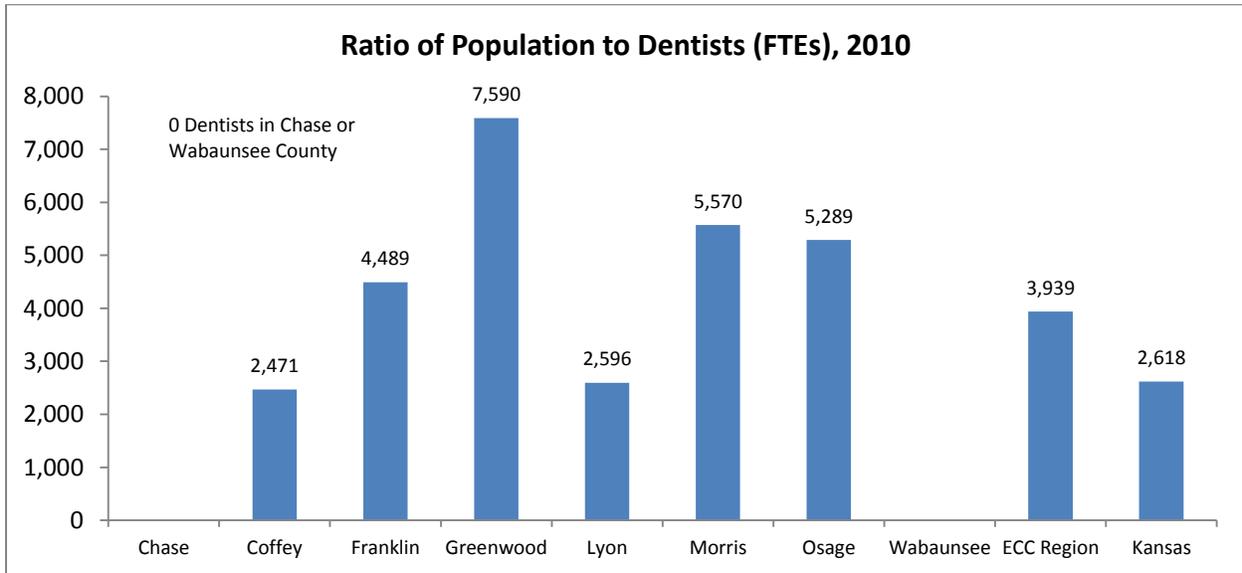
Source: Kansas Health Matters, www.kansashealthmatters.org



Source: Kansas Department of Health and Environment, PCHP FTE Equivalency Standard Report, <http://kic.kdhe.state.ks.us/kic/OHA/fte.html>

Dental Care – Ratio of Population to Dental Providers

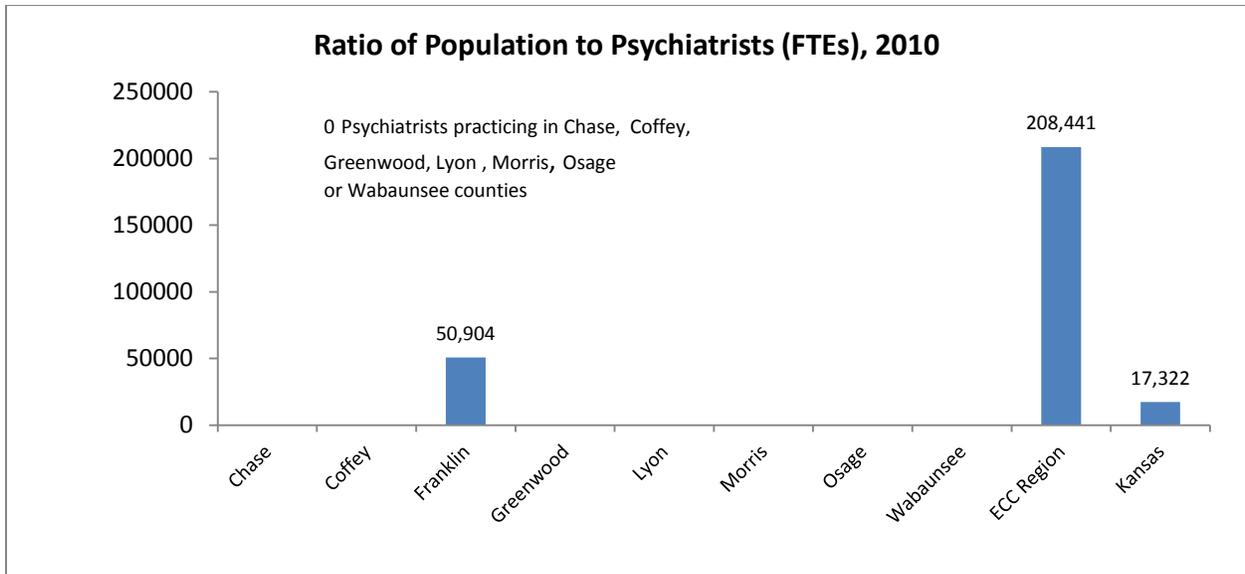
This measure describes the ratio of population in a county to the number of dentists practicing there. Two counties within the ECC region (Chase and Wabaunsee) had no dentists practicing within their boundaries during 2010. Three additional counties (Greenwood, Morris and Osage) had population to dentist FTE ratios greater than 5,000, which meets the definition of a Dental Health Professional Shortage Area.



Source: Kansas Department of Health and Environment, PCHP FTE Equivalency Standard Report, <http://kic.kdhe.state.ks.us/kic/OHA/fte.html>

Mental Health – Ratio of Population to Mental Health Providers

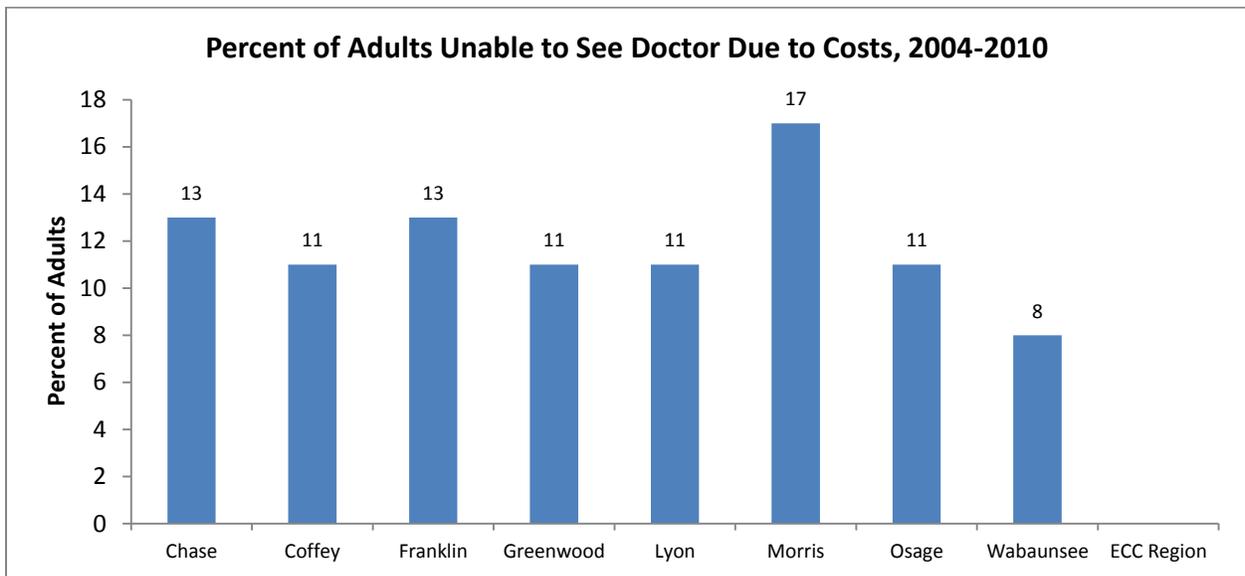
This measure describes the ratio of population in a county to the number of psychiatrists. Franklin County was the only location within the ECC region where a psychiatrist practiced during 2010. Both Franklin County and the ECC region as a whole meet the definition of a Mental Health Professional Shortage Area (population-to-psychiatrist ratio greater than 30,000).



Source: Kansas Department of Health and Environment, PCHP FTE Equivalency Standard Report, <http://kic.kdhe.state.ks.us/kic/OHA/fte.html>

Percent of Adults Unable to See Doctor Due to Costs

This indicator describes the percentage of the adult population that reported being unable to see a doctor when needed because of the costs of services. Data were not available at the regional level.

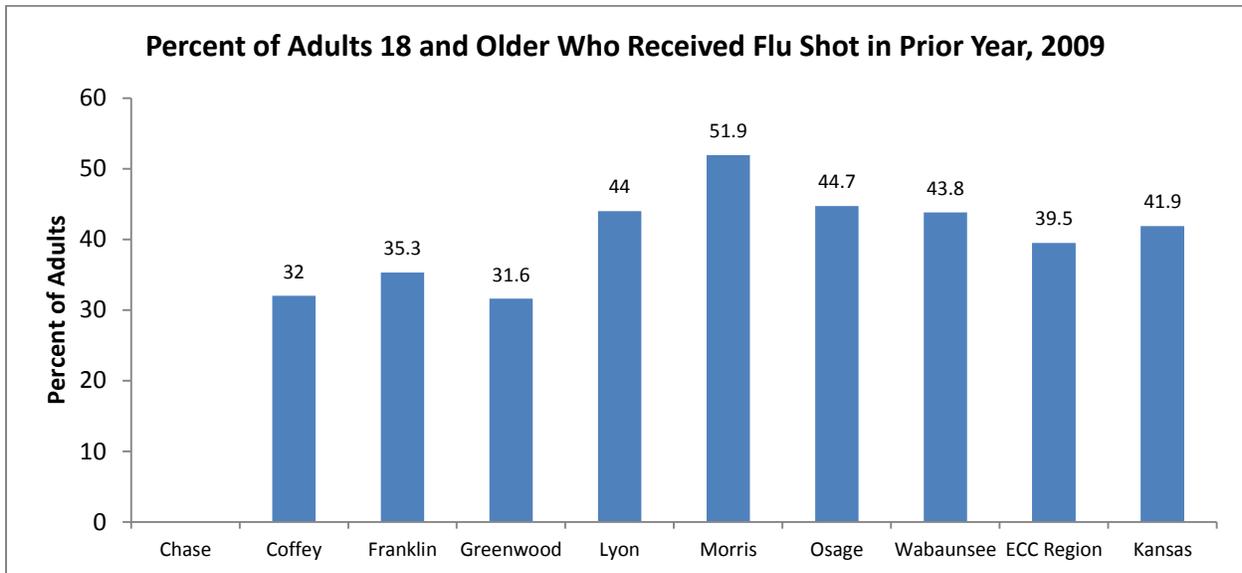


Source: County Health Rankings 2012, www.countyhealthrankings.org

Adult Influenza Vaccination

This indicator shows the percentage of adults age 18 and older who received an influenza immunization in 2009. The Centers for Disease Control and Prevention (CDC) recommends annual vaccination to prevent the spread of influenza.

Rates of influenza vaccination within the ECC region were similar to statewide levels, with approximately 40 percent of adults receiving the vaccine during 2009. Data were not available for Chase County.

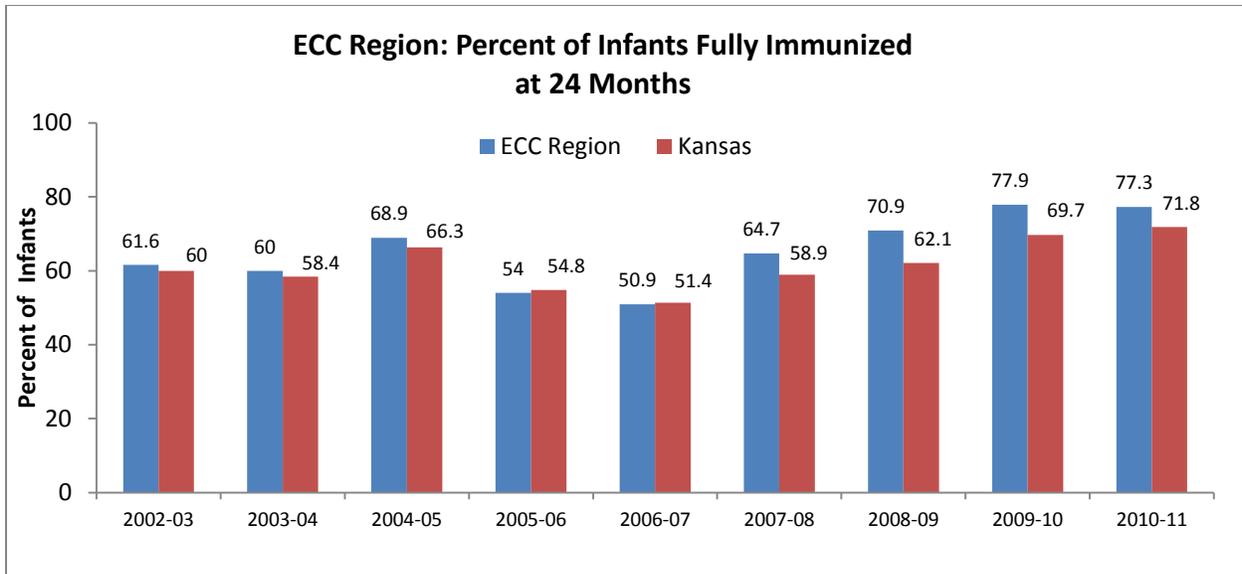


Source: Kansas Health Matters

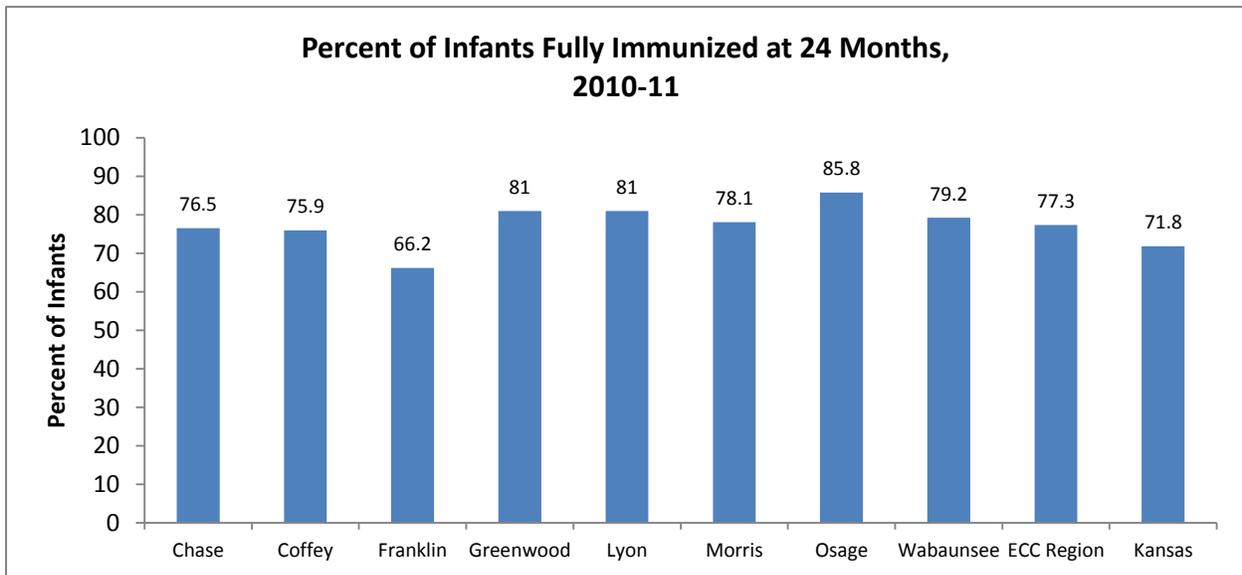
Childhood Immunization

This indicator shows the percent of infants who were fully immunized with the 4 DTap, 3 Polio, 1 MMR, 3 Haemophilus Influenzae type B, and 3 Hepatitis vaccines (the 4:3:1:3:3 series) by 24 months of age. High rates of vaccine coverage protect children from serious childhood diseases and increase herd immunity, which leads to lower disease rates and the ability to limit the size and spread of communicable disease outbreaks. Data reported here are from the KDHE Retrospective School Immunization Study, which reviews the immunization of children who enter kindergarten each year.

Since 2002, retrospective childhood immunization rates across the ECC region have been equal to or slightly higher than those for the state as a whole. Within the region, childhood immunization rates ranged from 66.2 percent in Franklin County to 85.8 percent in Osage County for children who entered kindergarten in the 2010-2011 school year.



Source: Kansas Health Matters, www.kansashealthmatters.org



Source: Kansas Health Matters, www.kansashealthmatters.org

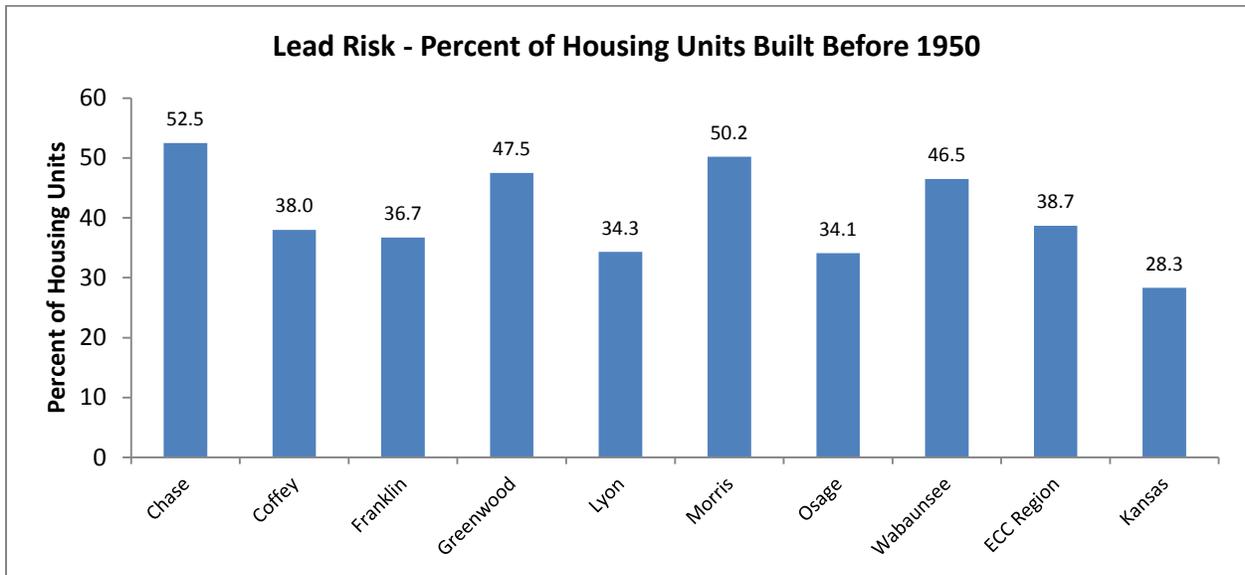
10. Environment

Housing with Increased Lead Exposure Risk

This indicator shows the percentage of housing units built before 1950. Lead-based paint can be found in most homes built before 1950, and individuals living in these homes are at elevated risk for lead

exposure. Lead poisoning, which can be difficult to recognize, can damage a child’s central nervous system, brain, kidneys and reproductive system.

