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COUNTIES OF JASPER & NEWTON AND THE CITY OF JOPLIN
Over the winter of 2009 and spring of 2010, the Jasper and Newton Counties Community Health Collaborative (CHC) developed an initial listing of community health issues using the Missouri Department of Health and Senior Services’ MICA Prioritization tool. From this initial set of issues, the CHC worked with other community organizations and individuals to arrive at a set of ten (10) key areas of concern. Community members and partners then completed individual prioritization surveys to arrive at the final set of priorities, as listed below:

<table>
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<th>Community Ranking</th>
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<tbody>
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</table>

Information regarding these priority areas is included in this report, along with supporting data. The CHC and partner organizations have existing programs to help address some of the issue areas and continue to work with the community, partners, and service organizations to meet the health needs of the citizens of Jasper and Newton Counties.

The Jasper and Newton Counties Community Health Collaborative is pleased to provide this Community Health Status Report. It is the culmination of significant research and reflection on the issues impacting the health and general well-being of residents in our area. For our purposes, Community Health is defined and measured as the overall wellness of the community. Wellness can be impacted by many factors including the economy, education, crime, environment, disease, availability of services and lifestyle factors such as nutrition and exercise.

The reporting process involved two components. The first component was a prioritization of areas of concern. The areas of concern were developed with cooperation of the Community Health Collaborative, community members, and with the use of data from the Missouri Department of Health and Senior Services. Previous Community Health Status Reports were also used to develop the areas of concern, which were then ranked according to perceived importance in the community.

The second component of the reporting process included an analysis of the areas of concern, and an analysis of additional health status indicators. The health status indicators include information from general areas that can include socio-economic information, demographics, the environment, public safety, education, birth and childhood data, and disease rate information. This analysis is not all-inclusive, but analyzed to seek out general trends over time.

This report is divided into a number of sections, each highlighting areas of interest and importance in the community. Graphs and charts are provided to help illustrate data and trends.
POPPULATION & DENSITY
The population of Jasper County has increased dramatically since the 1990 and 2000 census time periods. According to 2008 Census estimates, the current population of Jasper County is 116,813, an increase of 12,127 persons, or 11.6% from the 2000 census.

The population in Newton County increased from the 2000 census by 3,484 persons to 56,120 according to 2008 estimates, growing by 6.6%. Both Jasper and Newton counties have exceeded the growth estimates from the 2000 census.

With increasing populations, additional burdens are placed on the environment, schools, government, social service providers, transportation, and health care systems. Those in lower income brackets and at the poverty level face increased competition for scarce resources including competition for jobs, low-income housing, financial aid, food pantry supplies, and health and dental care services.

PER CAPITA INCOME
Jasper and Newton County per capita income rates are below the state rates. While generally following state trends, there has been an increasing gap between state rates and local rates over the past few years.

POVERTY
Poverty is based on the Federal Poverty Level. The percentage of poverty in Jasper County was estimated at 17.9% in 2008, with 26.6% of children age 0-17 living in poverty. Newton County has an estimated 14.6% of people in poverty, including 20.9% of children. The current economic climate has led to diminishing job opportunities, as evidenced by unemployment rates, which is a contributing factor to the increasing numbers of children and families living in poverty.

UNEMPLOYMENT
Unemployment in Jasper and Newton Counties has been lower than state trends since 2006. While lower than state rates, the graph illustrates that local rates follow state unemployment and economic trends.
FREE AND REDUCED SCHOOL LUNCH PROGRAM

The rate for students eligible to participate in the Free and Reduced Lunch program in each of the school districts in the county has, on average, increased significantly in the past eight years. While the overall rate for the state has increased by slightly less than 6%, the rate for Jasper County has increased by over 9% and the rate for Newton County has increased by over 14%.

EDUCATION – GRADUATION AND DROP OUT RATES

Both Jasper and Newton Counties have multiple school districts. The dropout and graduation rates for the schools within each county were averaged to provide overall rates for the counties. The averaged dropout rates for both counties show large fluctuations, with distinct increases in 2006. The average graduation rates show an overall increase from the year 2000. Jasper County peaked at 85% in 2004 and has since declined to 81%, however this is still higher than the 2000 rate of 75%. Newton County graduated 80% of students in 2000 and increased that to 91% by 2007, however the rate dropped to 86% in 2008.

Education rates can directly impact a community’s ability to attract and keep jobs with higher income potential. An educated workforce is needed to sustain jobs that are above minimum wage. Levels of education can also be directly related to unemployment rates. For example, those with less than a high school education are more likely to be unemployed than those with college and post-graduate degrees.

http://www.bls.gov/emp/ep_chart_001.htm,
Healthy Behaviors

Heart disease and stroke are the first and third leading causes of death in the United States, accounting for nearly 35% of all deaths.

Centers for Disease Control (http://www.cdc.gov/nccdphp/publications/factsheets/Prevention/dhdsp.htm)

These are also leading causes of death in Jasper and Newton Counties.

HEART DISEASE

According to the American Heart Association, the risk factors for heart disease include use of tobacco, physical inactivity, high cholesterol, high blood pressure, and obesity. Many of these risk factors can be reduced or controlled by lifestyle changes. High levels of stress can also contribute to unhealthy behaviors, such as overeating or smoking. (http://www.americanheart.org/presenter.jhtml?identifier=4726)

Jasper County ranks in the first quintile among all Missouri counties for heart disease related deaths. From 1998 – 2008, there were 3,964 deaths due to heart disease for a county rate of 299.5 as compared to the state rate of 253.7 (per 100,000). The mortality rate for heart disease has been decreasing overall for the state of Missouri and for Jasper County, however county residents remain at risk as the county rate has remained higher than state rates since 1991.

