



**Stoddard County
Public Health Center
2011 Community Needs Assessment**

Stoddard County Public Health Center mission statement:

“Stoddard County Public Health Center, working side by side with its residents, will protect the health and promote the wellness of its citizens by assessing and strengthening the public health care system through the coordination and delivery of services, education, and resources.”

The Stoddard County Public Health Center is a key partner in increasing the independence of our communities' most vulnerable populations by educating, providing preventative services, and working to ensure a safe and healthy environment.

The purpose of this report is to use data collected by federal, state, and local entities to paint a clear picture of the public health needs of Stoddard County. This data will help to bridge the gap between perceived and concrete needs in the county so that the SCPHC and community stakeholders can make informed decisions regarding the priorities of the SCPHC.

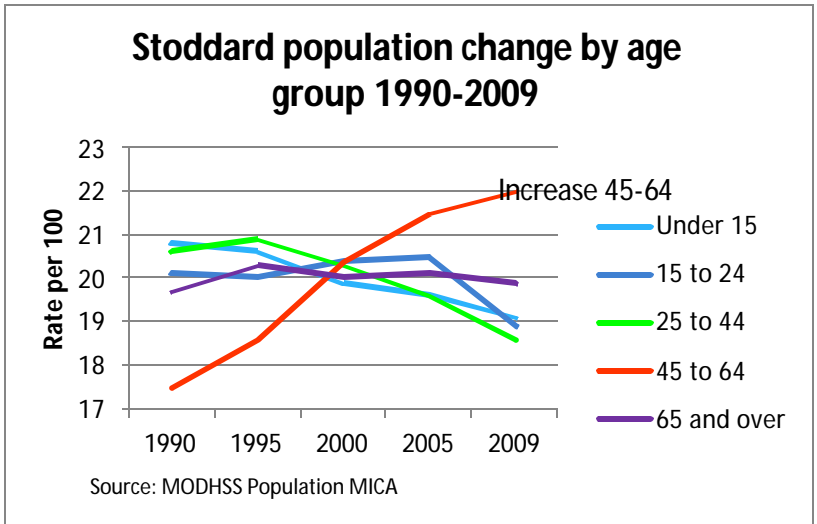
The report reveals the most current data regarding key health indicators. Comparisons between county indicators and state indicators; county indicators and the Bootheel region indicators; and year to year comparisons for Stoddard County illuminate successes and challenges in public health. For many health indicators, Stoddard County tends to fare better than the Bootheel as a whole, but poorer than the state as a whole. When this pattern is broken and indicators suggest that Stoddard is faring worse than the region and the state, this health determinant may be viewed with particular importance. On the other hand, for some health determinants, indicators may show that Stoddard's rate is similar or slightly better than the state rate, but when compared to the U.S. as a whole, or when the U.S. is compared to other industrialized nations, reveal that the issue area should remain a priority as Missouri or the U.S. is underperforming in this area.

Demographics

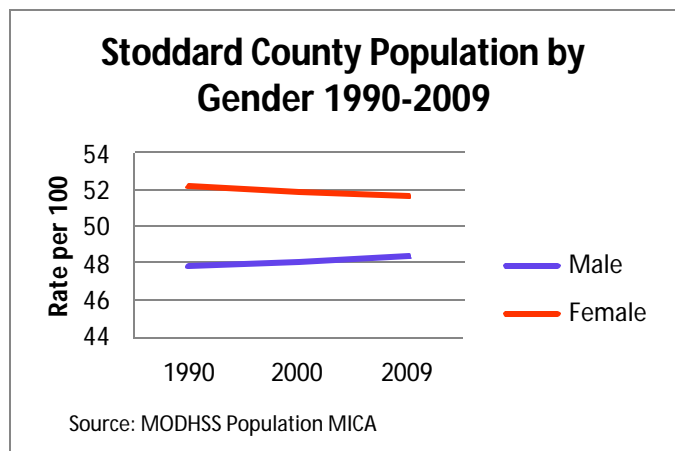
Stoddard County is a rural, Southeast Missouri county, one of the six Missouri counties that comprise the region known as the Missouri Bootheel. In 2010 Stoddard’s population was an estimated 29,968 (US Census Bureau, 2010), an increase of 0.9% since 2000. Missouri’s population increased by 7% in the same time frame. The population density in 2010 was 36 people per square mile compared with 81 for the state (Census Bureau quick facts). Nearly half of Stoddard’s population (49.2%) live outside of a town (OSEDA, 2009).