Approximately 39 percent of all housing units located within the ECC region were built prior to 1950 and present increased risk for lead exposure. Percentages of pre-1950 homes for the counties within the region range from 34 percent in Lyon and Osage counties to 52 percent in Chase County.

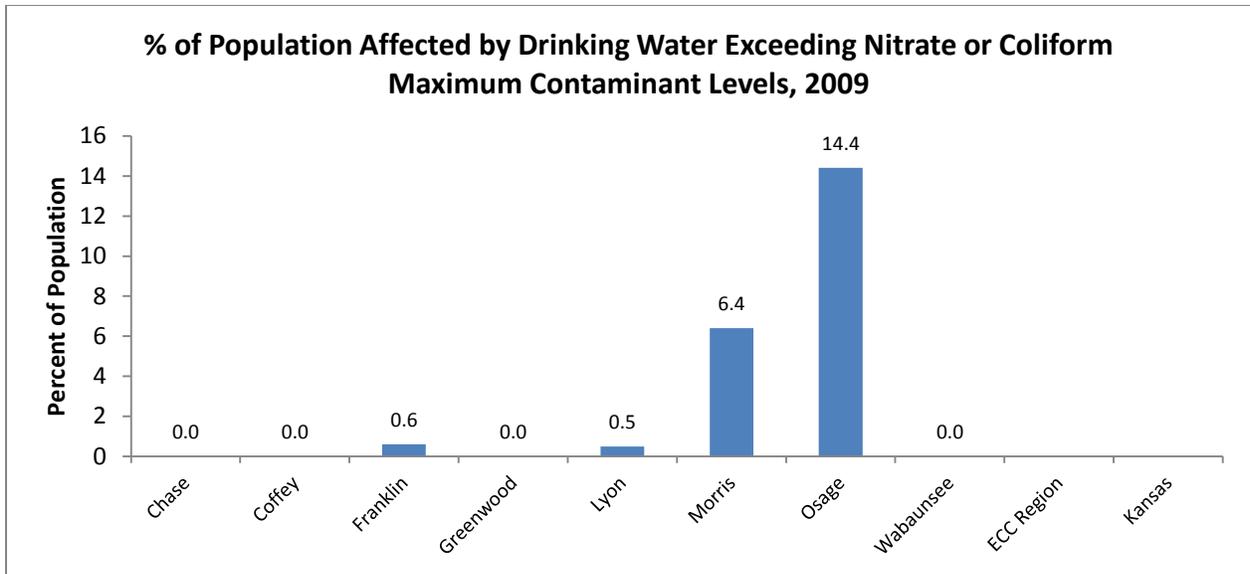


Source: <http://atlas.khi.org/cartto.php>

Nitrate and Coliform Levels in Drinking Water

This indicator shows the percentage of county populations served by public water systems that reported violations of maximum contaminant level (MCL) standards for nitrates or coliforms during 2009.

Public water distribution systems in Lyon, Morris and Osage counties reported MCL violations. Comparable data were not available for the regional or state levels.

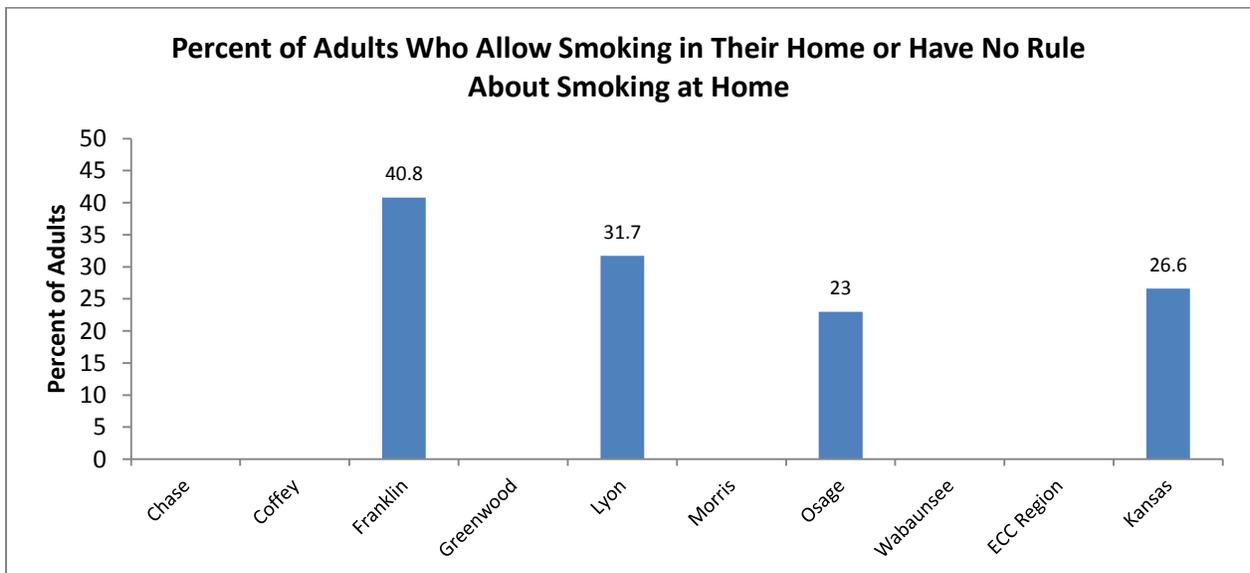


Source: <http://atlas.khi.org/cartto.php>

Secondhand Smoke Exposure

This indicator shows the percentage of households that reported allowing smoking in their homes or having no rules about smoking at home. Smoking within the home can expose children and non-smoking adults to secondhand smoke, which can cause or exacerbate a wide range of adverse health effects, including cancer, heart disease, respiratory infections and asthma.

Within the ECC region, data on smoking policies at home were only available for three counties. In two of those counties, the percentage of households that allowed smoking exceeded the statewide rate.



Source: <http://atlas.khi.org/cartto.php>



Appendix D: Quality of Life Survey

East Central Kansas Public Health Coalition Community Quality of Life Survey Analysis and Report of Findings

As requested, this report provides a summary of KHI's analysis of data from the Community Quality of Life Survey completed by residents of Chase, Coffey, Franklin, Greenwood, Lyon, Morris, Osage and Wabaunsee counties between March 9 and April 13, 2012. The East Central Kansas Public Health Coalition staff designed and administered the survey. This analysis is based on 1,035 surveys that were completed on or entered into the SurveyMonkey.com website by April 16, 2012.

Key Findings

The results of this community survey should be useful to East Central Region staff as one component of their Community Health Assessment. Key findings from the survey are:

- Across the region, residents tended to express satisfaction with their community while being more neutral about their community's potential for improvement.
- Across the region, residents identified economic factors such as jobs with adequate wages, affordable housing, and a healthy economy as some of the most important factors for a high quality of life in their community.
- The most important issues identified for communities across the region were joblessness, the high number of uninsured residents, and inadequate housing.
- The most important risky behaviors residents identified for their communities involved substance use and abuse as well as behaviors related to diet and exercise.
- Despite overall similar ratings and rankings across the region we found divergent ratings in some areas for individual communities as illustrated in the table below.

Notable Differences in Ratings Between Counties Within the East Central Coalition Region								
Bold numbers indicates counties that were rated <u>significantly different than most other counties</u>								
	<i>Chase</i>	<i>Coffey</i>	<i>Franklin</i>	<i>Greenwood</i>	<i>Lyon</i>	<i>Morris</i>	<i>Osage</i>	<i>Wabaunsee</i>
<u>Q2: Quality of Life in Community</u>								
<i>Satisfaction With Community</i>								
- Average ratings from Strongly Disagree (1) to Strongly Agree (5)								
	3.6	4.0	3.6	3.7	3.6	3.9	3.5	3.9
<i>Community Potential for Improvement - Average ratings from Strongly Disagree (1) to Strongly Agree (5)</i>								
	2.9	3.3	3.0	2.9	3.0	3.1	2.7	3.2
<u>Q3: Most Important Factors for High Quality of Life</u>								
<i>Low crime/ safe neighborhoods--Percent Checked</i>								
	13.2%	23.6%	25.2%	9.8%	21.0%	23.0%	28.9%	20.4%
<u>Q4: Three most important issues in community</u>								
<i>Joblessness</i>								
	55.3%	43.9%	53.4%	74.1%	60.0%	51.7%	54.1%	36.7%
<i>Aging problems (e.g., arthritis, hearing/ vision loss, etc.)</i>								
	36.8%	28.5%	12.2%	29.1%	6.7%	36.2%	21.6%	47.8%
<i>Domestic violence</i>								
	7.9%	9.8%	29.1%	10.1%	8.3%	3.4%	21.6%	2.2%
<u>Q5: Most Important Risky Behaviors in Community</u>								
<i>Drug use</i>								
	60.5%	41.8%	57.0%	56.4%	43.6%	60.7%	63.2%	30.8%
<i>Divorce</i>								
	10.5%	28.7%	9.9%	10.3%	12.9%	8.2%	2.6%	18.7%

Survey Methods and Responses per Capita

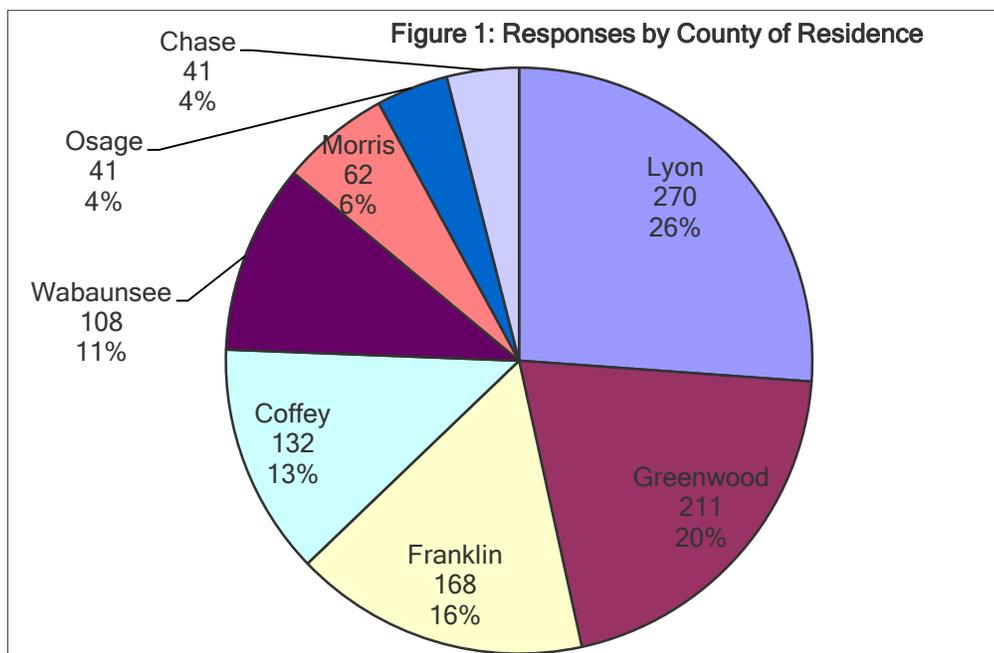
A copy of the survey instrument can be found in the Appendix. The survey asked residents about their community's quality of life and the contributing factors, issues and risky behaviors.

Non-Random Sampling Method

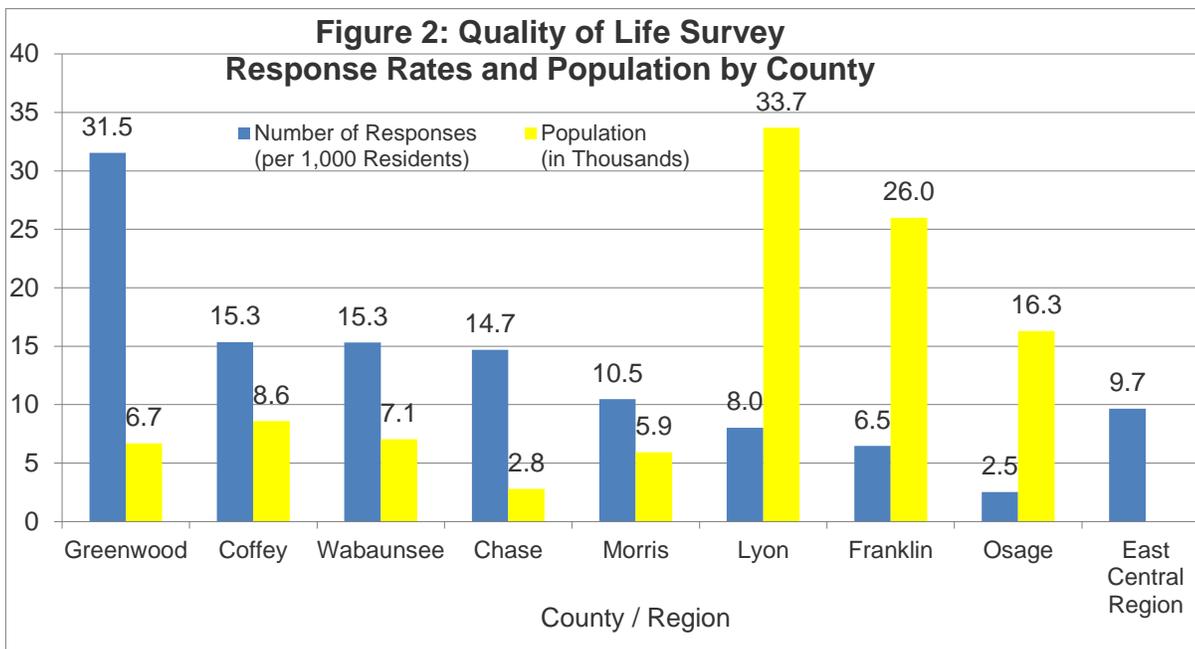
The survey was distributed in various ways to community members in paper and Internet-based forms (via SurveyMonkey.com) with English and Spanish versions of the paper form. Of the 1,035 completed surveys, 253 (24.4 percent) were the paper form. Because the survey was not distributed randomly, it can't be considered scientific or necessarily representative of the surveyed communities. The survey data represent the opinions and interests of individuals in each community who learned of the survey and had the time and inclination to answer the survey questions.

Response Rates per Capita

As shown in Figure 1, the largest number of responses came from Lyon County, which has the biggest population in the region. Greenwood County produced the second largest number of surveys.

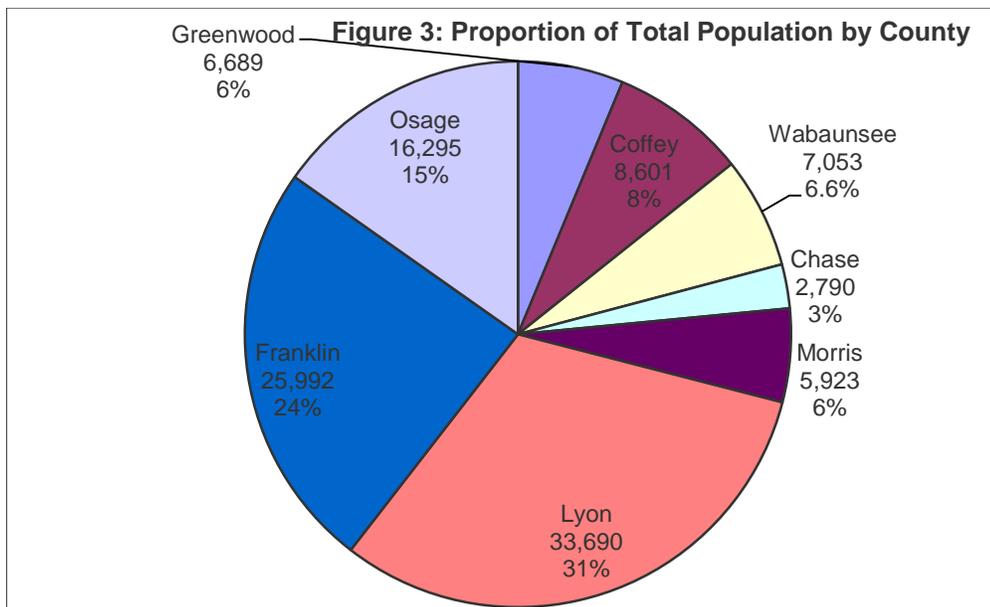


We used 2010 Census population data to calculate the number of responses per capita for each county. Those rates vary from 31.5 responses per 1,000 residents in Greenwood County to 2.5 responses per 1,000 residents in Osage County. Because of the wide variation in responses per capita across the eight counties (represented by the blue bars in Figure 2), we decided to apply population weights before conducting any regional analysis.



Weighting Methods

To correct for differences in the regional data, we applied population weights based on each county’s share of the total regional population. When we calculated survey responses for the region as a whole, we applied weights that gave Lyon County the most influence and Chase County the least influence. Figure 3 shows the relative influence of each county on the regional scores based on population.



Analysis Methods

We analyzed the county-level survey data (unweighted) and regional-level data (population weighted) using standard descriptive statistics such as averages, frequencies and standard deviations as well as comparative statistics including independent and paired sample t-tests, Analysis of Variance (ANOVA) and chi-square tests. We also analyzed the construct validity and reliability (internal consistency) of the

overall ratings of quality of life in the community. All analyses were conducted using SPSS version 19 or Microsoft Excel. The results of these analyses are summarized in the following sections. Although we conducted numerous statistical tests, in the interest of clarity and brevity only the most pertinent results are included in this memo. All of the SPSS output as well as the results of specific tests are available upon request.