Newton County ranks in the third quintile among all Missouri counties for heart disease related deaths, with a recorded 1,720 deaths during the 1998 – 2008 time frame for a county rate of 259.2 as compared to the state rate of 253.7. The rate of emergency room visits related to heart disease has increased dramatically over the past few years in Newton County. For the 2003 – 2007 time period, there were 4,632 emergency room visits for a county rate of 16.6 (per 1,000) as compared to the state rate of 12.6, placing the county in the second quintile.

Heart disease related emergency room visits also increased for Jasper County residents and for all Missouri residents.

STROKE & CEREBROVASCULAR DISEASE

Stroke is a type of cardiovascular disease. It affects the arteries leading to and within the brain. A stroke occurs when a blood vessel that carries oxygen and nutrients to the brain is either blocked by a clot or bursts. When that happens, part of the brain cannot get the blood (and oxygen) it needs, so it starts to die. Stroke is the third leading cause of death and the leading cause of disability for all Americans. The financial burden is staggering - Americans will pay about $68.9 billion in 2009 for stroke-related medical costs and disability. (American Stroke Association, http://www.strokeassociation.org)

There were 1,961 stroke related hospitalizations from 2003 – 2007 in Jasper County, and 1,134 stroke related hospitalizations during the same time period in Newton County. Statistically, Jasper and Newton counties rank in the third and fourth quintiles respectively; however both counties have experienced significant increases in the numbers of stroke related emergency room visits over recent years.

According to recent estimates, about one in three U.S. adults has high blood pressure, but because there are no symptoms, nearly one-third of these people don't know they have it. Uncontrolled high blood pressure can lead to stroke, heart attack, heart failure or kidney failure. This is why high blood pressure is often called the "silent killer." The only way to tell if you have high blood pressure is to have your blood pressure checked. (American Heart Association, http://www.americanheart.org)
CANCER
Cancer is a group of diseases that may cause almost any sign or symptom. The signs and symptoms will depend on where the cancer is, how big it is, and how much it affects nearby organs or tissues. If a cancer has spread (metastasized), symptoms may appear in different parts of the body. Cancer begins when cells in a part of the body start to grow out of control. There are many kinds of cancer, but they all start because of out-of-control growth of abnormal cells. A cancer may cause symptoms like fever, extreme tiredness (fatigue), or weight loss. This may be because cancer cells use up much of the body’s energy supply, or they may release substances that change the way the body makes energy from food. Or the cancer may cause the immune system to react in ways that produce these symptoms.

American Cancer Society (http://www.cancer.org)

Cancer claims the lives of more than half a million Americans every year and is the second leading cause of death in the United States, exceeded only by heart disease. The financial costs of cancer are overwhelming, costing an estimated $206 billion according to the National Institutes for Health. Cancer is the second leading cause of death for residents of both Jasper and Newton counties, claiming a total of 3,848 lives between 1997 and 2007. When compared to the state’s cancer-related death rate of 202.6 (per 100,000), the county rates of 201.5 (Jasper) and 202.0 (Newton) are not statistically significant and place the counties in the third quintile.

Early detection is key to successful cancer treatment. Jasper and Newton County residents are less likely to undergo preventative screening for early cancer detection. Nearly 34% of Jasper County women aged 40 and older have not had a mammogram or breast exam within the past year, and 50% of men and women aged 50 and older have never had a colonoscopy. In Newton County, over 25% of women aged 40 and older have not had a mammogram or breast exam within the past year, and 48% of men and women aged 50 and older have never had a colonoscopy.

COPD
COPD, or Chronic Obstructive Pulmonary Disease refers to a group of diseases that cause airflow blockage and breathing-related problems. It includes emphysema, chronic bronchitis, and in some cases asthma. In the United States, tobacco use is a key factor in the development and progression of COPD, but asthma, exposure to air pollutants in the home and workplace, genetic factors, and respiratory infections also play a role. In the United States, an estimated 10 million adults had a diagnosis of COPD in 2000, but data from a national health survey suggest that as many as 24 million Americans are affected.

 Residents of Jasper and Newton Counties face high risks of death, hospitalization, and ER visits due to COPD. From 1997 – 2007, there were 812 deaths due to COPD in Jasper County, for a rate of 63.2 as compared to the state rate of 45.8 (per 100,000). The Newton County rate was 50.1. Both counties have rates of hospitalization and ER Visits that are also higher than state rates, as evidenced in the chart.

Early detection of COPD might alter its course and progress. A simple test can be used to measure pulmonary function and detect COPD in current and former smokers aged 45 and over and anyone with respiratory problems. Avoiding tobacco smoke, home and workplace air pollutants, and respiratory infections are key to preventing the initial development of COPD.

(sources: Centers for Disease Control)
Healthy Behaviors

DIABETES
Diabetes is a costly disease that can have serious complications and premature death. It is a major cause of heart disease and stroke and a leading cause of leg and foot amputations unrelated to injury, kidney failure, and new blindness in adults. The Centers for Disease Control and Prevention reported that 1.5 million new cases of diabetes were diagnosed in people age 20 years or older in 2005. (http://www.cdc.gov/Features/Livingwithdiabetes/)