Age

Stoddard’s elderly population is higher than the state’s: 17.6% compared to 13.7%. However the percentage of minors is similar to the state average: 23.2% compared to 23.9%. (Census Bureau Quick facts, 2009). The county’s population has decreased for the 44 and under population during the past 20 years, while increasing in the 45 to 64 age group. This is



consistent with national trends as “Baby Boomers” age. However, the decrease in the youthful end of the spectrum may also reflect national and state trends of “brain drain”: students who move away for college and don’t return.



Gender

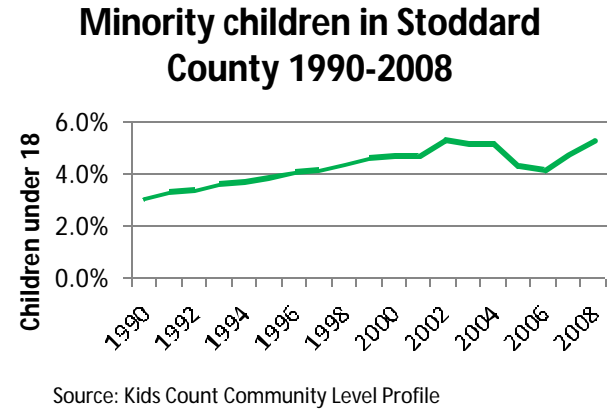
Since 1990, Stoddard County has shown a decrease in the female population and an increase in the male population. This is consistent with state and regional trends. Stoddard’s 2009 male population was 48.4% compared to Missouri’s 48.9%, while Stoddard’s female population was 51.6% compared to Missouri’s 51.1%. (MODHSS Population MICA)

Diversity

Although the numbers of all minority groups in Stoddard County are small, these groups are still of special interest to public health as they are vulnerable populations and can experience increased health

disparities in areas where their numbers are small. While the population is overwhelmingly white (96.5%), Stoddard is home to a small, but growing minority population. From 1990 to 2008 the population of minority children increased from 3.1% to 5.3%. The Health Center has experienced an increase in clients of other ethnicities. In addition to racial and ethnic minorities, a Mennonite community resides in Stoddard County.

Stoddard County Race and Ethnicity 2010 by percentage	
White	96.5%
African American	0.9%
Native American	0.4%
Asian	0.2%
Multiracial	1%
Hispanic	1.2%



Households

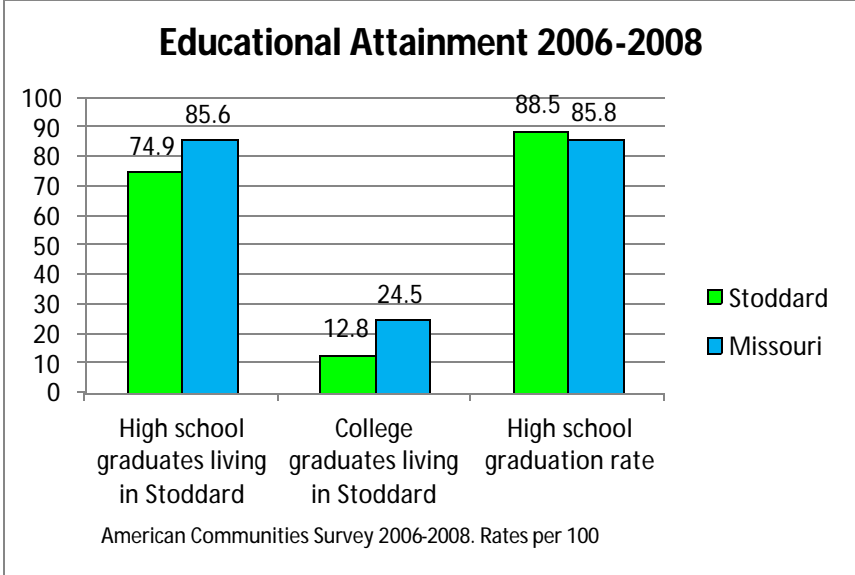
According to the American Communities Survey 2006-2008, Stoddard County has an estimated 12,141 households. As compared to the state of Missouri, Stoddard County has a similar percentage of families living with children, but has more single fathers and fewer single mothers.