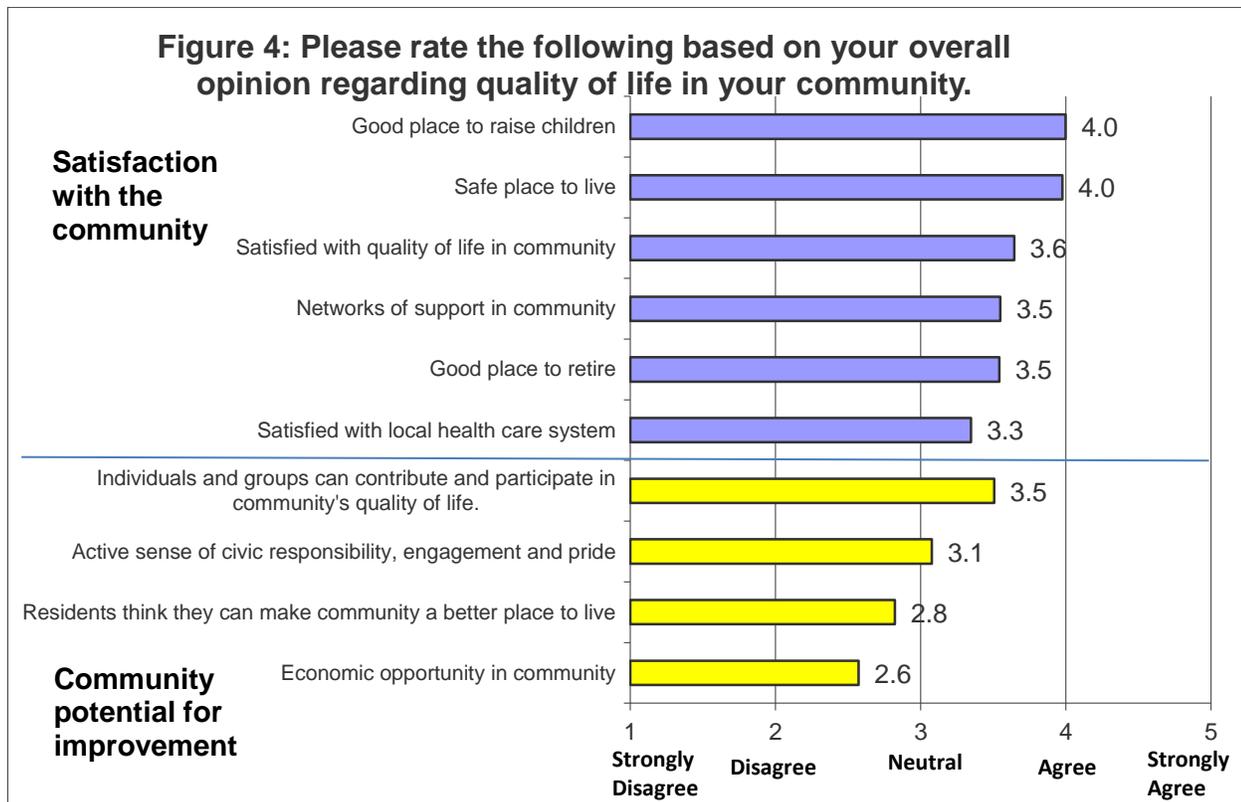
RESULTS

This section describes the results of the analysis of survey responses. Although it focuses on the results for the region as a whole, it also includes county-level data.

RESULTS FOR QUESTION #2

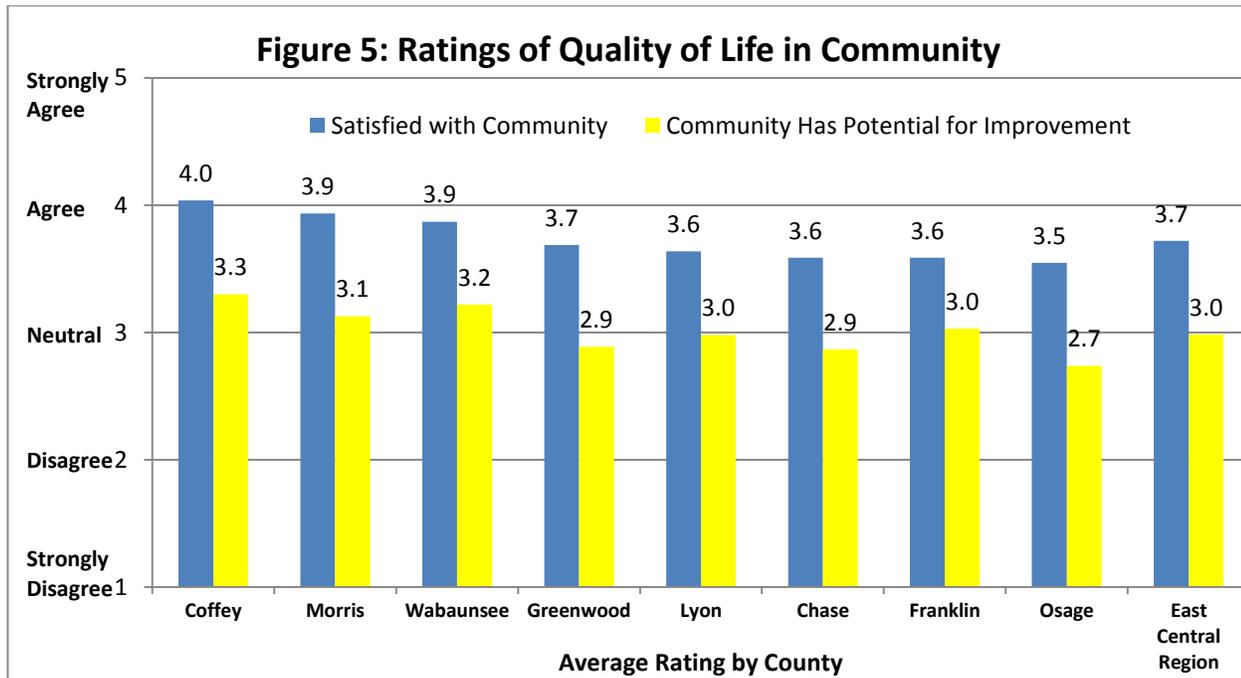
“Please rate the following based on your overall opinion regarding quality of life in your community.”

Based on factor analysis¹ of the components of this question, we identified two salient factors that underlie residents’ ratings of the overall quality of life in their community: *satisfaction with the community* and *community potential for improvement*. Figure 4 shows average ratings, or scale scores, for the questions that comprise those factors. An analysis of the scales reveals that both are reasonably reliable measures based on their internal consistency (Cronbach’s Alpha = 0.821 and 0.726, respectively).

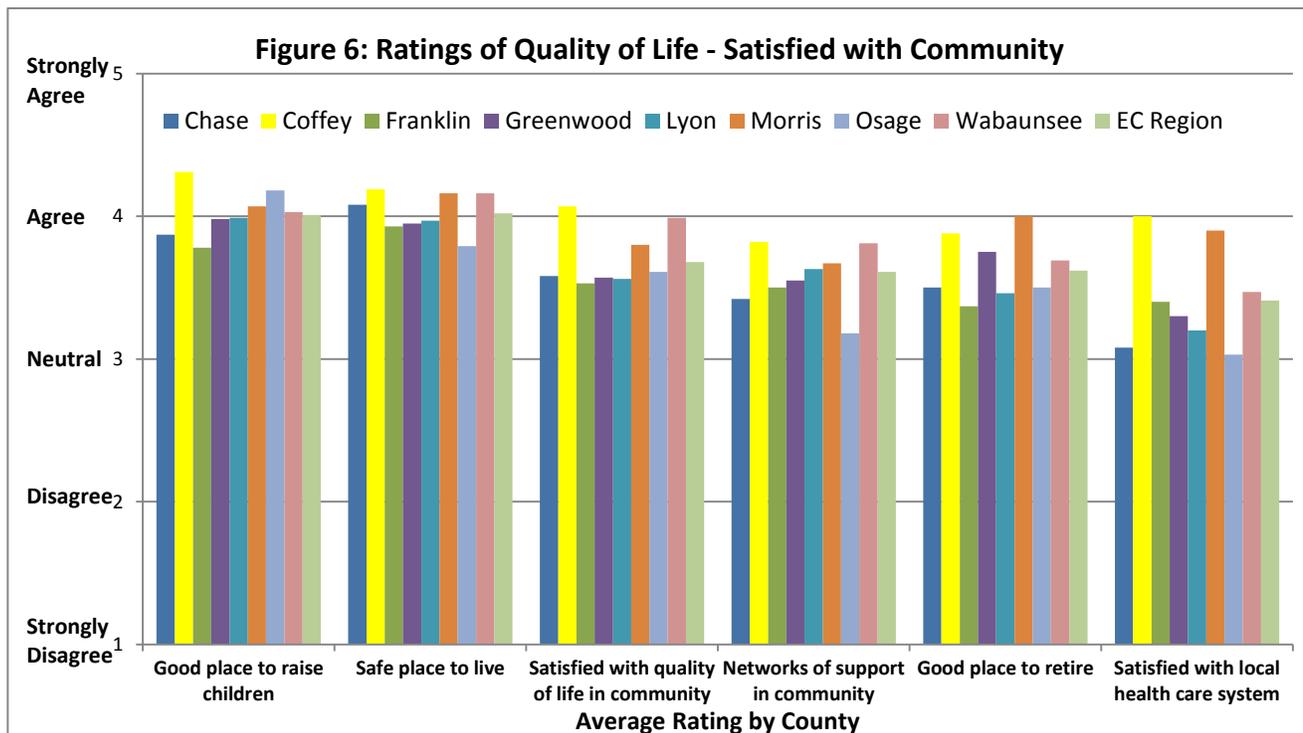


¹ Principal components analysis using varimax rotation, factors extracted where eigenvalues >1, and items with factor loading >0.5 retained (Note: “economic opportunity in community” was retained with a loading of 0.48).

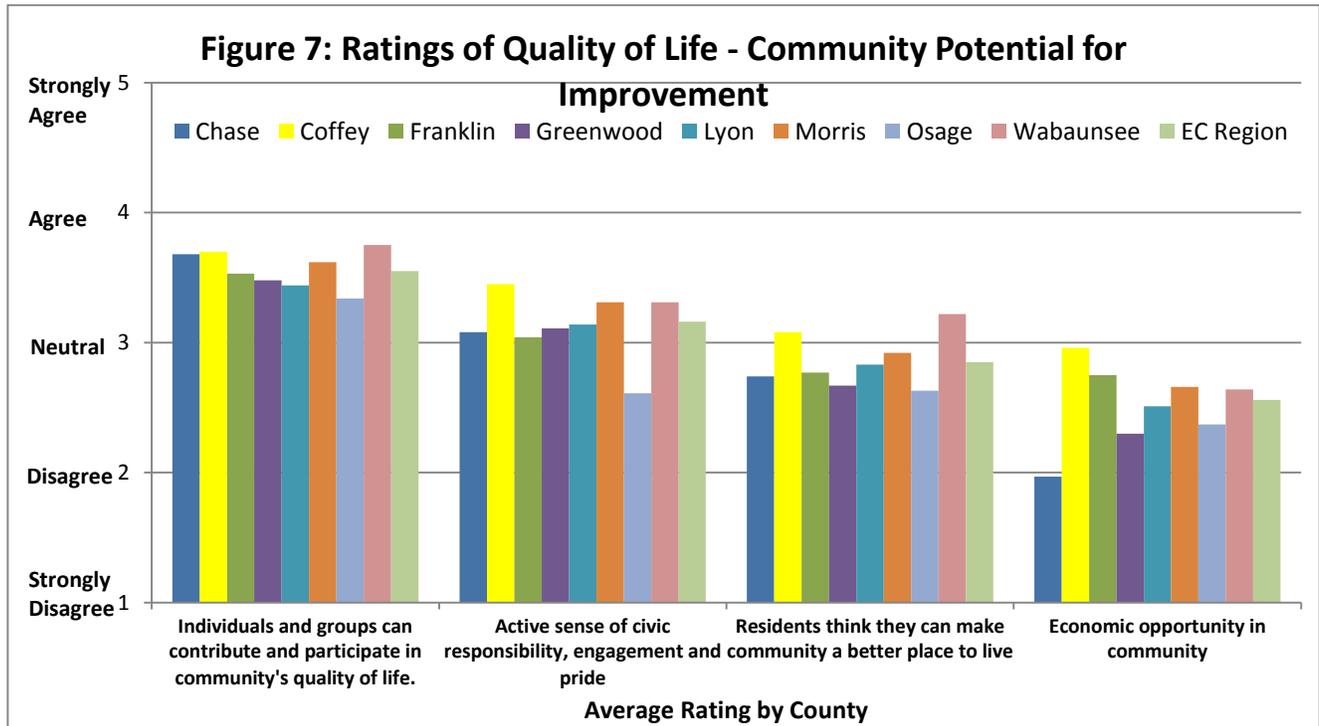
Across the region, residents tended to express satisfaction with their community while often being fairly neutral about their community’s potential for improvement.



Satisfaction was strongest in terms of perceptions of the community as a *good place to raise children* and relatively weakest in terms of *satisfied with local health care system*. Variation in ratings among counties also is noteworthy.



Residents agreed most when asked about the opportunity to contribute to and participate in their community’s quality of life. For the other questions in this area they tended to stay neutral or disagree with the statements.



Variation Among Counties

For both scales and many of the specific questions, average ratings for Coffey County were somewhat higher, or better, than the average ratings of respondents from most (five of the seven) other counties². Overall the ratings for Coffey, Morris and Wabaunsee counties tend to be the highest, with somewhat lower ratings for the other five counties.

² In terms of “satisfaction with community” and “community potential for improvement,” Coffey County was rated significantly higher than Chase, Franklin, Greenwood, Lyon and Osage counties (p<0.05). Although other significant differences among particular county pairings were found, they aren’t reported here in the interest of brevity.

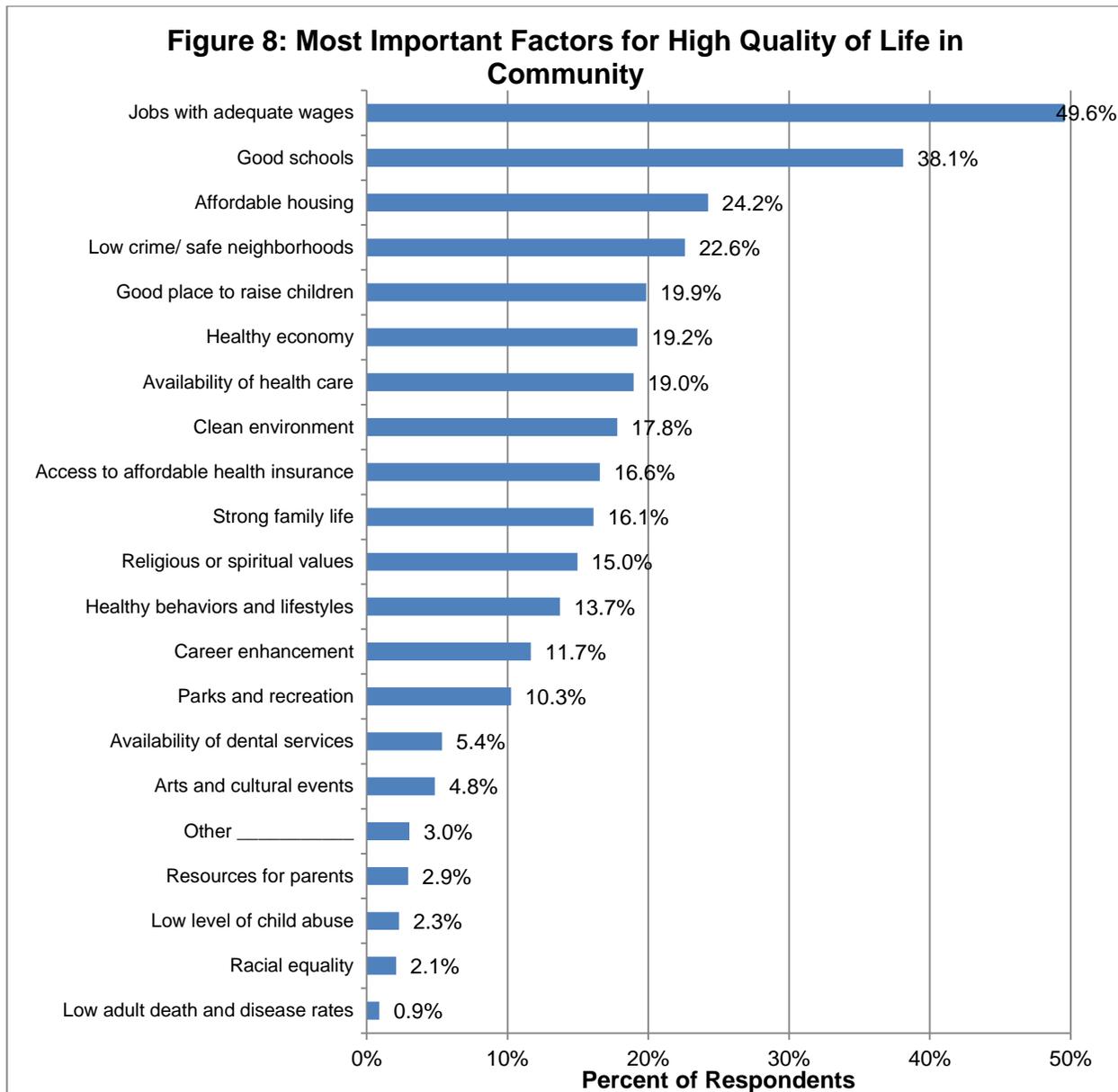
RESULTS FOR QUESTION #3

“In the following list, what do you think are the three most important factors that would contribute to a high quality of life in this community? Check only three.”

To analyze the responses to this question, we ranked the response frequencies from high to low and identified which responses fell under certain themes.

Economy

Nearly half of the respondents identified *jobs with adequate wages* as one of the most important factors for a high quality of life in their community. Other frequently cited economic factors include *affordable housing* (24.2 percent) and *healthy economy* (19.2 percent). These ratings should be compared with responses to Question 4 as well as local economic indicators such as the median income, poverty rate and unemployment rate.



Education

More than a third of the respondents cited *good schools* as an important factor in their community. These ratings should be contrasted with the education core indicators.

Healthy Physical and Social Environment

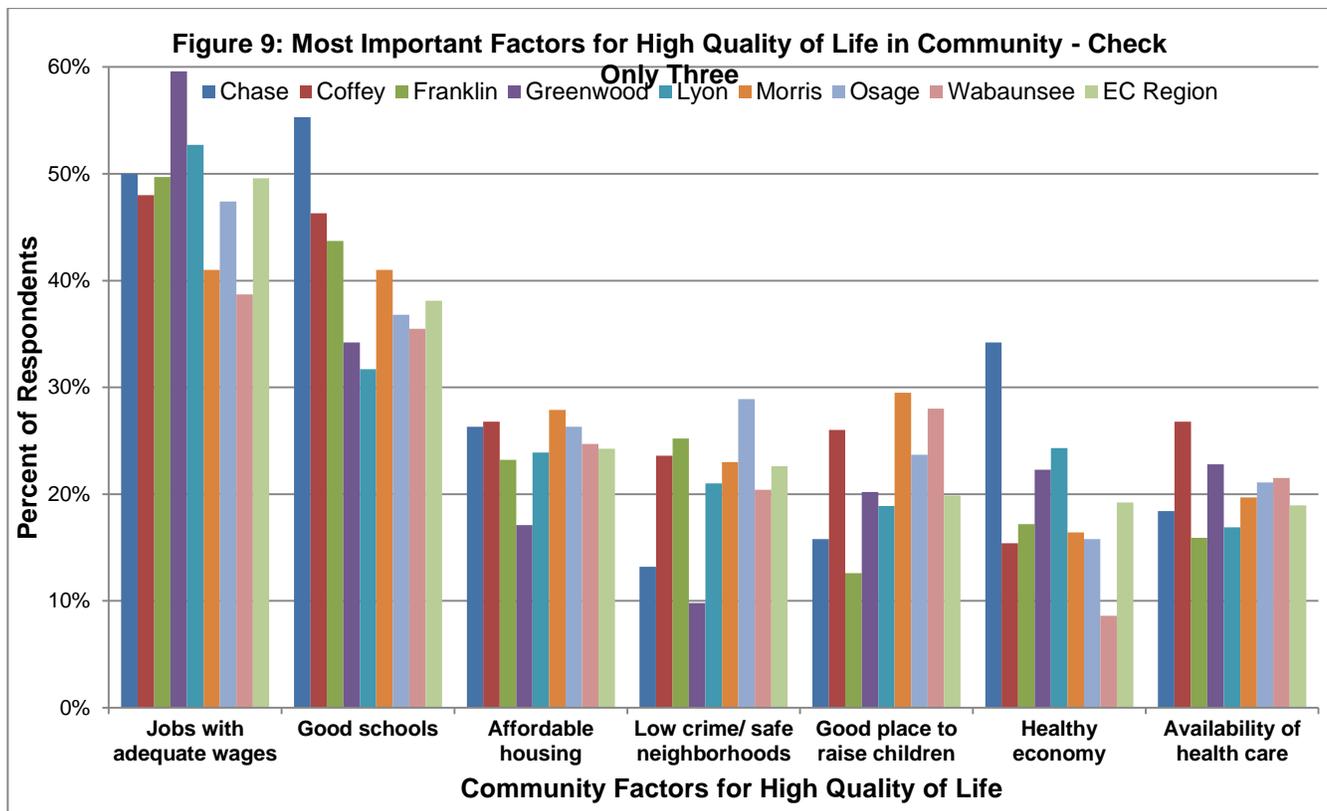
Many respondents cited social aspects of their community such as *low crime/safe neighborhoods* (22.6 percent), *good place to raise children* (19.9 percent), *clean environment* (17.8 percent), *strong family life* (16.1 percent) and *religious or spiritual values* (15.0 percent) as important for a high quality of life.