For the 1998-2008 time period, the death rate for diabetes for Jasper County was 22.3, and 19.3 for Newton County, as compared to the state rate of 24.19 (per 10,000). For the 2003-2007 time period, the hospitalization rate for diabetes was 18.3 for Jasper County and 19.3 for Newton County, as compared to the Missouri rate of 17.4 (per 10,000). Both the death rates and the hospitalization rates have increased slightly since the 1998-2003 time period.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Jasper County Rate</th>
<th>Newton County Rate</th>
<th>Missouri Rate</th>
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</thead>
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<tr>
<td>Fair or poor general health status</td>
<td>21%</td>
<td>19.2%</td>
<td>16.8%</td>
</tr>
<tr>
<td>Activity Limitation</td>
<td>24.4%</td>
<td>25.2%</td>
<td>22%</td>
</tr>
<tr>
<td>No leisure-time physical activity</td>
<td>29.1%</td>
<td>27.1%</td>
<td>25.3%</td>
</tr>
<tr>
<td>Overweight (25.0 – 29.9 BMI)</td>
<td>32.5%</td>
<td>37.5%</td>
<td>35.7%</td>
</tr>
<tr>
<td>Obese (&gt; = 30 BMI)</td>
<td>27.8%</td>
<td>28.7%</td>
<td>29.1%</td>
</tr>
<tr>
<td>Less than 5 fruits &amp; vegetables daily</td>
<td>80.5%</td>
<td>80.8%</td>
<td>76.1%</td>
</tr>
</tbody>
</table>

Livesmart is an initiative of the Jasper and Newton Counties Community Health Collaborative. The project goals are to improve chronic disease rates impacted by unhealthy behaviors in the two county area including Joplin. The initiative seeks to improve diet of area residents by encouraging them to Eat Right by eating 5 servings of fruits and vegetables daily as well as Move More by exercising a minimum of 30 minutes, 5 times per week. The program involves a community-wide concept that incorporates school, work and church based events, advocates for more exercise opportunities especially walking/biking trails, and provides a web site www.Livesmartswmo.org that includes maps of area trails, information on proper diet as well as other useful information.

OBESITY & PHYSICAL ACTIVITY
Obesity is one of the most serious health issues facing society today. In the past twenty years, the problem of obesity has grown so rapidly that it is considered a national epidemic. In Missouri, more than one in five adults are considered obese, and more than half of the adult population is considered overweight or obese, which can lead to obesity.

Being overweight or obese is a contributing factor in many chronic diseases including diabetes, heart disease, and high blood pressure. A healthy weight, active lifestyle, and balanced diet can directly impact and lower many risk factors related to chronic diseases.

Based on the 2007 Health and Preventative Practices Survey, 32.5% of Jasper County residents and 37.5% of Newton County residents are reported as overweight, with 27.8% and 28.7% (respectively) reported as obese. Residents of both counties also report less leisure-time physical activity and overall fair or poor general health status.
Access to Health Care Services

The number of people without health insurance has increased steadily since the beginning of the century, now totaling about 47 million Americans. Most Americans obtain health insurance coverage through their employers. With the cost of health insurance outpacing inflation and wage increases, more employers are opting out of the market. Family incomes have not kept pace with health care inflation making non-group coverage unaffordable for most low-income families. Medicaid and the State Children’s Health Insurance Program help to fill in the coverage gap for millions, especially children.


According to The Commonwealth Fund, in 2007, nearly two-thirds of U.S. adults, or an estimated 116 million people, struggled to pay medical bills, went without needed care because of cost, were uninsured for a time, or were underinsured (i.e., were insured but not adequately protected from high medical expenses).

(source: http://www.commonwealthfund.org/Content/Publications/Fund-Reports/2008/Aug/Losing-Ground--How-the-Loss-of-Adequate-Health-Insurance-Is-Burdening-Working-Families--8212-Finding.aspx) Missouri residents are not exempt from the struggle. The 2007 DHSS Health and Preventive Practice survey results indicate that 16.13% of Jasper County residents reported having no health care coverage along with 17.01% of Newton County residents. Along with this, 8.83% of Jasper residents and 6.95% of Newton residents indicated they did not get medical care when needed for reasons such as cost, lack of insurance, and lack of transportation.

Local Public Health Departments help to fill the health care gaps for many county residents by providing childhood immunizations free of charge to qualifying residents. Children with private insurance may seek care from their primary providers. The Jasper County Health Department also offers medical clinics that are available to clients with very limited income who are seeking assistance with prescriptions and basic medical care. Those receiving Medicare, Medicaid (Missouri Health Net), or private health insurance are not eligible for the clinic. The Joplin Health Department has a prescription assistance program to assist residents that attend the Joplin Community Clinic. Along with the local health departments, a significant number of uninsured and underinsured patients seek care at the Federally Qualified Health Center (FQHC) and the free clinic in Joplin as evidenced by the information below. A significant level of uncompensated care is provided by local hospitals and other medical providers for under or uninsured residents.

ACCESS FAMILY CARE (FQHC)

STATISTICS:
• 3,415 uninsured patients during last year
• 1,200 – 1,500 patient waiting list in dental clinic
• Top 3 diagnosis: diabetes, hypertension, anxiety/depression

COMMUNITY CLINIC OF JOPLIN (SERVICES UNDER/UNINSURED)

STATISTICS:
• 2,827 General Adult Medical visits
• 611 dental patient visits
• Top 5 diagnosis: diabetes, depression, hypertension, tooth ache, COPD
Infant & Child

HEALTH

Jasper and Newton County rates for Infants participating in WIC are consistently and significantly higher than state rates. Women, Infants and Children (WIC) is a special program which provides services such as health screenings, risk assessments, nutrition education and counseling, breastfeeding promotion and referrals to health care for pregnant women, new mothers, infants and children up to their 5th birthday based on nutritional risk and income eligibility. High WIC participation rates in Jasper and Newton Counties indicate a prevalence of low-income families in need of assistance. This is also indicated by the county rates for infants on Medicaid, which are also higher than state rates.

![Birth Defects per 10,000](chart)

While neither Jasper nor Newton County has a high rate of infant mortality, both counties have high rates of birth defects. The Jasper County rate is 673.5 and the Newton County rate is 722.3, as compared to the state rate of 591.1 (Per 10,000) during the 2001-2005 time period. While the state rate has remained fairly stable during the 1999-2006 time period, the rates of birth defects have increased dramatically for both Jasper and Newton Counties.