Access to Health Care

Respondents often cited *availability of health care* (19.0 percent) or *access to affordable health insurance* (16.6 percent). These ratings should be contrasted with the access core indicators.

Variation Among Counties

As illustrated in Figure 9, how often factors were cited sometimes varied substantially among counties despite similar ordering of the factors when rank ordered (i.e. *jobs with adequate wages* was almost always the most frequently cited factor). For example, 55.3 percent of Chase County respondents cited *good schools*, while only 31.7 percent of the Lyon County respondents did so. While important to both communities, *good schools* appears to be the most important factor to Chase County residents.



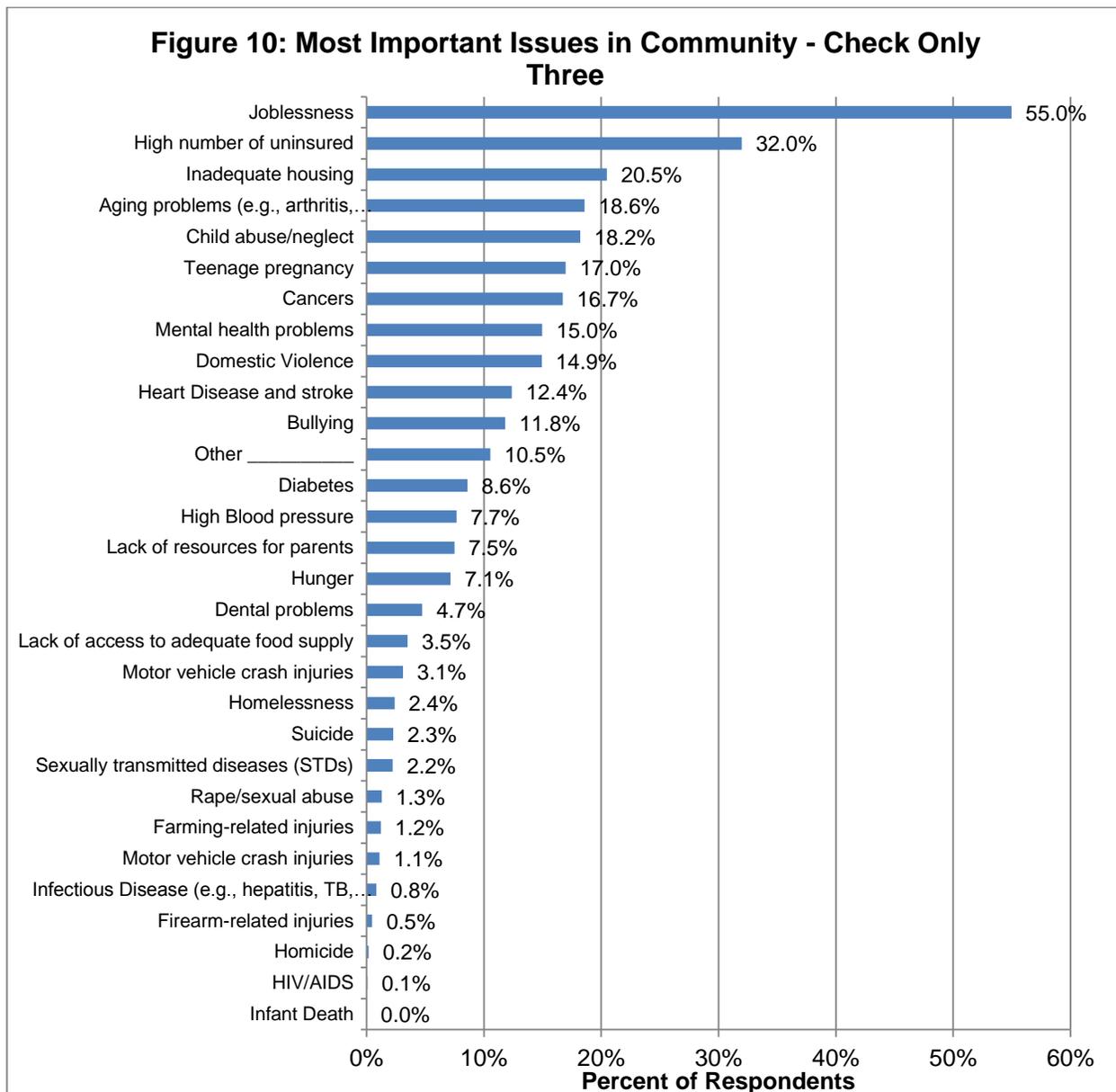
RESULTS FOR QUESTION #4

“In the following list, what do you think are the three most important issues in our community? Check only three.”

Once again we ranked the response frequencies from high to low and identified which responses fell under certain themes.

Economy

Just as they identified economic factors as important for a high quality of life, survey respondents identified economic issues as some of the most important in their communities. More than half (55 percent) identified *joblessness*, almost two-thirds (32 percent) identified the *high number of uninsured* and a fifth (20.5 percent) identified *inadequate housing*.



Health Issues

Survey respondents identified several health issues among the most important in their community. These issues can be grouped based on the primary population they affect:

Issues that commonly affect the elderly:

- 18.6 percent identified *aging problems* as one of the three most important issues,
- 16.7 percent identified *cancers* as one of the three most important issues and
- 12.4 percent identified *heart disease and stroke* as one of the three most important issues.

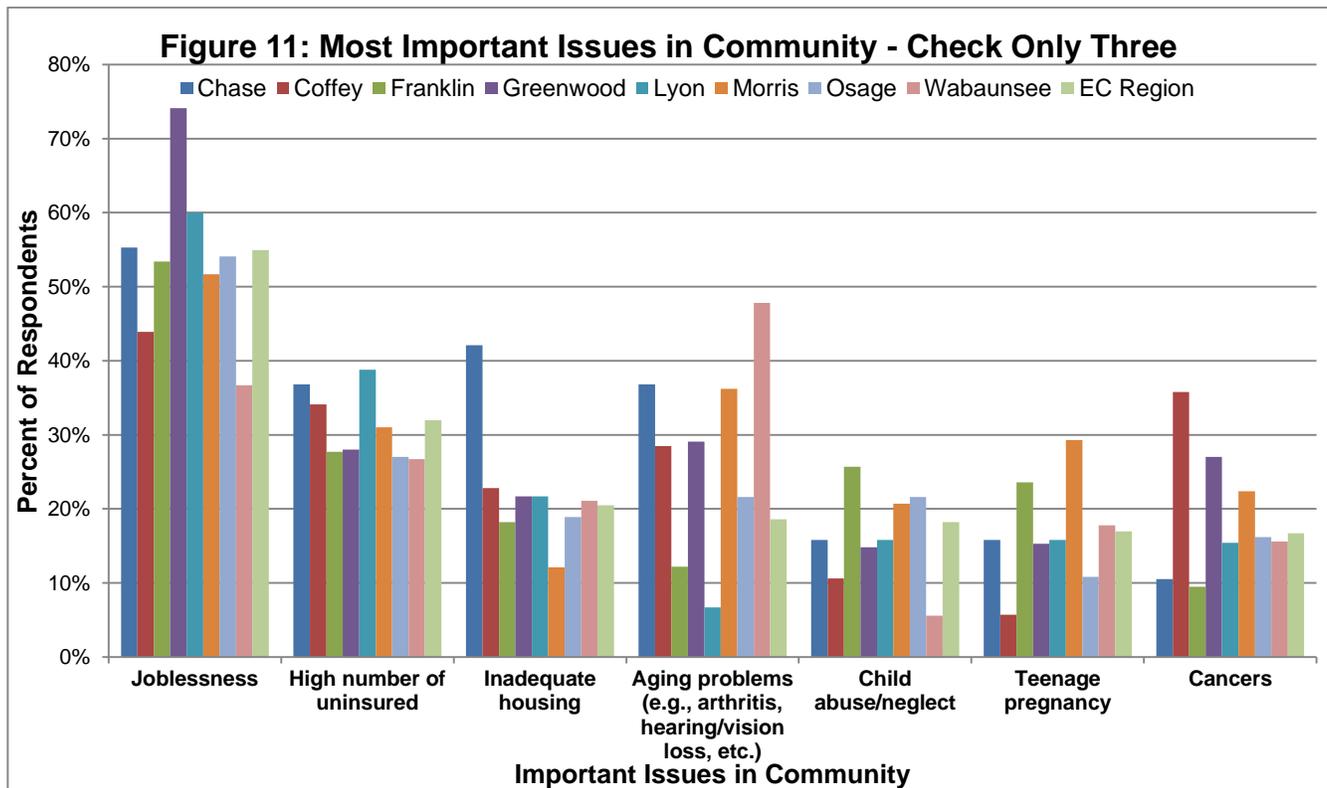
Issues that commonly or always affect children:

- 18.2 percent identified *child abuse/neglect* as one of the three most important issues,
- 17.0 percent identified *teenage pregnancy* as one of the three most important issues,
- 14.9 percent identified *domestic violence* as one of the three most important issues and
- 11.8 percent identified *bullying* as one of the three most important issues.

Survey respondents also frequently cited *mental health problems* (15.0 percent), which can affect people of all ages.

Variation Among Counties

Once again, the responses vary somewhat among counties. As shown in Figure 11, *aging problems* is the most frequently cited issue in Wabaunsee County but not in Lyon County.



RESULTS FOR QUESTION #5

“In the following list, what do you think are the three most important risky behaviors in our community? Check only three.”

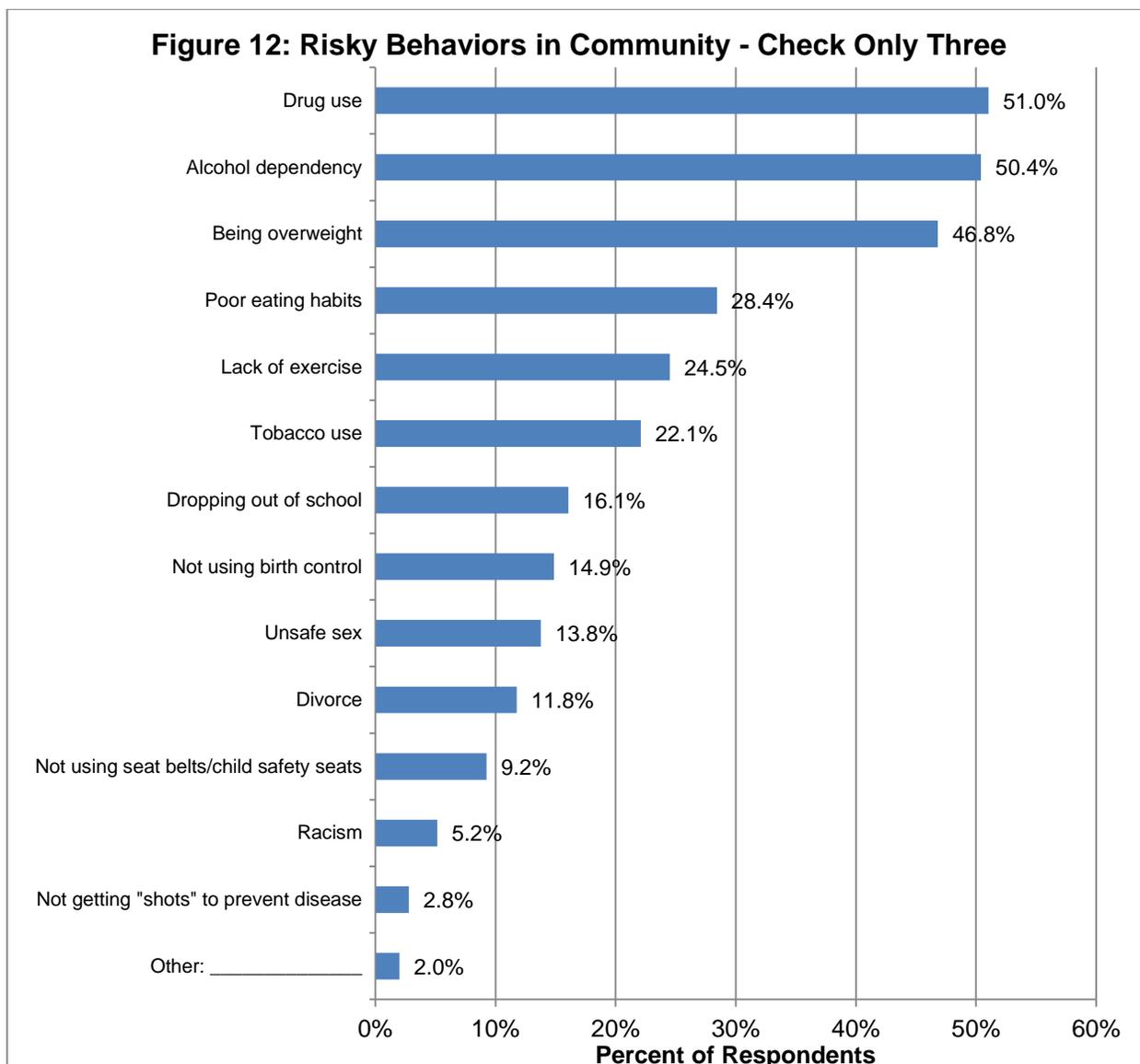
Once again we ranked the response frequencies from high to low and identified common themes. Many of these questions can be mapped to specific core indicators such as binge drinking, obesity and physical activity.

Substance Use or Abuse

The top two risky behaviors cited were *drug use* (51 percent) and *alcohol dependency* (50.4 percent). *Tobacco use* (22.1 percent) also was frequently cited by survey respondents.

Behaviors Related to Diet and Exercise

The next three frequently cited behaviors were *being overweight* (46.8 percent), *poor eating habits* (28.4 percent) and *lack of exercise* (24.5 percent).

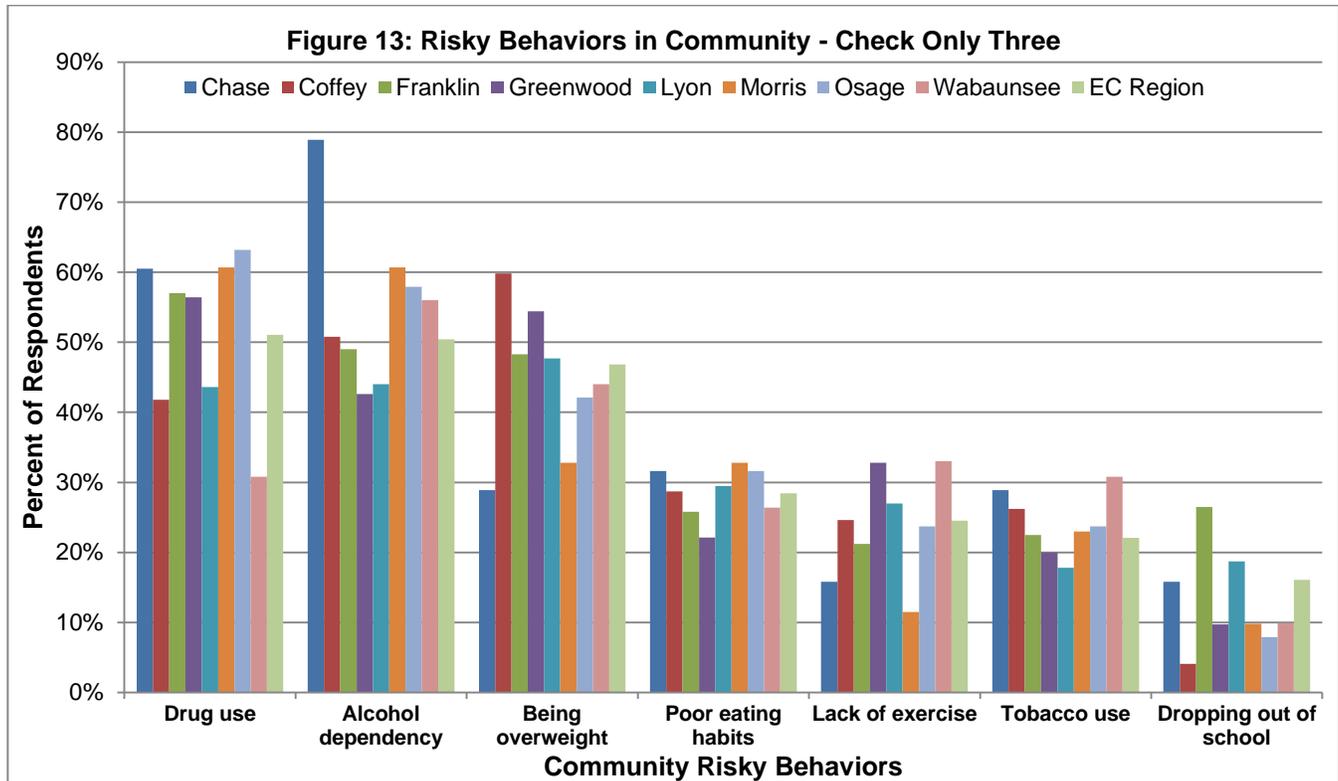


Risky Behaviors of Adolescents

The next three frequently cited risky behaviors often or only apply to teens: *dropping out of school* (16.1 percent), *not using birth control* (14.9 percent) and *unsafe sex* (13.8 percent).

Variation Among Counties

Once again, although the ranking of risky behaviors is similar, the frequencies for individual risky behaviors vary among counties. For example, as shown in Figure 13, *alcohol dependency* (78.9 percent) was cited more frequently than *drug use* (60.5 percent) in Chase County.



LIMITATIONS

The primary limitation of this survey is the use of a non-random sample. As a result of the sampling methods used the results can't be generalized to those individuals who didn't complete a survey. The results from this survey may reflect opinions that are different than those of the communities they are meant to represent, so the survey results should be interpreted cautiously. Any substantive findings from or recommendations based on them should incorporate information that is independently corroborated by other sources such as relevant core indicators.