Information on birth defects in Missouri is maintained in a passive registry. The information comes from a merging of several different data sources including birth certificates, death certificates, newborn patient abstracts, pediatric inpatient and outpatient abstracts, and other state systems for children with special health care needs. A passive registry means that case finding is limited to reports provided to the MO DHSS and there is no verification of reported defects. It is probable that some cases are not reported, and that other cases are diagnosed after the first year of the infant’s life although diagnostic tests available during the first year of life has increased in the community and may increase the ability to detect defects that would not have been found until years later. It can also be assumed that the registry contains false-positive entries, which would include tentative diagnosis that were not later removed. Birth defects also result in intrauterine death, and those instances are not tracked on the Birth Defects registry. As a result, the Birth Defects registry has several limitations regarding data collection, making it difficult to truly know the extent of the problem in Missouri.

According to the March of Dimes, about 150,000 babies are born with birth defects each year in the United States. Birth defects are defined as abnormalities of structure, function, or body metabolism that are present at birth. These abnormalities lead to mental or physical disabilities or are fatal. There are more than 4,000 different known birth defects, ranging from minor to serious, and although many can be treated or cured, they’re the leading cause of death in the first year of life. (source: [http://kidshealth.org/parent/system/ill/birth_defects.html](http://kidshealth.org/parent/system/ill/birth_defects.html))
Along with birth defects, residents in Jasper and Newton Counties face concerns over lead exposure. The area was a leading source of lead production from the mid 1800s until the mid 1900s. Fine particles of processed or recycled lead/lead dust become a hazard when they are ingested or inhaled. Lead exposure of this sort can cause learning and behavioral problems, lower IQ levels, and interfere with growth and hearing. Children less than 72 months of age are at greatest risk and are the primary focus for blood lead testing. In 2007, there were a total of 3,575 children tested in Jasper and Newton Counties, with 35 children in Jasper County being followed for elevated blood lead levels and 9 children in Newton County being followed. The county rates were 1.4% for Jasper and 0.8% for Newton, as compared to the state rate of 1.5%.

Both counties also have high rates of injury related Emergency Room visits for children under age 15. Rates for visits related to other conditions are also higher. Children in Jasper and Newton counties are also more likely to be hospitalized for infections, mental disorders, respiratory and digestive conditions.

According to Kids Count Data, childhood death rates are higher in Jasper and Newton Counties than in Missouri for the 2005 and 2006 time periods. Newton County rates have been consistently higher than state rates since 2002. The majority of the deaths for those under age 15 were related to birth defects, SIDS, and other conditions related to early infancy.

### Child (ages 1-14) Death Rates (per 100,000)

<table>
<thead>
<tr>
<th>Year</th>
<th>Jasper County</th>
<th>Newton County</th>
<th>Missouri</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>20.6</td>
<td>39.8</td>
<td>24.8</td>
</tr>
<tr>
<td>2003</td>
<td>21.5</td>
<td>43.9</td>
<td>23.7</td>
</tr>
<tr>
<td>2004</td>
<td>18.4</td>
<td>34.3</td>
<td>23.2</td>
</tr>
<tr>
<td>2005</td>
<td>23.5</td>
<td>30.4</td>
<td>22.8</td>
</tr>
<tr>
<td>2006</td>
<td>25.9</td>
<td>26.1</td>
<td>20.3</td>
</tr>
</tbody>
</table>
Maternal Health

Safe motherhood begins before conception with proper nutrition and a healthy lifestyle and continues with appropriate prenatal care, the prevention of complications when possible, and the early and effective treatment of complications. The ideal result is a pregnancy at term without unnecessary interventions, the delivery of a healthy infant, and a healthy postpartum period in a positive environment that supports the physical and emotional needs of the woman, infant, and family. (source: http://www.cdc.gov/reproductivehealth/)

Inadequate prenatal care is an area of concern for expectant mothers in both Jasper and Newton Counties. The number of mothers receiving inadequate prenatal care in 2008 in Jasper County was 349, for a county rate of 19.5%. The number of mothers receiving inadequate prenatal care in Newton County during the same time period was 143, for a county rate of 20.1%. In comparison, the state rate for the stated time period was 11.9%. The county rates for mothers receiving late care, during the 2nd or 3rd trimesters, were also higher than state rates. The Jasper County rate was 18.8%, the Newton County rate was 19.6%, and the state rate was 13.4%.

Inadequate prenatal care is an area of concern for expectant mothers in both Jasper and Newton Counties. The number of mothers receiving inadequate prenatal care in 2008 in Jasper County was 349, for a county rate of 19.5%. The number of mothers receiving inadequate prenatal care in Newton County during the same time period was 143, for a county rate of 20.1%. In comparison, the state rate for the stated time period was 11.9%. The county rates for mothers receiving late care, during the 2nd or 3rd trimesters, were also higher than state rates. The Jasper County rate was 18.8%, the Newton County rate was 19.6%, and the state rate was 13.4%.

Jasper County teen pregnancy rates are higher than statewide rates, and have been increasing slightly since 2003. During the 2004 – 2008 time period in Jasper County, there were 361 births to mothers aged 15 to 17, for a county rate of 4.0% as compared to the state rate of 3.3%. There were also 909 births to mothers age 18 to 19, for a county rate of 10.0%, as compared to the state rate of 7.9%. Newton County teen pregnancy rates are also higher than statewide rates, with county rate of 4.0% and a total of 152 births to mothers aged 15 to 17, and 385 births to mothers aged 18 to 19 for a county rate of 10.0%.