DISCUSSION AND CONCLUSIONS

Despite these limitations, the results of this survey can serve as a useful component of the East Central Coalition's assessment of community health.

SURVEY INSTRUMENT

QUALITY OF LIFE QUESTIONS

Thanks for taking time to provide your opinion. These five questions are intended for county residents of Chase, Coffey, Franklin, Greenwood, Lyon, Morris, Osage and Wabaunsee.

The purpose of this survey is to determine county residents' level of satisfaction regarding quality of life. These results will be utilized by Health Departments to identify strengths in our communities.

1. County of residence

- Chase
- Coffey
- Franklin
- Greenwood
- Lyon
- Morris
- Osage
- Wabaunsee

QUALITY OF LIFE QUESTIONS

2. Please rate the following based on your overall opinion regarding quality of life in your community.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I am satisfied with the quality of life in this community.	<input type="radio"/>				
I am satisfied with the health care system in the community.	<input type="radio"/>				
This is a good place to raise children.	<input type="radio"/>				
This is a good place to retire.	<input type="radio"/>				
There is economic opportunity in this community.	<input type="radio"/>				
This is a safe place to live.	<input type="radio"/>				
There are networks of support for individuals and families during times of stress and need.	<input type="radio"/>				
All individuals and groups have the opportunity to contribute to and participate in the community's quality of life.	<input type="radio"/>				
All residents think that they can make the community a better place to live.	<input type="radio"/>				
There is an active sense of civic responsibility and engagement and civic pride in shared accomplishments.	<input type="radio"/>				

QUALITY OF LIFE QUESTIONS

3. In the following list, what do you think are the three most important factors that would contribute to a high quality of life in this community?

Check Only Three

- Access to affordable health insurance
- Affordable housing
- Arts and cultural events
- Availability of dental services
- Availability of health care
- Career enhancement
- Clean environment (including water, air, sewage, waste disposal)
- Good schools
- Good place to raise children
- Healthy behaviors and lifestyles
- Healthy economy
- Jobs with adequate wages
- Low adult death and disease rates
- Low crime/safe neighborhoods
- Low level of child abuse
- Parks and recreation
- Racial equality
- Religious or spiritual values
- Resources for parents
- Strong family life
- Other _____

QUALITY OF LIFE QUESTIONS

4. In the following list, what do you think are the three most important issues in our community?

Check Only Three

- Aging problems (e.g., arthritis, hearing/vision loss, etc.)
- Bullying
- Cancers
- Child abuse/neglect
- Dental problems
- Diabetes
- Domestic Violence
- Firearm-related Injuries
- Farming-related Injuries
- Heart Disease and stroke
- High Blood pressure
- High number of uninsured
- HIV/AIDS
- Homicide
- Hunger
- Homelessness
- Inadequate housing
- Infant Death
- Infectious Disease (e.g., hepatitis, TB, etc.)
- Joblessness
- Lack of access to adequate food supply
- Lack of resources for parents
- Mental health problems
- Motor vehicle crash Injuries
- Motor vehicle crash Injuries
- Rape/sexual abuse
- Sexually transmitted diseases (STDs)
- Suicide

QUALITY OF LIFE QUESTIONS

- Teenage pregnancy
- Other _____

5. In the following list, what do you think are the three most important risky behaviors in our community?

Check Only Three

- Alcohol dependency
- Being overweight
- Dropping out of school
- Divorce
- Drug use
- Lack of exercise
- Not getting "shots" to prevent disease
- Not using birth control
- Not using seat belts/child safety seats
- Poor eating habits
- Racism
- Tobacco use
- Unsafe sex
- Other: _____



Appendix E: Forces of Change

East Central Kansas Public Health Coalition Forces of Change Assessment

This report summarizes the findings from Forces of Change Assessments conducted in the Spring of 2012 by regional and local teams within the East Central Kansas Public Health Coalition.

Contents are organized as outlined below:

	Page
I. Introduction	2
II. Summary of Findings	2
III. Combined Results from Local Forces of Change Teams	5
IV. Forces of Change Worksheet	16
V. Local Group Forces of Change Reports	
a. Core Team	18
*County Reports Available Upon Request	
b. Coffey County	21
c. Franklin County	29
d. Greenwood County	33
e. Lyon County	36
f. Morris County	38
g. Osage County	39
h. Wabaunsee County	40

East Central Kansas Coalition Forces of Change Assessment

As a component of the Community Health Assessment process outlined by the **Mobilizing for Action through Planning and Partnerships (MAPP)** tool, the Forces of Change (FOC) Assessment is designed to help participants answer two questions: "What is occurring or might occur that affects the health of our community or the local public health system?" and "What specific threats or opportunities are generated by these occurrences?" The exercise is designed to produce a comprehensive but focused list that identifies key forces and describes their impacts.

For the purpose of the Forces of Change exercise, forces are defined as broad and all-encompassing, to include trends, events and factors:

Trends: Patterns over time

Events: One-time occurrences

Factors: Discrete elements or attributes of a community

Participants in the Forces of Change Assessment engage in brainstorming sessions to identify forces pertinent to their community. Once a comprehensive list of forces has been developed, the identified items are reviewed and discussed more fully. An organized list is developed by combining smaller or linked forces and deleting or adding items as needed. Each force on the resulting list is then evaluated further, and associated threats and opportunities for the community and local public health system are identified.

The East Central Kansas Coalition began planning for a Forces of Change Assessment in January of 2012. The Core Team regional partners participated in an initial FOC brainstorming session on February 9. Force categories generated in the brainstorming exercise were categorized into topical domains: Social, Economic, Political, Technological, Environmental, Scientific, Legal and Ethical. Core Team partners were asked to carry out local brainstorming sessions in each of their counties, with a minimum of five to six community members participating. Results of the county-level FOC exercises were due to the regional team by March 22, 2012. The regional FOC subcommittee then evaluated each force and identified associated threats and opportunities.

Results of Forces of Change discussions were returned by the regional core team and teams from all coalition counties except Chase. This report includes a summary of combined results from each of the counties within the coalition, as well as findings from each county team. Findings from the local FOC groups are presented in the formats in which they were generated by the individual groups, so they vary by county.

FINDINGS

Results from each of the local Forces of Change groups were consolidated into a single summary table (Table 1). They are categorized by domain (Social, Economic, Political, Technological, Environmental,

Scientific, Legal and Ethical) and assigned as opportunities or threats according to the local group recommendations. Where items had not been classified as opportunities or threats by the local teams, they were listed in the summary table as unassigned.

Items listed in the summary table were reviewed for areas of repetition or recurrent themes. Although the brainstorming exercises identified a variety of issues, some common themes did emerge and are discussed below.

Recurrent themes that emerge from the combined results

Community strengths. While the lists of items generated in the brainstorming exercises tended to identify more concerns than opportunities, several positive aspects were also identified. The rural lifestyle was mentioned frequently as a positive, tied to ideas such as clean air and low crime rates. The low population density of the region was recognized as providing an opportunity for growth. FOC participants recognized that unemployment rates in the region had not increased as sharply as in other portions of the state. Easy transportation access via highway systems and the existence of recreational lakes within the region were also recognized as strengths. Growing and emerging opportunities for community collaboration efforts were mentioned several times.

Economic concerns. These include unemployment, lack of jobs that pay adequate wages and rising prices for food and fuel. Interestingly, there were also multiple mentions of an unskilled workforce and difficulty in finding qualified workers for existing jobs. While frequently cited as a threat, the combined existence of an unskilled but available labor force and a need for jobs that pay better wages might also represent a community opportunity.

Changes to community. Issues identified included loss of residents through out-migration and an aging population, as well as difficulty in maintaining critical community infrastructure such as schools, post offices, SRS offices and grocery stores. A number of concerns were raised around issues of deteriorating social cohesion within the community, with specific issues such as crime rates, substance abuse, divorce, child abuse and deteriorating social values mentioned. A growing anti-government sentiment and concerns of excessive or external government regulation were also cited frequently.

Access to health care services, particularly in the area of mental health. Concerns over cuts to programs, loss of funding, professional workforce shortages and workers being expected to do more with less were identified. On a more positive note, expansion of hospital facilities and programs and the potential for expanded access to health insurance coverage under the Affordable Care Act were cited as opportunities.

Emerging technology. The discussions noted both positive and negative aspects. Social media communication, in particular, was recognized as providing opportunities for easier and more timely communication with some segments of the population but also carrying risks for deterioration of more formal communication skills, the spread of misinformation and concerns over protection of privacy. Electronic health records was a second area recognized as potentially bringing improvements to coordination of health care, but there also are concerns with implementation costs and related challenges.

Numerous items generated in the brainstorming phase of the Forces of Change exercises were apparently not explored further or not categorized as opportunities or threats. It may be worthwhile for the Regional Core Team to look back through the consolidated list of ideas generated by the local groups and consider whether further exploration of some of the recurrent concepts would be warranted.

Forces of Change Analysis East Central Kansas Coalition

Table 1. Summary of Forces of Change Findings

(The county from which each item originated is identified in parentheses)

Forces of Change		
Legal	Opportunities	Threats
	Smoking regulations in place (OS)	Lack of affordable legal aid available to community (WB)
	County attorney prosecuting more teens for drugs and drinking (OS)	Curfews not enforced in small towns (WB)
	Teen Court (OS)	Unfunded law changes that burden local resources, offender registration, mental health funding (LY)
	Crimestoppers in place (OS)	Defensive medicine – increased costs, fear of lawsuits, unnecessary tests; rationing of medicine (FR)
	Defensive medicine – preventive medicine (FR)	Medical reimbursement – limited providers; potential bankruptcy (FR)
	Medical reimbursement – increase family practice providers (FR)	Federal health care spending – Supreme Court reversal (FR)
	Federal health care spending – Increase access for currently uninsured (FR)	Affordable Care Act – increased costs and government regulation (CF)
	Affordable Care Act – possible improvement of health care for uninsured (CF)	Increase in drug use, illegal use of prescription drugs – drag on health care facilities, increasing jail population (CF)
	Job security (CF)	Not enough information on future government plans (CF)
	Technology increases effectiveness (CF)	Lack of care at appropriate times (CF)
	Faith group – become positive influence (CF)	Harassing calls (CF)
	Lack of insurance (CF)	Inability to employ (CF)
	Opportunity to educate on person care and prevention activities (CF)	(EPA regulation?) From federal government – tell you what you can do (CF)
	Agencies that offer free services (CF)	(EPA regulation?) Wastewater evidence that they are doing something (CF)
	Build collaboration with agencies (CF)	(EPA regulation?) Puts fear into people (CF)
	Build a support system (CF)	(EPA regulation?) Loss of revenue and less jobs (CF)
	Change creates opportunity to create (CF)	
	Forces Not Identified as Opportunity or Threat	
	Affordable Care Act (CORE)	
	Contraceptive ruling under Affordable Care Act (CORE)	

Forces of Change		
	Marriage laws (CORE)	
	Loss of judge (GW)	
	Crimes against person(s) (GW)	
	Animal ID system mandatory? (GW)	
	People knowing how to “play the system” (GW)	
	Illegal drug growers (Mexicans/marijuana plants) (GW)	
	Crime level increasing (GW)	
	Availability of legal services (GW)	
Scientific	Opportunities	Threats
	Alma Health Care Clinic with physician (WB)	Health care will not be as good (LY)
	Autism – to research for answers, promote prevention funding (FR)	Diseases resistant to antibiotics (OS)
		High cancer rates (OS)
		Chronic disease on the rise (OS)
		Autism – drain on medical and educational systems (FR)
		Smart phones – self-diagnosing occurs (FR)
		Drug ads (FR)
		Unrealistic EPA rules, lack of scientific evidence to support them (CF)
	Forces Not Identified as Opportunity or Threat	
	Medical technology (CORE)	
	New vaccines (CORE)	
	Evidence-based practices (CORE)	
	Head injury research (sports) (CORE)	
	New technology (CORE)	
	Lack of new antibiotics (CORE)	
	Consumer misinformation (ex: pink slime) (GW)	
	Farmers/cattle producers actively researching methods for farming/cattle herd improvement (GW)	
	Restriction of animal medicine (GW)	
Ethical	Opportunities	Threats
	Many churches in county (OS)	Religious group refusing to immunize (WB)
	Lots of space = groundwork for growth (CORE)	Change in health insurance, coverage costs (LY)
	Major highway 54/40 (CORE)	Lack of people to fill roles (LY)
	Access to care – more to prevention fund; contraception; nutritionist (FR)	Rate of child abuse (OS)
	ACA – HMOs may be able to better serve (FR)	Social hosting (OS)
	Private insurance – coverage for more people (FR)	Small town (CORE)
	Bring programs into school and partner with religious groups (CF)	One grocery store (CORE)
		Dentist 8 hours/week (CORE)

Forces of Change		
		No female physician (CORE)
		Access to care - mental health; class system; people saddled with debt (FR)
		ACA – take away funds because of not meeting criteria (in hospitals) (FR)
		Private insurance – focus on profits (FR)
		No critical thinking (CF)
		Lack of Christian values (CF)
		Personal respect (CF)
		Lack of value/morals (CF)
		Ethical, fair and humane treatment (CF)
		Cost of mental health care (CF)
		STDs, suicides, not making ethical decisions (CF)
	Forces Not Identified as Opportunity or Threat	
		Care for low income (CORE)
		Advances in medical technology (CORE)
		Medicaid reform resulting in decreased payment/funding for services (CORE)
		Decreasing budgets (funds) – prioritizing what is important to purchase (GW)
		Small-town politics (GW)
		Teens/peer pressure: drinking, tobacco, etc. (GW)
		Decisions made out of self-purpose and self-direction (GW)
		Income level (GW)
Political	Opportunities	Threats
	Political redistricting (LY)	Decreased county budget funding (WB)
	Political reform (LY)	Legislative budget cuts (WB)
	Upcoming presidential election, change in government (LY)	Political redistricting (LY)
	Conservative state (LY)	Political reform (LY)
	Regionalization – reduced costs (FR)	Upcoming presidential election, change in government (LY)
	Super PACs - participation for opposing views (FR)	Decreased available resources (LY)
	Government funding – volunteers could step in (FR)	Loss of SRS office in county (OS)
	Lack of movers and shakers in community – a new drive/social consciousness; improvement possible (FR)	Downsizing of community service organizations (OS)
	Public education – accountability of parents, fill the chairs with coordinated efforts, more education (FR)	Cuts in mental health (OS)
		Regionalization – competition for market share for some organizations, unequal distribution of resources among sharing agencies (FR)
		Super PACs – buys political power (FR)

Forces of Change	
	Government funding – reduced care, more long-term expense cost shifting with greater costs, both economic and social (FR)
	Lack of movers and shakers in community – vacuum/not enough time, so little action (FR)
	Public education – soft skills missing, not coordinated in the community regarding health issues, community road map missing for consistency of purpose (FR)
	Governmental control (CF)
	Environmental regulations (CF)
	Divorce – judge quick to grant (CF)
	Presidential candidate (GW)
	“No child left behind act” – negative for core learning of students, schools focusing on “standards” not variety of subjects (GW)
	Public leaders (local and national) (GW)
Forces Not Identified as Opportunity or Threat	
	Future – election (CORE)
	Change in governor (CORE)
	Presidential election (CORE)
	Change in commission (CORE)
	Agriculture support by governor (CORE)
	Gym – high school, community and grant funded (CORE)
	SRS reorganization (CORE)
	Anti-government sentiment = decreased funding (CORE)
	Redistricting legislators – representative (CORE)
	Consolidate smaller schools (CORE)
	Tax reform – flat tax could penalize majority of county population already in poverty (CORE)
	Access legislation approved: hospital/assisted living/nursing home (CORE)
	Election (CORE)
	Changes in local leadership (GW)
	International turmoil military (GW)
	Political/economic – fear of Hamilton school closing/consolidating (GW)
	Future of Social Security (GW)
	Obamacare (GW)
	Elections (GW)
	Redistricting of representatives (GW)
	Openness of community leaders to opportunities for businesses to locate here (GW)
	Funding to continue to decrease (GW)
	Health care reform (GW)
	Mid-Cap going away (GW)

Forces of Change		
Economic	Opportunities	Threats
	Large cattle population (LY)	Lack of adequate medical/dental access (WB)
	Opportunity for community to work together to fill some needs (CF)	Lack of job opportunities (WB)
	Lower unemployment and higher wages locally due to Wolf Creek (CF)	Lack of jobs (WB)
	School interventions (CF)	Lack of groceries or stores (WB)
	Unemployment not as high as area counties (CF)	Decreased school funding (LY)
	Opportunity to teach kids how to be employed – job training (CF)	Decreased funding for federal programs (LY)
	Opportunity to work with employees on drug awareness (CF)	Less income for individuals and families (LY)
	Grants available for job training (CF)	Fuel prices affecting personal resources (LY)
		[Health?] Costs going up, coverage being reduced (LY)
		Recession (LY)
		Gas prices (LY)
		Funding insecurity (LY)
		Decrease in population in Emporia/area (LY)
		Government budget cuts (LY)
		Family planning budget cut (LY)
		Low SES, rural community (OS)
		Lack of job opportunities in county (OS)
		Lack of adequate housing (OS)
		Small businesses' failure to thrive (OS)
		Large population on Medicaid (OS)
		Budget cuts to mental health and social services (CF)
		People not qualified, lack soft skills for employment (CF)
		Businesses closing (grocery stores) GW
		Mid-Cap going away (GW)
		Desirable jobs – applicants are unemployable (CF)
		Lose employees (CF)
		Fewer jobs (CF)
		Lower valuation (CF)
		Less community involvement (CF)
		Many offer jobs, but possible employees can make more than \$10 per hour on unemployment (CF)
	Forces Not Identified as Opportunity or Threat	
	Water recreation/zebra mussels (CORE)	
	Changes in reimbursement – or funding (loss of funding) (CORE)	

Forces of Change

Small business failure to thrive (CORE)
Business downsizing (CORE)
Future: loss of students in school district (CORE)
Low census in hospital (CORE)
LEPP funding (CORE)
KDHE funding (CORE)
Community support for funding areas (hospital , life center, schools) (CORE)
Cuts in (or lack of) mental health services (CORE)
Increased cost of living (CORE)
Increased food prices (CORE)
Increased gasoline prices (CORE)
Education funding (CORE)
Educational decline – lack of availability (CORE)
Reintegration of children back into a family after they've been removed (CORE)
Fluctuation of cattle prices (CORE)
Increasing feed prices (CORE)
Lack of jobs (CORE)
Cuts in mental health (CORE)
Grocery stores have decreased to bare bones necessity – can't meet buyer obligation levels (CORE)
Decrease of population (CORE)
Decreased funding (CORE)
Businesses closing (CORE)
Cuts in mental health (CORE)
Loss of employment, higher gas prices decrease opportunities to regain livelihood (CORE)
KPERS reform could affect retirement benefits for those age 50-65 (CORE)
Decreased mental health services (CORE)
School finance (CORE)
Gas prices (CORE)
Inflation (CORE)
School closures? (CORE)
Managed care organizations (CORE)
Higher levels of poverty in county decreased available tax base and results in job loss (CORE)
Lack of available health services in county on four days of the week causes people to travel out of county for health care (CORE)
Logistics (CORE)
Funding (CORE)
Buy-in (CORE)
Fear of failure or loss (CORE)
Health education (GW)
Funding decreasing in science fields (GW)
Staff service – doing more for less (GW)
Lack of jobs - X2 (GW)
Lack of resources - X2 (GW)
Rural exodus (GW)
Erosion of services (GW)