Both counties have high rates of mothers with less than a high school education. Jasper County has a rate of 27.6% and Newton County has a rate of 24.4%, as compared to the state rate of 18.4%. State trends show a decrease in mothers with less than a high school education, however rates in Jasper and Newton Counties have been increasing.
Tobacco use kills nearly half a million Americans each year, with one in every six U.S. deaths the result of smoking. Smoking harms nearly every organ of the body, causing many diseases and compromising smokers’ health in general. Nicotine, a component of tobacco, is the primary reason that tobacco is addictive, although cigarette smoke contains many other dangerous chemicals, including tar, carbon monoxide, acetaldehyde, nitrosamines, and more.*

*National Institute on Drug Abuse (http://www.drugabuse.gov/ResearchReports/Nicotine/Nicotine.html)

Overall, smoking attributable deaths are decreasing in Missouri and in Newton County as well. An estimated 1,049 people in Newton County died from smoking related problems from 1998-2008, for a county rate of 161.3 (per 100,000) as compared to the state rate of 154.58. However, the rate of deaths in Jasper County was 182.4. While the Jasper County rate is lower than previous years, it still remains significantly higher than the state rate during the stated time period.

Smoking during pregnancy can harm both an expectant mother and her unborn baby. It increases the risk of preterm delivery and nearly doubles the risk of having a low-birthweight baby. (source: http://www.marchofdimes.com/professionals/14332_1171.asp) The Jasper County rate of mothers who smoked while pregnant was 21.6% in 2008, as compared to the state rate of 17.6%. The Newton County rate was also 21.6%. Rates for Jasper County have remained higher than state rates since 1991. The City of Joplin has an even greater rate of mothers that smoke during pregnancy, with data indicating a rate that is increasing as opposed to the declining state rate. The 1999 rate for Joplin was 22.5%, which has since increased to 29.5% in 2008.
There were 127 deaths in Jasper County during the 1998 – 2008 time period that were Alcohol/Drug Induced according to the Missouri Department of Health and Senior Services Leading Cause of death profile for a county rate of 10.9 (per 100,000) as compared to the state rate of 15.54. In Newton County, there were 59 alcohol/drug induced deaths for a county rate of 10.0. While the alcohol/drug induced death rate is not significant for either county, area hospitals are facing increasing numbers of hospitalizations that are considered alcohol related disorders. In Jasper County, there were 509 hospitalizations during 2008 for a county rate of 47.8 (per 10,000) as compared to the state rate of 9.34. The rate for Newton county for the same time period was 17.7. Both counties are showing a disturbing trend with significant increases in alcohol related hospitalizations over the past five years. Jasper County has increased from a rate of 6.5 in 1994-96 to 44.4 in 2006-08. For the same time periods, the rate for Newton County increased from 2.5 to 18.3. Rates for Missouri stayed nearly stable, with a slight decrease from 10.5 to 8.8 during the given time period.

Arrests for Driving Under the Influence (DUI) fluctuate from year to year, but average out to 1,291 per year during 2001 to 2008 in Jasper County and 330 per year for Newton County. Alcohol is reported to be a factor in an average of 4.5% of all Jasper County traffic accidents each year and 6.5% of Newton County accidents. While Jasper County rates have remained fairly consistent during the 2001 to 2008 time frame, Newton County rates have increased nearly 3% over the time period.

The Missouri State Highway Patrol statistics indicate a decreasing number of arrests due to narcotics during the 2001 – 2008 time period in Jasper County. Drug related arrests in Newton County increased slightly during the stated time period, from 212 arrests in 2001 to 287 arrests in 2008. The Missouri State Highway Patrol also reports Methamphetamine Lab incidents for both counties show overall decreases in the number of incidents investigated.
Mental Health

The mental health status of a county can be difficult to track, however there are some factors that can provide an indication of problems. Those factors include rates of suicide, self-inflicted injuries, alcohol and substance abuse, and domestic and family violence rates.

For Jasper County, rates of hospitalizations due to self-inflicted injuries were higher than state rates for the 1997 – 2007 time period. The rate for suicides for the 1997 – 2007 time period was 14.6 for Jasper County as compared to 12.7 for the state. While this is not a statistically significant difference, trending data shows a recent increase in suicide rates for Jasper County over the past few years. Joplin residents are also at greater risk for hospitalizations due to self-inflicted injuries. The Joplin rate for the 1997-2007 time period was 11.9. The suicide rate is also high for the City of Joplin at 16.7. The Newton County rate for hospitalizations due to self-inflicted injuries for the 1997-2007 time period was 6.2, and the rate for suicides was 12.0.

KidsCount data shows a historical increase in the number of children receiving public SED (serious emotional disturbance) mental health services. In Jasper County in 2001, there were 921 children receiving services. The number jumped to 1,525 by 2005, for an increase of 65.6%. In Newton County, the percentage of increase was even greater, at 75.6% with a total of 511 children receiving services in 2005. However, the numbers plummeted in 2006 for both counties due to drastic cuts in the state budget that removed about 90,000 Missourians from the Medicaid system.

Single-parent families are very common in today's world. A single parent is a parent with one or more children, who is not living with any of the children's other parents. The percentage of children who live with two parents has been declining among all racial and ethnic groups throughout the years. There are many statistics out there regarding this fast growing family phenomenon. In the United States, 22 million children go home to one parent, and 83 percent of those parents are moms. [source: http://www.associatedcontent.com/article/297615/single_parent_households_how_does_it_pg2.html?cat=25] There has been a significant increase in single parent families in Missouri since 1990, and the increase is reflected in Jasper and Newton Counties as well with increases of up to 14% as evidenced in the chart.

<table>
<thead>
<tr>
<th>Year</th>
<th>Jasper County</th>
<th>Newton County</th>
<th>Missouri</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>19.3%</td>
<td>14.4%</td>
<td>19.5%</td>
</tr>
<tr>
<td>2000</td>
<td>24.5%</td>
<td>19.5%</td>
<td>24.3%</td>
</tr>
<tr>
<td>2007</td>
<td>32.9%</td>
<td>28.8%</td>
<td>31.2%</td>
</tr>
</tbody>
</table>
Communicable Disease

Local health agencies have the responsibility of protecting the public by controlling the spread of communicable diseases in the community. This goal is achieved through conducting tracking (surveillance) and investigations on all the reportable communicable diseases and conditions in the community. There are over 100 reportable disease and conditions in Missouri.

Local public health agencies conduct disease investigations as they are reported in the community. This involves collecting information from several sources about the disease or condition and using that information to establish the extent of the disease or condition and implementing the appropriate prevention. Disease investigations can range from a single case to community-wide outbreaks.

In Jasper and Newton Counties, and in the City of Joplin, there are several elevated levels and disease outbreaks that have been detected to include: E. coli Shiga toxin (Jasper County, 2008); Varicella (chicken pox) (Jasper County, 2006); Pertussis (Jasper and Newton Counties, 2006); and Neuro-invasive West Nile Virus (Joplin, 2007). Other conditions that were considered to be elevated between 2006 and 2008 were Chlamydia, animal bites, and chronic Hepatitis C.

Recently, health care systems provided an organized response to the H1N1 flu outbreak by sponsoring vaccination clinics, providing public information, and tracking reported cases. Health departments in the Counties of Jasper and Newton and the City of Joplin are addressing the potential risk to our food by offering Food Safety Programs. There is an ever-changing inventory of facilities that are inspected regularly. Inspection frequency is determined by a priority assessment formula applied to each food service facility.

Facilities are inspected one to three times per year, depending on the level of priority. The 1999 Food and Drug Administration Model Food Code is used as the basis for the ordinances in Joplin and Jasper, and the program in Newton. Food Safety Training is also an important element of the programs, as employees and management are trained to “keep it safe” with safe food processing, good hygiene, and clean facilities.
DOMESTIC VIOLENCE
Domestic violence is a pattern of assaultive and coercive behaviors that abusers use to control their intimate partners. In addition to the very real threat of harm or death to themselves or their children, victims must contend with the accompanying financial and emotional hardships. They often must cope with cultural and religious values that emphasize keeping families intact, regardless of abuse. Social service and justice systems don’t always provide adequate safety and support, leaving victims with further feelings of insecurity and instability.

The Missouri State Highway Patrol (MSHP) records the number of incidents related to domestic violence reports. As evidenced in the graph, the MSHP rates of reported domestic violence have increased in Jasper County since 2003 and have decreased in Newton County since 2004. The Missouri Department of Health and Senior Services Assault Injury Profile indicates there were a total of 48 Emergency Room visits in Newton County and 117 Emergency Room visits in Jasper County that were classified as Spouse-Partner Abuse during the 1997 – 2007 time frame.

CHILD ABUSE
Every day, across the country, the very people children rely on for protection and comfort subject them to abuse or neglect. Children in our own community face these same risks. In Missouri, there are over 60,000 children involved in the child protection system each year. Approximately 10,000 of those children are confirmed as abused or neglected.

Rates of child abuse and neglect have declined overall in Missouri and in Jasper County, however Newton County rates have been increasing since 2005, as evidenced in the graph. The Missouri Department of Health and Senior Services Assault Injury Profile indicates that child abuse related deaths and hospitalization rates for both Jasper and Newton Counties are slightly higher than state rates for the 1997-2007 time period.
Currently there are no solid waste landfills operating in Jasper or Newton Counties. Solid waste generated in the two-county area is disposed of in landfills in Barton County or Kansas. All residents of Jasper and Newton Counties have access to solid waste disposal services.

Several communities in the two-county area operate recycling programs including Carthage, Carterville, Joplin and Webb City in Jasper County; and Granby, Seneca and Neosho in Newton County. Many other individual businesses and office environments participate in individualized recycling programs.

The Region M Solid Waste Management District helps to coordinate waste disposal and recycling efforts in the area. The group facilitates the application for, and dispersal of, various grants that help local governments, businesses and other entities operate solid waste disposal, recycling and litter control programs.

Illegal dumping or littering continues to be an issue. Several communities operate nuisance control programs, including litter control efforts. In response to growing litter problems on rural roadways, Newton and Jasper Counties operate a litter control program. The City of Joplin Code Enforcement also operates a litter control program utilizing community service workers.

As of January 2006, the Joplin Recycling Center Household Hazardous Waste (HHW) Satellite Facility accepts (limited) HHW during regular operational hours. It is free to residents of McDonald, Newton, Jasper, Barton and Vernon Counties. For HHW that is not accepted, such as paint and motor oil, instructions and free supplies are given to residents so they can properly dispose of various items.

Waste disposal issues that are receiving more attention in recent years are those associated with the proper disposal of old electronic waste (e.g. televisions, computer monitors, etc.) and the disposal of unused prescription, over-the-counter, and illegal (seized in police actions) drugs. It is anticipated that in the near future electronic waste will be banned from disposal in local landfills thus providing a new challenge for disposal. While still legal for residents to dispose of unused prescription or over-the-counter drugs in landfills or by flushing into sewer systems, these disposal methods are becoming less accepted nationwide as more information becomes available about levels of these drugs ending up in streams, rivers and groundwater sources.
Air Quality

While air quality in the two-county area is generally still considered to be good, several issues related to air quality continue to evolve and warrant increased attention.