Forces of Change		
	New businesses in Eureka (Trading Post – Coffee Shop) (GW)	
	Troubled economy (GW)	
	Affordable Care Act changes (GW)	
	Aging physicians (GW)	
	Health care reform (GW)	
	Income level (GW)	
	Housing (GW)	
	Internet availability (GW)	
	Economic development in Eureka (GW)	
Environmental	Opportunities	Threats
	Natural disaster (WB)	Lack of security (WB)
	No place for children to safely ride bikes (WB)	Drinking while boating (WB)
	Influx of visitors to two federal lakes (OS)	Boating safety (WB)
	Intermodal – increase job opportunities (FR)	Algae microorganisms in lakes and ponds (WB)
	Natural disasters – collaborative planning and participation (FR)	Broken or missing sidewalks (WB)
	Hospital renovation – increase used by local residents (FR)	Lack of medical/dental services (WB)
	Community growth, more options (FR)	Natural disasters (LY)
	Opportunity to work as community to prepare (CF)	Tornado (LY)
	Help from Wolf Creek (CF)	No LEP program, reduction in environmental health budget (LY)
		Lack of medical providers (OS)
		Lacking built environment (OS)
		Limited availability of rural water (OS)
		No hospital (OS)
		Limited access to medical care (OS)
		Intermodal – increase in population, possibly more bedroom-community aspects; change in “rural” lifestyle (FR)
		Natural disasters – expensive, destroy property; loss of life (FR)
		Damage by storms (CF)
		Tornado – severe weather (GW)
	Forces Not Identified as Opportunity or Threat	
	Agriculture-related issues – weather, burning, legislation, chemicals (CORE)	
	Geographic diversity and regional size = not being considered a unit (CORE)	
	Lack of medical providers (CORE)	
	More emphasis on built environment (CORE)	
	Limited access to recreational facilities and facilities have limited offerings (CORE)	
	Mid-Cap closed (GW)	
	Pesticide use (GW)	
	Insecticide use (GW)	

Forces of Change		
	Severe weather (GW)	
	No real winter – pest control (GW)	
	Funding prioritization	
	Clean water (GW)	
	Gas emissions from Highway 54 running through (GW)	
	Warming up – lack of seasonal temperatures (GW)	
	Creation of park facilities (GW)	
	Improve quality of life (GW)	
	Lead paint (GW)	
	Clean air (GW)	
Social	Opportunities	Threats
	Federal health care law (LY)	Binge drinking (WB)
	Public health accreditation (LY)	Social norm of teen drinking (WB)
	Drug-free Osage County (OS)	Parents not enforcing underage drinking laws (“Kids will be kids”) (WB)
	Bedroom communities (OS)	Religious group refusing to immunize (WB)
	Rural friendly attitude (OS)	Limited activities for children (WB)
	Prevention vs. reactionary mindset – public education through partnerships with limited focus (FR)	Social threat – people don’t want to associate with certain people or groups outside of their own social group (WB)
	Divorces – Opportunity to strengthen the family with better parents and a larger family (CF)	Low-income folks may not have adequate coverage (LY)
		Housing prices (LY)
		Gas prices (LY)
		Health insurance, national healthcare reform (LY)
		High food prices (LY)
		Federal health care law (LY)
		End to Social Security (LY)
		Health insurance reform (LY)
		Lowered accessibility to health care (LY)
		Lack of commitment to the community (OS)
		Bedroom communities (OS)
		Apathy/acceptance of substance abuse (OS)
		Medically underserved (OS)
		Declining population (OS)
		Workforce limited – social skills limited, commitment to job (FR)
		Prevention vs. reactionary mindset – increase in population, low income/low education (FR)
		High divorce rate (15.77/1,000) – Easy to get divorced in county (CF)
		Divorces – reduce domestic abuse (CF)

Forces of Change	
	Divorces - family awareness – morals (CF)
	Divorces - lack of supervised activities (CF)
	Divorces - increased poverty rates (CF)
	Divorces - trouble at school (CF)
	Divorces - drug and alcohol issues (CF)
	Divorces – ministerial association - four months to get education before marriage and can't live together before marriage (CF)
	Diversity (CF)
	Hunger (CF)
	Polio eradication (CF)
	Autism (CF)
	Ageing population (CF)
Forces Not Identified as Opportunity or Threat	
	Multi-generational SRS clients (CORE)
	Youth not coming back to the community (CORE)
	Multi-generational households (CORE)
	Obesity (CORE)
	Access to EMS (CORE)
	Sandwich generation (CORE)
	Generational poverty (CORE)
	Loss of family planning program (CORE)
	Foster care system (CORE)
	Vaccination fears (CORE)
	Access to grocery stores (CORE)
	Moving from rural to semi-urban or rural to frontier (CORE)
	Impact financially on health – community and social (CORE)
	Decrease of population (CORE)
	Ageing community (CORE)
	Rural community (CORE)
	Fewer job opportunities (CORE)
	Life center available with pool and exercise equipment (CORE)
	Building new high school gym for community (CORE)
	Segregation of county (GW)
	Drug use (GW)
	Rural exodus (GW)
	Opportunities for exercise (GW)
	Lack of adequate paying jobs (GW)
	Obesity – X2 (GW)
	Draining of same people, same groups (GW)
	Tradition vs. progression (GW)
	New FCS agent (GW)
	Lack of apathy in community (GW)
	Lack of qualified staff (GW)
	Two new extension agents (GW)
	Either have insurance (employer provided) or Healthwave (low-income), middle children don't have coverage (GW)

Forces of Change		
	Opening up conversation among the county groups and residents (GW)	
	"Rural" people vs. "town" people (GW)	
	Community involvement (GW)	
	Lack of funding (GW)	
	Good people willing to help (GW)	
	Poverty level (GW)	
	Attitude (GW)	
Technological	Opportunities	Threats
	Social media (O)	Additional training (LY)
	Emergency Medical Services (O)	Limited access to cell towers and DSL (OS)
	Social media – good information quickly, way to reach certain populations (FR)	Social media – rumors abound (FR)
	Faith community picking up? (FR)	Loss of post office (FR)
	Pull in more youth clubs (FR)	Social skills not being taught (FR)
	EMR – access to health records anywhere (CF)	EMR – information security (CF)
	Social media – good way to reach young people (CF)	Social media – poor communication skills among youth (CF)
	Social media – quicker (CF)	Electronic communication (GW)
		Social media – misinformation (CF)
		Social media – lack of privacy (CF)
		Social media – being able to access porn (CF)
		Social media – Identity theft (CF)
		Social media – texting – no social skills (CF)
		Social media – kids don't think for themselves (CF)
	Forces Not Identified as Opportunity or Threat	
	PHI expectations (personal health information) (CORE)	
	Instant communication and social networking – many older people lack access or knowledge (CORE)	
	Social media (CORE)	
	Buried fiber for faster internet connections (CORE)	
	Additions to hospital therapy (pool, MRI, mammography) (CORE)	
	Electronic medical records (CORE)	
	Emergency medical services (CORE)	
	Getting information to those who need it most – rural, no telephone, no internet (GW)	
	Fiberoptics to Madison (GW)	
	New medical equipment costs (GW)	
	Internet availability (GW)	
	EHR (Electronic Health Records) (GW)	
	Poor internet/cell phone coverage (GW)	
	Severe weather alert system not functioning (GW)	
	Educate to legislator (CF)	
	EMR – case management in rural areas (CF)	

Forces of Change		
	Pull up patient info/meds/doctor's name, etc. (CF)	
Unclassified		
	City lake and federal reservoir – people living at the lake (MR)	Less funding for state/federal programs (MR)
	Hospital adding services (MR)	Lack of high-paying jobs in county (MR)
	Rural community (MR)	Aging population (MR)
	Agricultural community – Flint Hills, cattle, crops (MR)	Young people moving out of area (MR)
	Phone company has buried fiber cable to rural customers – high-speed internet (MR)	Many people drive out of town for jobs/employment (MR)
		Schools may have to consolidate (MR)

Forces of Change Brainstorming Worksheet

The following two-page worksheet is designed for MAPP Committee Members to use in preparing for the Forces of Change brainstorming session.

What are Forces of Change?

Forces are a broad, all-encompassing category that includes trends, events, and factors.

- **Trends are patterns over time**, such as migration in and out of a community or a growing disillusionment with government.
- **Factors are discrete elements**, such as a community's large ethnic population, an urban setting, or a jurisdiction's proximity to a major waterway.
- **Events are one-time occurrences**, such as a hospital closure, a natural disaster, or the passage of new legislation.

What Kind of Areas or Categories Are Included?

Be sure to consider any and all types of forces, including:

- Social
- Economic
- Political
- Technological
- Environmental
- Scientific
- Legal
- Ethical

How to Identify Forces of Change

Think about forces of change --- outside of your control --- that affect your local public health system or community.

1. What has occurred recently that may affect our local public health system or community?
2. What may occur in the future?
3. Are there any trends occurring that will have an impact? Describe the trends.
4. What forces are occurring locally? Regionally? Nationally? Globally?
5. What characteristics of our jurisdiction or state may pose an opportunity or threat?
6. What may occur or has occurred that may pose a barrier to achieving the shared vision?
7. How does this impact your life?

Force of Change Brainstorming Worksheet

Using the information from the previous page, list all brainstormed forces, including factors, events, and trends. Continue onto another page if needed. Bring the completed worksheet to the brainstorming session.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

ECKPHC – Regional Core Team
Forces of Change Brainstorming Session Results
February 9, 2012

LEGAL

- Affordable Care Act
- Contraceptive ruling under Affordable Care Act
- Marriage laws

ETHICAL

- Threat: 1 grocery store
 - 1 pharmacy
 - Dentist 8 hours/ week
 - No female physician
- Opportunity: small town
 - Lots of space= groundwork for growth
 - Major highway 54/ 400
- Care for low income
- Advances in medical technology
- Medicaid reform resulting in decreased payment/ funding for services

SCIENTIFIC

- Medical technology
- New vaccines
- Evidenced- based practices
- Head injury research (sports)
- New technology
- Lack of new antibiotics

TECHNOLOGICAL

- PHI expectations (personal health information)
- Instant communication and social networking- many older generation people lack access or knowledge
- Social media
- Buried fiber for faster internet connections
- Additions to hospital therapy (Pool, MRI machine, mammography)
- Electronic medical records
- Emergency medical services

ENVIRONMENTAL

- Ag related issues – weather, burning, legislation, chemicals

- Geographic diversity and regional size = Not being considered a unit
- Lack of medical providers
- + Emphasis on built environment
- Limited access to recreational facilities and facilities have limited offering

POLITICAL

- Future – election
- Change in Governor
- Presidential election
- Change in Commission
- Agriculture support by Gov
- Gym- high school , community and grant funded
- SRS reorganization
- Anti-government sentiment = decreased funding
- Redistricting Legislators – Rep
- Consolidate smaller schools
- Tax reform – flat tax could penalize majority of county population already in poverty
- Access legislation approved: hospital/ assisted living/ nursing home
- Election

SOCIAL

- Intergenerational SRS clients
- Youth not coming back to the community
- Multi-generational households
- Obesity
- Access to EMS
- Sandwich generation
- Skill level of EMS
- Grandparents raising grandchildren
- Sandwich generation
- Generational poverty
- Loss of family planning program
- Foster care system
- Vaccination fears
- Access to grocery stores
- Moving from rural to semi-urban or rural to frontier
- Impact financially on health- community and social
- Decrease of population
- Aging community
- Rural community
- Fewer job opportunities
- Life center available with pool & exercise equipment
- Building new high school gym for community

ECONOMIC

- Water recreation/ zebra mussels
- Changes in reimbursement- or funding (loss of funding)
- Small business failure to thrive

- Business down sizing
- Future: loss of students in school district
- Low census in hospital
- LEPP funding
- KDHE funding
- Community support for funding areas (hospital, life center, schools)
- Cuts in mental health (or lack of) mental health
- Increased cost of living
- Increased food prices
- Increased gasoline prices
- Education funding
- Educational decline—lack of availability
- Reintegration of children back into a family where they have previously been taken out of the same home
- Fluctuation of cattle prices
- Increasing feed prices
- Lack of jobs
- Cuts in mental health
- Grocery stores have decreased to bare bones necessity – can't meet buyer obligation levels
- Decrease of population
- Decreased funding
- Businesses closing
- Cuts in mental health
- Loss of employment, higher gas prices decrease opportunities to regain livelihood
- KYPRS reform could penalize retirement benefits for those aged 50—65 years.
- Decreased mental health services
- School finance
- Gas prices
- Inflation
- School closures ?
- MCO Managed care
- Higher levels of poverty in county decreases available tax base and results in job loss
- Lack of available health services in county on 4 days of the week cause people to travel out of county for healthcare
- Logistics
- Funding
- Buy in
- Fear of failure or loss

COUNTY REPORTS AVAILABLE UPON REQUEST



Appendix F: NPHPS



Local Public Health System
Performance Assessment

Report of Results

East Central Kansas Public Health Coalition

5/1/2012



Table of Contents

A. The NPHPSP Report of Results

- I. Introduction
- II. About the Report
- III. Tips for Interpreting and Using NPHPSP Assessment Results
- IV. Final Remarks

B. Performance Assessment Instrument Results

- I. How well did the system perform the ten Essential Public Health Services (EPHS)?
- II. How well did the system perform on specific Model Standards?
- III. Overall, how well is the system achieving optimal activity levels?

Appendix

Resources for Next Steps

The National Public Health Performance Standards Program

Local Public Health System Performance Assessment Report of Results

A. The NPHPSP Report of Results

I. INTRODUCTION

The National Public Health Performance Standards Program (NPHPSP) assessments are intended to help users answer questions such as "What are the activities and capacities of our public health system?" and "How well are we providing the Essential Public Health Services in our jurisdiction?" The dialogue that occurs in answering these questions can help to identify strengths and weaknesses and determine opportunities for improvement.

The NPHPSP is a partnership effort to improve the practice of public health and the performance of public health systems. The NPHPSP assessment instruments guide state and local jurisdictions in evaluating their current performance against a set of optimal standards. Through these assessments, responding sites consider the activities of all public health system partners, thus addressing the activities of all public, private and voluntary entities that contribute to public health within the community.

Three assessment instruments have been designed to assist state and local partners in assessing and improving their public health systems or boards of health. These instruments are the:

- State Public Health System Performance Assessment Instrument,
- Local Public Health System Performance Assessment Instrument, and
- Local Public Health Governance Performance Assessment Instrument.

The NPHPSP is a collaborative effort of seven national partners:

- Centers for Disease Control and Prevention, Office of Chief of Public Health Practice (CDC/OCPHP)
- American Public Health Association (APHA)
- Association of State and Territorial Health Officials (ASTHO)
- National Association of County and City Health Officials (NACCHO)
- National Association of Local Boards of Health (NALBOH)
- National Network of Public Health Institutes (NNPHI)
- Public Health Foundation (PHF)

This report provides a summary of results from the NPHPSP Local Public Health System Assessment (OMB Control number 0920-0555, expiration date: August 31, 2013). The report, including the charts, graphs, and scores, are intended to help sites gain a good understanding of their performance and move on to the next step in strengthening their public system.

II. ABOUT THE REPORT

Calculating the scores

The NPHPSP assessment instruments are constructed using the Essential Public Health Services (EPHS) as a framework. Within the Local Instrument, each EPHS includes between 2-4 model standards that describe the key aspects of an optimally performing public health system. Each model standard is followed by assessment questions that serve as measures of performance. Each site's responses to these questions should



indicate how well the model standard - which portrays the highest level of performance or "gold standard" - is being met.

Sites responded to assessment questions using the following response options below. These same categories are used in this report to characterize levels of activity for Essential Services and model standards.

NO ACTIVITY	0% or absolutely no activity.
MINIMAL ACTIVITY	Greater than zero, but no more than 25% of the activity described within the question is met.
MODERATE ACTIVITY	Greater than 25%, but no more than 50% of the activity described within the question is met.
SIGNIFICANT ACTIVITY	Greater than 50%, but no more than 75% of the activity described within the question is met.
OPTIMAL ACTIVITY	Greater than 75% of the activity described within the question is met.

Using the responses to all of the assessment questions, a scoring process generates scores for each first-tier or "stem" question, model standard, Essential Service, and one overall score. The scoring methodology is available from CDC or can be accessed on-line at <http://www.cdc.gov/nphpsp/conducting.html>.

Understanding data limitations

Respondents to the self-assessment should understand what the performance scores represent and potential data limitations. All performance scores are a composite; stem question scores represent a composite of the stem question and subquestion responses; model standard scores are a composite of the question scores within that area, and so on. The responses to the questions within the assessment are based upon processes that utilize input from diverse system participants with different experiences and perspectives. The gathering of these inputs and the development of a response for each question incorporates an element of subjectivity, which can be minimized through the use of particular assessment methods. Additionally, while certain assessment methods are recommended, processes can differ among sites. The assessment methods are not fully standardized and these differences in administration of the self-assessment may introduce an element of measurement error. In addition, there are differences in knowledge about the public health system among assessment participants. This may lead to some interpretation differences and issues for some questions, potentially introducing a degree of random non-sampling error.

Because of the limitations noted, the results and recommendations associated with these reported data should be used for quality improvement purposes. More specifically, results should be utilized for guiding an overall public health infrastructure and performance improvement process for the public health system. These data represent the collective performance of all organizational participants in the assessment of the local public health system. The data and results should not be interpreted to reflect the capacity or performance of any single agency or organization.

Presentation of results

The NPHPSP has attempted to present results - through a variety of figures and tables - in a user-friendly and clear manner. Results are presented in a Microsoft Word document, which allows users to easily copy and paste or edit the report for their own customized purposes. Original responses to all questions are also available.

For ease of use, many figures in tables use short titles to refer to Essential Services, model standards, and questions. If in doubt of the meaning, please refer to the full text in the assessment instruments.

Sites may choose to complete two optional questionnaires - one which asks about priority of each model standard and the second which assesses the local health department's contribution to achieving the model standard. Sites that submit responses for these questionnaires will see the results included as an additional component of their reports. Recipients of the priority results section may find that the scatter plot figures include data points that overlap. This is unavoidable when presenting results that represent similar data; in these cases, sites may find that the table listing of results will more clearly show the results found in each quadrant.

III. TIPS FOR INTERPRETING AND USING NPHPSP ASSESSMENT RESULTS

The use of these results by respondents to strengthen the public health system is the most important part of the performance improvement process that the NPHPSP is intended to promote. Report data may be used to identify strengths and weaknesses within the local public health system and pinpoint areas of performance that need improvement. The NPHPSP User Guide describes steps for using these results to develop and implement public health system performance improvement plans. Implementation of these plans is critical to achieving a higher performing public health system. Suggested steps in developing such improvement plans are:

1. Organize Participation for Performance Improvement
2. Prioritize Areas for Action
3. Explore "Root Causes" of Performance Problems
4. Develop and Implement Improvement Plans
5. Regularly Monitor and Report Progress

Refer to the User Guide section, "After We Complete the Assessment, What Next?" for details on the above steps.