Ozone:
The quality of outdoor air is monitored in Missouri by the Department of Natural Resources (DNR) for compliance with the National Ambient Air Quality Standards that set limits for seven air pollutants that have documented effects on public health. Ozone is one of these seven pollutants. Among other health effects, breathing ozone can worsen bronchitis, emphysema and asthma and reduce lung function.

In March of 2008 the Environmental Protection Agency (EPA) finalized a new ground level ozone standard of 75 parts per billion (ppb). Based on air quality monitoring conducted in several locations in Southwest Missouri some counties in the region were found to be in violation or "non-attainment" for this new standard. The Missouri Department of Natural Resources was required by EPA to review the data to determine which counties might be considered "non-attainment." This review was completed by MDNR in September of 2008 and recommendations were sent to EPA for their approval. In their report, MDNR recommended that the Joplin Metropolitan Area (Jasper and Newton Counties) should be considered in compliance or in attainment with the ozone standard at this time but also indicated that there is evidence that ozone levels could be a problem in the future. In response to this, 2 new ozone monitors have been placed in Jasper County by MDNR to more closely monitor ozone levels and provide better data for future decisions. More recently, in early 2010 EPA has proposed strengthening even further the ozone standards for the nation. What this may mean for local ozone standard attainment remains to be seen.

Based on these activities, and the concern raised by them the Ozark Clean Air Alliance (OCAA) formed in 2007 in the Springfield area. The group represents approximately 40 organizations from Southwest Missouri including businesses, government, and individuals. The OCAA developed a Clean Air Action Plan (CAAP) in 2008 with the goals of voluntarily and proactively improving air quality in Southwest Missouri. Representation from the Joplin area has been solicited from this group and several entities have become active in this organization.

Odor:
Odor issues in the two-county area continue to occur and receive attention from the public with some frequency. Complaints are largely linked to concentrated animal feeding operations (CAFOs) and specific local manufacturing industries. Southwest Missouri, including Jasper and Newton counties, has one of the highest concentrations of CAFO’s in the entire state, mainly poultry operations.

Other Issues:
Additional information on reportable chemical releases to the environment is gathered by the Environmental Protection Agency and MDNR and is compiled in the Toxic Release Inventory (TRI). This report indicates the total amount of atmospheric releases in the area, but is not necessarily an indication of adverse effects on human health or the environment. The TRI data is available through the EPA at http://www.epa.gov/tri/ or DNR at http://www.dnr.mo.gov/env/tri/index.htm. Additional information can be found on the EPA’s Envirofacts website: http://www.epa.gov/enviro/index.html. According to Envirofacts, Jasper County currently has 25 registered facilities that produce and release air pollutants and Newton County has 21 registered facilities.
Environment

WATER QUALITY
Increasing populations in Jasper and Newton counties continue to increase the demand for drinking water and other domestic and industrial water needs. Historical environmental problems and the increasing population continue to contribute to environmental concerns over contaminated ground water and surface water.

Drinking Water
A study conducted by Missouri American Water Company revealed that drinking water supplies could be depleted in some areas of the two county region as soon as 2015. Current studies conducted by the U.S. Geological Survey indicate that areas of the Ozark Aquifer continue to decline and deep wells are not likely to be a long term solution for drinking water supplies. The Tri-State Water Resource Coalition was formed and began feasibility studies to locate potential future sources of drinking water. Current potential options being considered include water allocations from area lakes such as Grand Lake O’ The Cherokees, Stockton, Table Rock, Beaver and others, construction of small water supply reservoirs in the region, and implementation of water conservation practices.

Ground Water Contamination
Jasper and Newton Counties are part of the Tri-State Mining District, historically known for lead mining. Although lead mining in the area ceased many years ago, the environmental impacts of lead, cadmium, and zinc (heavy metals) persist today. Much progress has been made by local health departments, the Missouri Department of Natural Resources, and the Environmental Protection Agency (EPA) in reducing hazards to the public and in environmental clean-up. Most residential properties in both counties have been remediated to reduce heavy metals in soil to a safe level based on current EPA standards. The EPA is in the process of cleaning up the old mining areas in Jasper County and plans to initiate clean-up activities in Newton County in 2010. Many rural water wells are contaminated from the mining activity. As a result, EPA and Missouri American Water Company have provided public water supplies to most of these areas. The remaining areas are slated to have new deep water wells provided by the EPA and should be completed in the near future.

Newton County also has two EPA superfund sites from Trichloroethylene (TCE) contaminated groundwater. The Newton County Wells site near Joplin has been remediated and all affected residents are now on public water supplies. The Pools Prairie Site near Neosho is still undergoing remediation, but all affected residents are on public water supplies.
### Impaired Waters List

(From MDNR Proposed 2010 Missouri 303(d) List)