Assessment results represent the collective performance of all entities in the local public health system and not any one organization. Therefore, system partners should be involved in the discussion of results and improvement strategies to assure that this information is appropriately used. The assessment results can drive improvement planning within each organization as well as system-wide. In addition, coordinated use of the Local Instrument with the Governance Instrument or state-wide use of the Local Instrument can lead to more successful and comprehensive improvement plans to address more systemic statewide issues.

Although respondents will ultimately want to review these results with stakeholders in the context of their overall performance improvement process, they may initially find it helpful to review the results either individually or in a small group. The following tips may be helpful when initially reviewing the results, or preparing to present the results to performance improvement stakeholders.

Examine performance scores

First, sites should take a look at the overall or composite performance scores for Essential Services and model standards. These scores are presented visually in order by Essential Service (Figure 1) and in ascending order (Figure 2). Additionally, Figure 3 uses color designations to indicate performance level categories. Examination of these scores can immediately give a sense of the local public health system's greatest strengths and weaknesses.

Review the range of scores within each Essential Service and model standard

The Essential Service score is an average of the model standard scores within that service, and, in turn, the model standard scores represent the average of stem question scores for that standard. If there is great range or difference in scores, focusing attention on the model standard(s) or questions with the lower scores will help to identify where performance inconsistency or weakness may be. Some figures, such as the bar charts in Figure 4, provide "range bars" which indicate the variation in scores. Looking for long range bars will help to easily identify these opportunities.

Also, refer back to the original question responses to determine where weaknesses or inconsistencies in performance may be occurring. By examining the assessment questions, including the subquestions and discussion toolbox items, participants will be reminded of particular areas of concern that may most need attention.

Consider the context

The NPHPSP User Guide and other technical assistance resources strongly encourage responding jurisdictions to gather and record qualitative input from participants throughout the assessment process. Such information can include insights that shaped group responses, gaps that were uncovered, solutions to identified problems, and impressions or early ideas for improving system performance. This information should have emerged from the general discussion of the model standards and assessment questions, as well as the responses to discussion toolbox topics.

The results viewed in this report should be considered within the context of this qualitative information, as well as with other information. The assessment report, by itself, is not intended to be the sole "roadmap" to answer the question of what a local public health system's performance improvement priorities should be. The original purpose of the assessment, current issues being addressed by the community, and the needs and interests for all stakeholders should be considered.

Some sites have used a process such as Mobilizing for Action through Planning and Partnerships (MAPP) to address their NPHPSP data within the context of other community issues. In the MAPP process, local users consider the NPHPSP results in addition to three other assessments - community health status, community themes and strengths, and forces of change - before determining strategic issues, setting priorities, and developing action plans. See "Resources for Next Steps" for more about MAPP.

Use the optional priority rating and agency contribution questionnaire results

Sites may choose to complete two optional questionnaires - one which asks about priority of each model standard and the second which assesses the local health department's contribution to achieving of the model standard. The supplemental priority questionnaire, which asks about the priority of each model standard to the public health system, should guide sites in considering their performance scores in relationship to their own system's priorities. The use of this questionnaire can guide sites in targeting their limited attention and resources to areas of high priority but low performance. This information should serve to catalyze or strengthen the performance improvement activities resulting from the assessment process.

The second questionnaire, which asks about the contribution of the public health agency to each model standard, can assist sites in considering the role of the agency in performance improvement efforts. Sites that use this component will see a list of questions to consider regarding the agency role and as it relates to the results for each model standard. These results may assist the local health department in its own strategic planning and quality improvement activities.

IV. FINAL REMARKS



The challenge of preventing illness and improving health is ongoing and complex. The ability to meet this challenge rests on the capacity and performance of public health systems. Through well equipped, high-performing public health systems, this challenge can be addressed. Public health performance standards are intended to guide the development of stronger public health systems capable of improving the health of populations. The development of high-performing public health systems will increase the likelihood that all citizens have access to a defined optimal level of public health services. Through periodic assessment guided by model performance standards, public health leaders can improve collaboration and integration among the many components of a public health system, and more effectively and efficiently use resources while improving health intervention services.



B. Performance Assessment Instrument Results

I. How well did the system perform the ten Essential Public Health Services (EPHS)?

Table 1: Summary of performance scores by Essential Public Health Service (EPHS)

EPHS		Score
1	Monitor Health Status To Identify Community Health Problems	34
2	Diagnose And Investigate Health Problems and Health Hazards	81
3	Inform, Educate, And Empower People about Health Issues	61
4	Mobilize Community Partnerships to Identify and Solve Health Problems	48
5	Develop Policies and Plans that Support Individual and Community Health Efforts	53
6	Enforce Laws and Regulations that Protect Health and Ensure Safety	64
7	Link People to Needed Personal Health Services and Assure the Provision of Health Care when Otherwise Unavailable	71
8	Assure a Competent Public and Personal Health Care Workforce	57
9	Evaluate Effectiveness, Accessibility, and Quality of Personal and Population-Based Health Services	49
10	Research for New Insights and Innovative Solutions to Health Problems	53
Overall Performance Score		57

Figure 1: Summary of EPHS performance scores and overall score (with range)

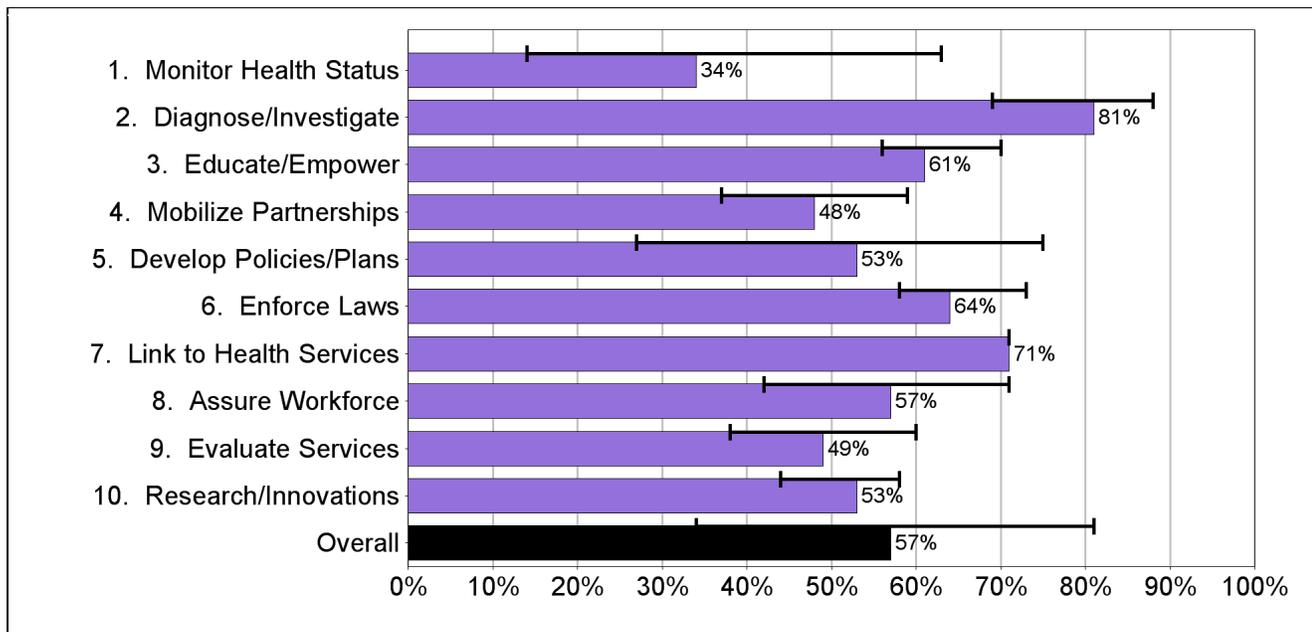


Table 1 (above) provides a quick overview of the system's performance in each of the 10 Essential Public Health Services (EPHS). Each EPHS score is a composite value determined by the scores given to those activities that contribute to each Essential Service. These scores range from a minimum value of 0% (no activity is performed pursuant to the standards) to a maximum of 100% (all activities associated with the standards are performed at optimal levels).



Figure 1 (above) displays performance scores for each Essential Service along with an overall score that indicates the average performance level across all 10 Essential Services. The range bars show the minimum and maximum values of responses within the Essential Service and an overall score. Areas of wide range may warrant a closer look in **Figure 4** or the raw data.

Figure 2: Rank ordered performance scores for each Essential Service

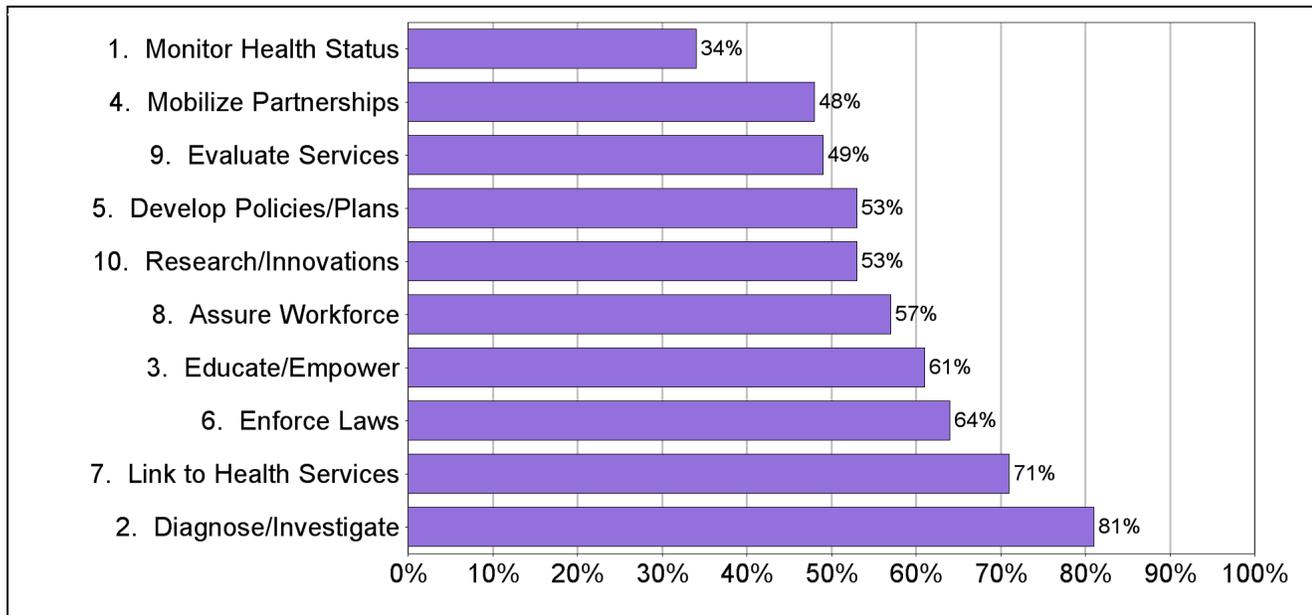


Figure 3: Rank ordered performance scores for each Essential Service, by level of activity

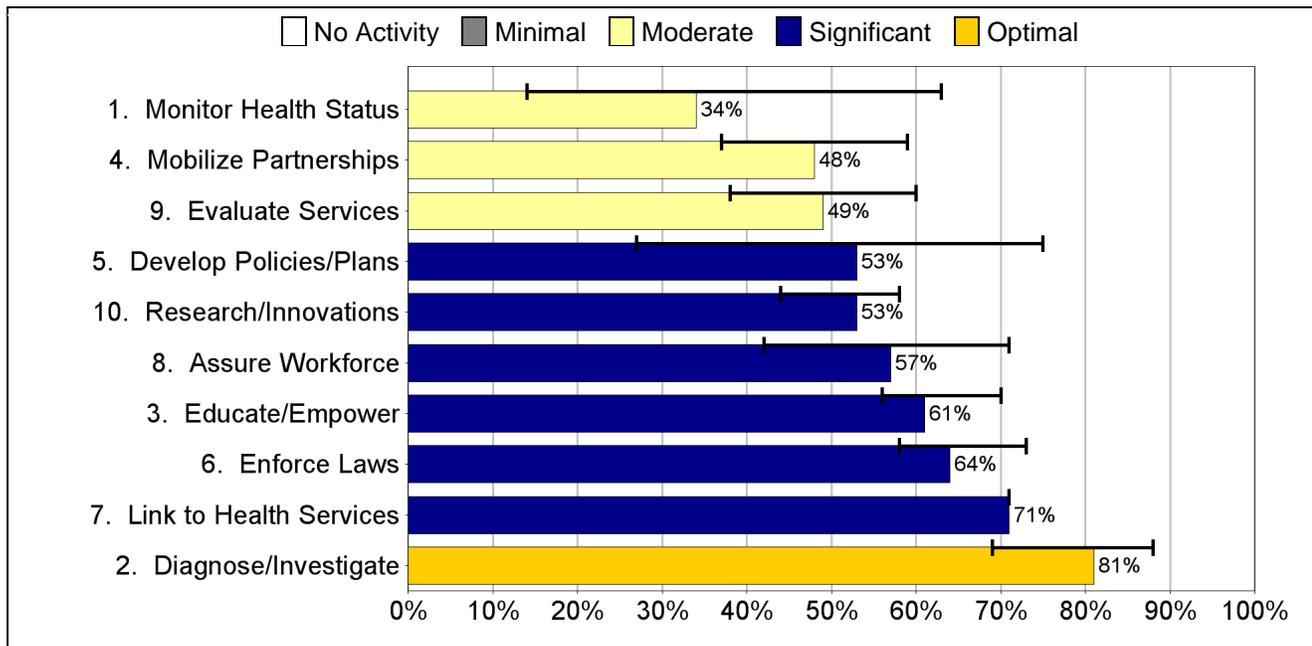


Figure 2 (above) displays each composite score from low to high, allowing easy identification of service domains where performance is relatively strong or weak.

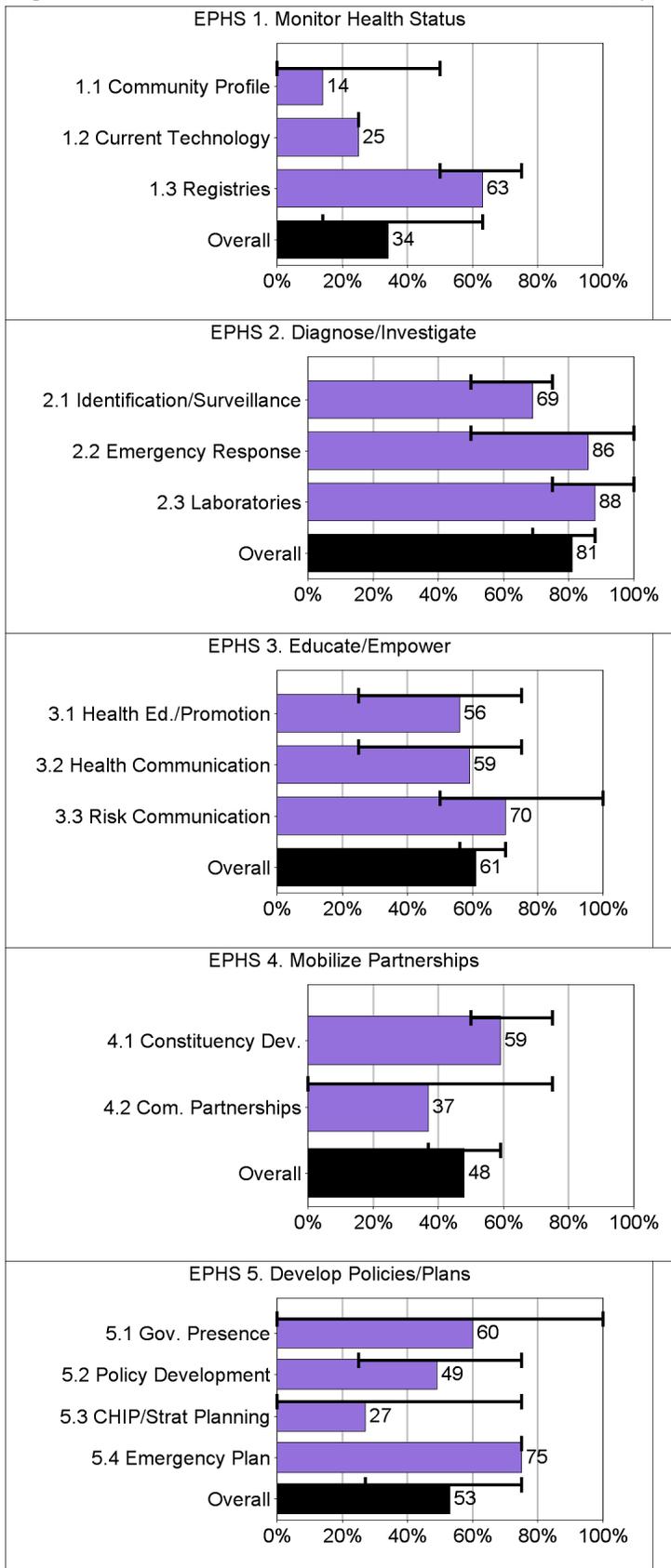
Figure 3 (above) provides a composite picture of the previous two graphs. The range lines show the range of responses within an Essential Service. The color coded bars make it easier to identify which of the Essential Services fall in the five categories of performance activity.

Figure 4 (next page) shows scores for each model standard. Sites can use these graphs to pinpoint specific activities within the Essential Service that may need a closer look. Note these scores also have range bars, showing sub-areas that comprise the model standard.