<table>
<thead>
<tr>
<th>Waterbody Name</th>
<th>Pollutant(s)</th>
<th>Source</th>
<th>U/D County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blackberry Cr.</td>
<td>Chloride, Sulfate Chloride</td>
<td>Asbury PP</td>
<td>Jasper</td>
</tr>
<tr>
<td>Center Cr.</td>
<td>Cadmium, Lead, Zinc, Bacteria</td>
<td>Mill Tailings (Aban.), Rural NPS</td>
<td>Jasper</td>
</tr>
<tr>
<td>Center Cr.</td>
<td>Bacteria</td>
<td>Rural NPS</td>
<td>Jasper/Newton</td>
</tr>
<tr>
<td>Clear Cr.</td>
<td>Bacteria</td>
<td>Rural NPS</td>
<td>Newton</td>
</tr>
<tr>
<td>Clear Cr.</td>
<td>Nutrients, Low D.O.</td>
<td>Monett WWTP</td>
<td>Newton</td>
</tr>
<tr>
<td>Dry Branch</td>
<td>Bacteria</td>
<td>Rural NPS</td>
<td>Jasper</td>
</tr>
<tr>
<td>Hickory Cr.</td>
<td>Bacteria</td>
<td>Rural NPS</td>
<td>Newton</td>
</tr>
<tr>
<td>Indian Cr.</td>
<td>Bacteria</td>
<td>Rural NPS</td>
<td>Newton</td>
</tr>
<tr>
<td>Little Lost Cr.</td>
<td>Bacteria</td>
<td>Rural NPS</td>
<td>Newton</td>
</tr>
<tr>
<td>Lone Elm Hollow</td>
<td>Metals</td>
<td>Mill Tailings (Aban.)</td>
<td>Jasper</td>
</tr>
<tr>
<td>Lost Cr.</td>
<td>Bacteria</td>
<td>Rural NPS</td>
<td>Newton</td>
</tr>
<tr>
<td>Middle Indian Cr.</td>
<td>Bacteria</td>
<td>Rural NPS</td>
<td>Newton</td>
</tr>
<tr>
<td>North Fk. Spring R.</td>
<td>Low D.O., Bacteria</td>
<td>Lamar WWTP, Rural NPS</td>
<td>Jasper</td>
</tr>
<tr>
<td>North Indian Cr.</td>
<td>Bacteria</td>
<td>Rural NPS</td>
<td>Newton</td>
</tr>
<tr>
<td>Shoal Cr.</td>
<td>Bacteria</td>
<td>Rural NPS</td>
<td>Newton</td>
</tr>
<tr>
<td>South Indian Cr.</td>
<td>Bacteria</td>
<td>Rural NPS</td>
<td>Newton</td>
</tr>
<tr>
<td>Spring River</td>
<td>Bacteria</td>
<td>Rural NPS</td>
<td>Jasper</td>
</tr>
<tr>
<td>Turkey Cr.</td>
<td>Cadmium, Lead, Zinc, Bacteria</td>
<td>Mill Tailings (Aban.), Rural NPS</td>
<td>Jasper</td>
</tr>
<tr>
<td>Willow Br.</td>
<td>Bacteria</td>
<td>Rural NPS</td>
<td>Newton</td>
</tr>
</tbody>
</table>

**Watersheds and Surface Water Contamination**

Many of the creeks and streams in Jasper and Newton County are currently listed (2008 list) or proposed for the 2010 EPA 303(d) list for impaired waters. A complete listing may be found on the Missouri Department of Natural Resources (MDNR) web site at [http://www.dnr.mo.gov/env/wpp/waterquality/303d.htm](http://www.dnr.mo.gov/env/wpp/waterquality/303d.htm). The reasons for impairment are many, including but not limited to nutrients, sedimentation, bacteriological contamination (*E. coli*), low dissolved oxygen, and heavy metals. The sources of contamination include old mining waste, agriculture, livestock, septic systems, wildlife, wastewater treatment plants, and public use of local waterways. Many watershed groups have been formed to help address these issues. The Elk River Watershed Improvement Association (ERWIA) and Shoal Creek Watershed Improvement Group (SCWIG) on upper Shoal Creek were formed several years ago. More recently the Shoal Creek Watershed Partnership (SCWP) on lower Shoal Creek and the Spring River Watershed Partnership were formed to continue efforts to improve water quality on area watersheds.
Community Health Collaborative Partners 2010

Access Family Care
Alliance of Southwest Missouri
American Cancer Society
Clean Air Project
Community Residents
Community Clinic of Joplin
Dogwood Trailblazers
Freeman Health System
Freeman Southwest YMCA
Jasper County Family Support Division
Joplin Family YMCA
Joplin Parks and Recreation
Joplin School District
Joplin Roadrunners
Living Well Smoothies
Local Health Departments (Joplin City, Jasper and Newton Counties)
Missouri Department of Health and Senior Services
Missouri Southern State University
Neosho School District
Ozark Center
St. John’s Regional Medical Center
United Way of Southwest Missouri
Wildcat Glades Audubon Center
Planning for and responding to emergencies affecting community health continues to be an important function of local officials in the medical community. Most recently, planning efforts for dealing with pandemic flu events were tested during the 2009-2010 H1N1 Pandemic Flu outbreak. Planning and response activities for community-wide public health emergencies continue to be centered in the Medical Subcommittee of the Joplin/Jasper County Local Emergency Planning Committee. The subcommittee includes representatives from local and state government, Emergency Management, health departments, hospitals, EMS, American Red Cross, the local Federally Qualified Health Center (FQHC), and others. Some of the emergency plans and improvement projects that have received attention most recently include:

- Animal Emergency Response Plan-Animal Sheltering Plan
- Mass Care Sheltering Plan (including a plan for dealing with persons with Special Needs)
- Public Health Training Plan
- Complete update of the Local Public Health Emergency Plan (LPHEP) (including a complete update to the Strategic National Stockpile [SNS plan])
- Update of Annex-M (the Health & Medical Annex) to the County Emergency Plan (including a Mass Fatality-Emergency Mortuary Standard Operating Guide [SOG])

Data SOURCES

U.S. Census Bureau  
U.S. Bureau of Labor Statistics  
Missouri Department of Economic Development  
Missouri Department of Elementary and Secondary Education  
Missouri Department of Health and Senior Services  
Missouri State Highway Patrol  
Missouri Department of Mental Health  
Missouri Department of Social Services  
Kids Count  
Missouri Department of Natural Resources  
American Heart Association  
Centers for Disease Control  
American Stroke Association  
American Cancer Society  
Access Family Care (FQHC)  
Community Clinic of Joplin  
March of Dimes  
Jasper County Health Department  
Newton County Health Department  
City of Joplin Health Department