II. How well did the system perform on specific model standards?

Figure 4: Performance scores for each model standard, by Essential Service



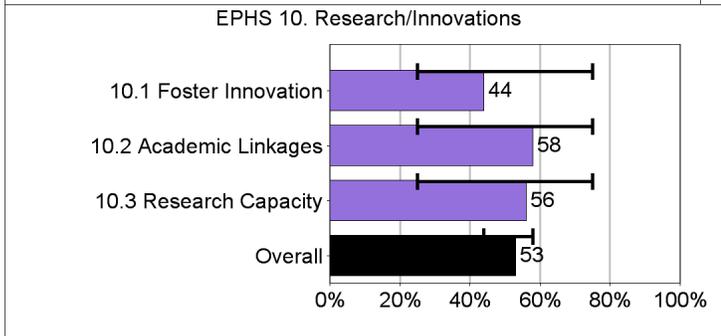
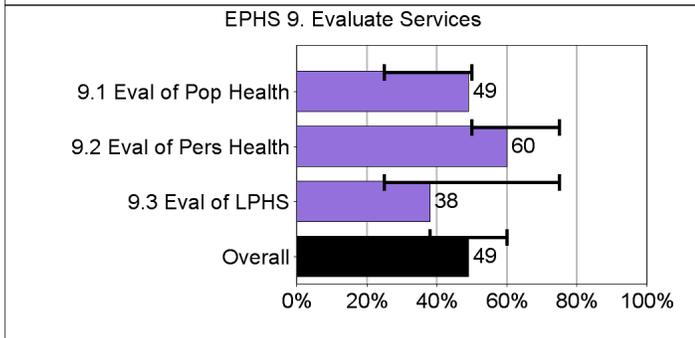
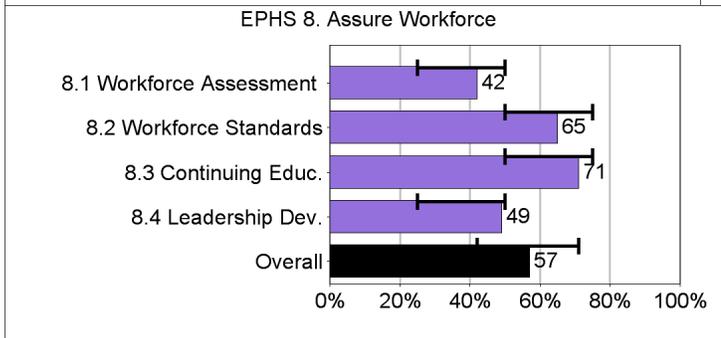
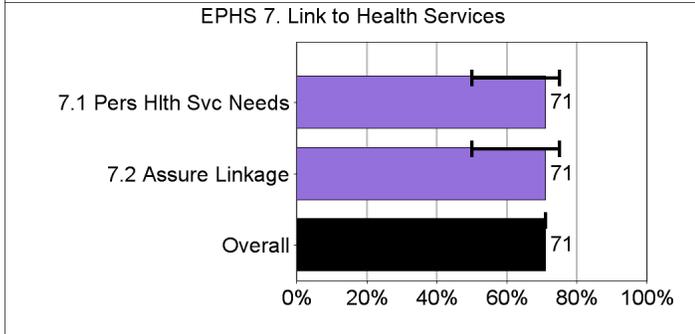
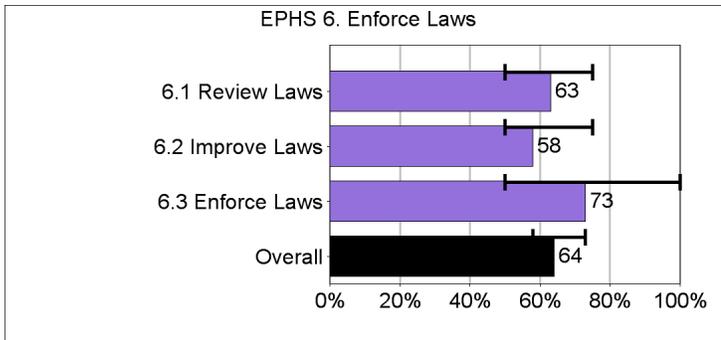


Table 2: Summary of performance scores by Essential Public Health Service (EPHS) and model standard

Essential Public Health Service	Score
EPHS 1. Monitor Health Status To Identify Community Health Problems	34
1.1 Population-Based Community Health Profile (CHP)	14
1.1.1 Community health assessment	19
1.1.2 Community health profile (CHP)	3
1.1.3 Community-wide use of community health assessment or CHP data	21
1.2 Access to and Utilization of Current Technology to Manage, Display, Analyze and Communicate Population Health Data	25
1.2.1 State-of-the-art technology to support health profile databases	25
1.2.2 Access to geocoded health data	25
1.2.3 Use of computer-generated graphics	25
1.3 Maintenance of Population Health Registries	63
1.3.1 Maintenance of and/or contribution to population health registries	75
1.3.2 Use of information from population health registries	50
EPHS 2. Diagnose And Investigate Health Problems and Health Hazards	81
2.1 Identification and Surveillance of Health Threats	69
2.1.1 Surveillance system(s) to monitor health problems and identify health threats	75
2.1.2 Submission of reportable disease information in a timely manner	75
2.1.3 Resources to support surveillance and investigation activities	56
2.2 Investigation and Response to Public Health Threats and Emergencies	86
2.2.1 Written protocols for case finding, contact tracing, source identification, and containment	69
2.2.2 Current epidemiological case investigation protocols	84
2.2.3 Designated Emergency Response Coordinator	100
2.2.4 Rapid response of personnel in emergency / disasters	75
2.2.5 Evaluation of public health emergency response	100
2.3 Laboratory Support for Investigation of Health Threats	88
2.3.1 Ready access to laboratories for routine diagnostic and surveillance needs	75
2.3.2 Ready access to laboratories for public health threats, hazards, and emergencies	75
2.3.3 Licenses and/or credentialed laboratories	100
2.3.4 Maintenance of guidelines or protocols for handling laboratory samples	100
EPHS 3. Inform, Educate, And Empower People about Health Issues	61
3.1 Health Education and Promotion	56
3.1.1 Provision of community health information	38
3.1.2 Health education and/or health promotion campaigns	60
3.1.3 Collaboration on health communication plans	69
3.2 Health Communication	59
3.2.1 Development of health communication plans	43
3.2.2 Relationships with media	58
3.2.3 Designation of public information officers	75
3.3 Risk Communication	70
3.3.1 Emergency communications plan(s)	72
3.3.2 Resources for rapid communications response	88
3.3.3 Crisis and emergency communications training	50
3.3.4 Policies and procedures for public information officer response	69



Essential Public Health Service	Score
EPHS 4. Mobilize Community Partnerships to Identify and Solve Health Problems	48
4.1 Constituency Development	59
4.1.1 Identification of key constituents or stakeholders	75
4.1.2 Participation of constituents in improving community health	63
4.1.3 Directory of organizations that comprise the LPHS	50
4.1.4 Communications strategies to build awareness of public health	50
4.2 Community Partnerships	37
4.2.1 Partnerships for public health improvement activities	65
4.2.2 Community health improvement committee	23
4.2.3 Review of community partnerships and strategic alliances	25
EPHS 5. Develop Policies and Plans that Support Individual and Community Health Efforts	53
5.1 Government Presence at the Local Level	60
5.1.1 Governmental local public health presence	71
5.1.2 Resources for the local health department	60
5.1.3 Local board of health or other governing entity (not scored)	0
5.1.4 LHD work with the state public health agency and other state partners	50
5.2 Public Health Policy Development	49
5.2.1 Contribution to development of public health policies	46
5.2.2 Alert policymakers/public of public health impacts from policies	75
5.2.3 Review of public health policies	25
5.3 Community Health Improvement Process	27
5.3.1 Community health improvement process	57
5.3.2 Strategies to address community health objectives	13
5.3.3 Local health department (LHD) strategic planning process	13
5.4 Plan for Public Health Emergencies	75
5.4.1 Community task force or coalition for emergency preparedness and response plans	75
5.4.2 All-hazards emergency preparedness and response plan	75
5.4.3 Review and revision of the all-hazards plan	75
EPHS 6. Enforce Laws and Regulations that Protect Health and Ensure Safety	64
6.1 Review and Evaluate Laws, Regulations, and Ordinances	63
6.1.1 Identification of public health issues to be addressed through laws, regulations, and ordinances	50
6.1.2 Knowledge of laws, regulations, and ordinances	75
6.1.3 Review of laws, regulations, and ordinances	50
6.1.4 Access to legal counsel	75
6.2 Involvement in the Improvement of Laws, Regulations, and Ordinances	58
6.2.1 Identification of public health issues not addressed through existing laws	75
6.2.2 Development or modification of laws for public health issues	50
6.2.3 Technical assistance for drafting proposed legislation, regulations, or ordinances	50
6.3 Enforce Laws, Regulations and Ordinances	73
6.3.1 Authority to enforce laws, regulation, ordinances	75
6.3.2 Public health emergency powers	88
6.3.3 Enforcement in accordance with applicable laws, regulations, and ordinances	75
6.3.4 Provision of information about compliance	75
6.3.5 Assessment of compliance	50



Essential Public Health Service	Score
EPHS 7. Link People to Needed Personal Health Services and Assure the Provision of Health Care when Otherwise Unavailable	71
7.1 Identification of Populations with Barriers to Personal Health Services	71
7.1.1 Identification of populations who experience barriers to care	75
7.1.2 Identification of personal health service needs of populations	75
7.1.3 Assessment of personal health services available to populations who experience barriers to care	63
7.2 Assuring the Linkage of People to Personal Health Services	71
7.2.1 Link populations to needed personal health services	75
7.2.2 Assistance to vulnerable populations in accessing needed health services	67
7.2.3 Initiatives for enrolling eligible individuals in public benefit programs	75
7.2.4 Coordination of personal health and social services	69
EPHS 8. Assure a Competent Public and Personal Health Care Workforce	57
8.1 Workforce Assessment Planning, and Development	42
8.1.1 Assessment of the LPHS workforce	25
8.1.2 Identification of shortfalls and/or gaps within the LPHS workforce	50
8.1.3 Dissemination of results of the workforce assessment / gap analysis	50
8.2 Public Health Workforce Standards	65
8.2.1 Awareness of guidelines and/or licensure/certification requirements	75
8.2.2 Written job standards and/or position descriptions	50
8.2.3 Annual performance evaluations	50
8.2.4 LHD written job standards and/or position descriptions	75
8.2.5 LHD performance evaluations	75
8.3 Life-Long Learning Through Continuing Education, Training, and Mentoring	71
8.3.1 Identification of education and training needs for workforce development	75
8.3.2 Opportunities for developing core public health competencies	58
8.3.3 Educational and training incentives	75
8.3.4 Interaction between personnel from LPHS and academic organizations	75
8.4 Public Health Leadership Development	49
8.4.1 Development of leadership skills	47
8.4.2 Collaborative leadership	50
8.4.3 Leadership opportunities for individuals and/or organizations	50
8.4.4 Recruitment and retention of new and diverse leaders	50



Essential Public Health Service	Score
EPHS 9. Evaluate Effectiveness, Accessibility, and Quality of Personal and Population-Based Health Services	49
9.1 Evaluation of Population-based Health Services	49
9.1.1 Evaluation of population-based health services	50
9.1.2 Assessment of community satisfaction with population-based health services	47
9.1.3 Identification of gaps in the provision of population-based health services	50
9.1.4 Use of population-based health services evaluation	50
9.2 Evaluation of Personal Health Care Services	60
9.2.1. In Personal health services evaluation	50
9.2.2 Evaluation of personal health services against established standards	75
9.2.3 Assessment of client satisfaction with personal health services	63
9.2.4 Information technology to assure quality of personal health services	63
9.2.5 Use of personal health services evaluation	50
9.3 Evaluation of the Local Public Health System	38
9.3.1 Identification of community organizations or entities that contribute to the EPHS	75
9.3.2 Periodic evaluation of LPHS	25
9.3.3 Evaluation of partnership within the LPHS	25
9.3.4 Use of LPHS evaluation to guide community health improvements	25
EPHS 10. Research for New Insights and Innovative Solutions to Health Problems	53
10.1 Fostering Innovation	44
10.1.1 Encouragement of new solutions to health problems	50
10.1.2 Proposal of public health issues for inclusion in research agenda	25
10.1.3 Identification and monitoring of best practices	75
10.1.4 Encouragement of community participation in research	25
10.2 Linkage with Institutions of Higher Learning and/or Research	58
10.2.1 Relationships with institutions of higher learning and/or research organizations	75
10.2.2 Partnerships to conduct research	25
10.2.3 Collaboration between the academic and practice communities	75
10.3 Capacity to Initiate or Participate in Research	56
10.3.1 Access to researchers	75
10.3.2 Access to resources to facilitate research	75
10.3.3 Dissemination of research findings	50
10.3.4 Evaluation of research activities	25

III. Overall, how well is the system achieving optimal activity levels?

Figure 5: Percentage of Essential Services scored in each level of activity

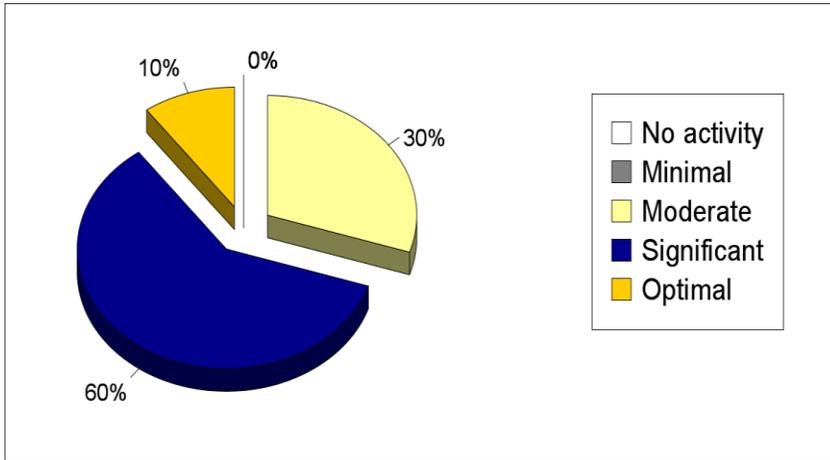


Figure 5 displays the percentage of the system's Essential Services scores that fall within the five activity categories. This chart provides the site with a high level snapshot of the information found in **Figure 3**.

Figure 6: Percentage of model standards scored in each level of activity

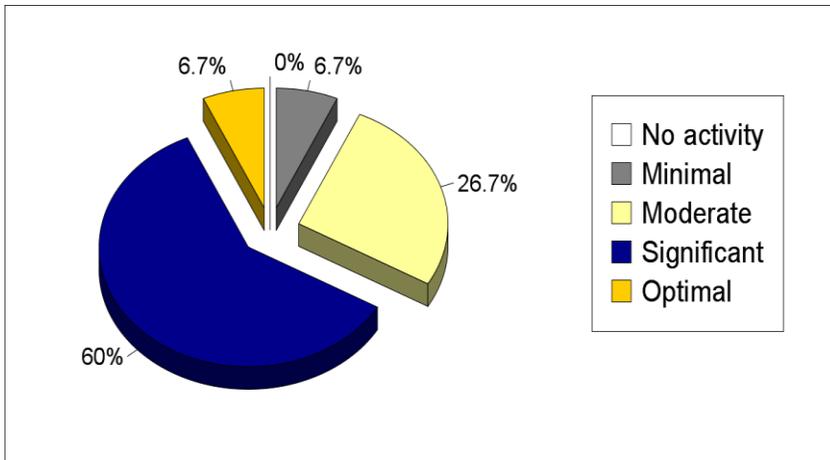


Figure 6 displays the percentage of the system's model standard scores that fall within the five activity categories.

Figure 7: Percentage of all questions scored in each level of activity

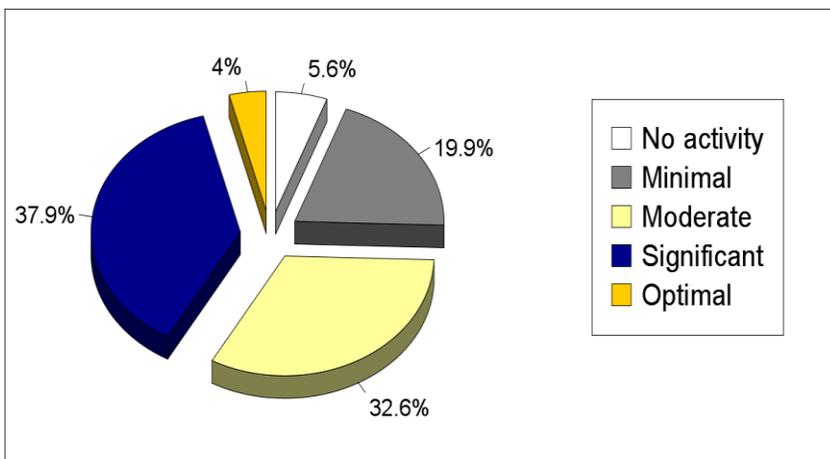


Figure 7 displays the percentage of all scored questions that fall within the five activity categories. This breakdown provides a closer snapshot of the system's performance, showing variation that may be masked by the scores in **Figures 5 and 6**.

APPENDIX: RESOURCES FOR NEXT STEPS

The NPHPSP offers a variety of information, technical assistance, and training resources to assist in quality improvement activities. Descriptions of these resources are provided below. Other resources and websites that may be of particular interest to NPHPSP users are also noted below.

- **Technical Assistance and Consultation** - NPHPSP partners are available for phone and email consultation to state and localities as they plan for and conduct NPHPSP assessment and performance improvement activities. Contact 1-800-747-7649 or phpsp@cdc.gov.
- **NPHPSP User Guide** - The NPHPSP User Guide section, "After We Complete the Assessment, What Next?" describes five essential steps in a performance improvement process following the use of the NPHPSP assessment instruments. The NPHPSP User Guide may be found on the NPHPSP website (<http://www.cdc.gov/NPHPSP/PDF/UserGuide.pdf>).
- **NPHPSP Online Tool Kit** - Additional resources that may be found on, or are linked to, the NPHPSP website (<http://www.cdc.gov/NPHPSP/generalResources.html>) under the "Post Assessment/ Performance Improvement" link include sample performance improvement plans, quality improvement and priority-setting tools, and other technical assistance documents and links.
- **NPHPSP Online Resource Center** - Designed specifically for NPHPSP users, the Public Health Foundation's online resource center (www.phf.org/nphpsp) for public health systems performance improvement allows users to search for State, Local, and Governance resources by model standards, essential public health service, and keyword.;
- **NPHPSP Monthly User Calls** - These calls feature speakers and dialogue on topic of interest to users. They also provide an opportunity for people from around the country to learn from each other about various approaches to the NPHPSP assessment and performance improvement process. Calls occur on the third Tuesday of each month, 2:00 - 3:00 ET. Contact phpsp@cdc.gov to be added to the email notification list for the call.
- **Annual Training Workshop** - Individuals responsible for coordinating performance assessment and improvement activities may attend an annual two-day workshop held in the spring of each year. Visit the NPHPSP website (<http://www.cdc.gov/nphpsp/annualTrainingWorkshop.html>) for more information.
- **Public Health Improvement Resource Center at the Public Health Foundation** - This website (www.phf.org/improvement) provides resources and tools for evaluating and building the capacity of public health systems. More than 100 accessible resources organized here support the initiation and continuation of quality improvement efforts. These resources promote performance management and quality improvement, community health information and data systems, accreditation preparation, and workforce development.
- **Mobilizing for Action through Planning and Partnerships (MAPP)** - MAPP has proven to be a particularly helpful tool for sites engaged in community-based health improvement planning. Systems that have just completed the NPHPSP may consider using the MAPP process as a way to launch their performance improvement efforts. Go



to www.naccho.org/topics/infrastructure/MAPP to link directly to the MAPP website.



References

ⁱ <http://quickfacts.census.gov/qfd/states/20/2021275.html>

ⁱⁱ <http://quickfacts.census.gov/qfd/states/20/2053550.html>

ⁱⁱⁱ Task Force on Community Preventive Services. Oral health (Oal-Health.pdf) in: Zaza S, Briss PA, Haris KW, eds. The Guide to Community Preventive Services. What Works to Promote Health? Atlanta (GA): Oxford Univeisty Press; 2005-:304-28.

^{iv} Centers for Disease Control and Prevention. Recommended Community Strategies and Measurements to Prevent Obesity in the United States, MMWR, July 24, 2009 58(RR07);1-26.