	Stoddard	Missouri
Families with Children	30.3%	30.2%
Single Mothers with Children	5.2%	7.3%
Single Fathers with Children	4.7%	2.2%

Source: American Communities Survey 2006-2008

Education

Educational attainment is an important health determinant that is positively associated with better health outcomes. Stoddard County’s high school graduation rate of 88.5% is higher than the state average of 85.8%. However, the percentages of high school and college graduates living in Stoddard County are below the state average. (American Community Survey 2006-2008). This likely reflects the tendency of university educated persons to relocate to metropolitan areas or larger towns. (OSED).

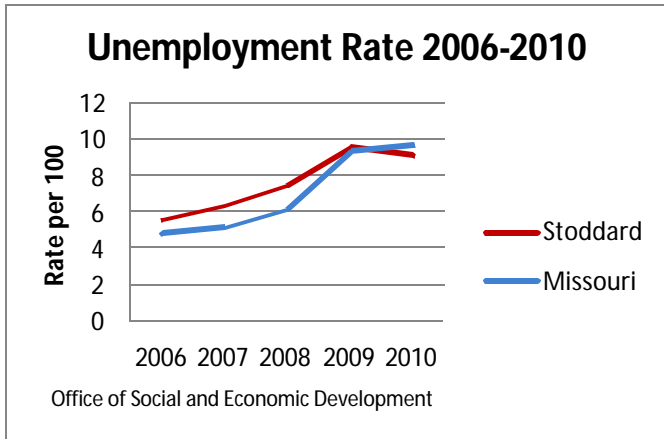


Functional Need Populations

Missouri’s Office of Social and Economic Development shows that a high proportion of disabled persons live in Stoddard County, as compared to the state, even after adjusting for age. A disability can include physical, mental and emotional impairments. Functional needs populations present challenges in meeting the health needs of this population, especially in regard to transportation, communication, and accessibility.

Disabled Population 2000	Number	Stoddard	Missouri
Office of Social and Economic Development			
Disabled Persons Over 5 Years of Age	6,978	25.2%	19.0%
Disabled Persons Over 65 Years of Age	2,520	52.2%	42.6%
Persons 16-64 with work disability	2,490	13.5%	10.8%

Stoddard County is home to Mingo Job Corp, a technical career training program for disadvantaged youths ages 16 to 24. The program is located in the Mingo Wildlife Refuge and the average enrollment is 225 students, most from Missouri and Illinois. As with other populations, economic disadvantages can be related to negative health outcomes.



Stoddard County also hosts the regional juvenile detention center which houses juveniles from Stoddard and neighboring counties. The maximum capacity of the center is 22. These children represent a high-risk population.

Employment characteristics

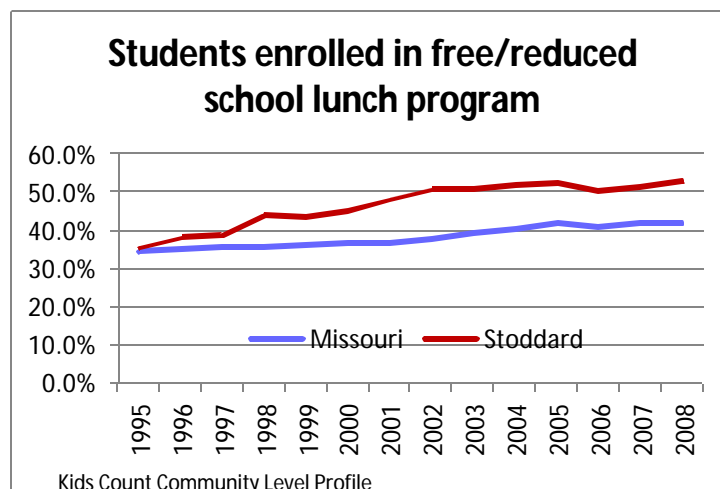
Stoddard’s unemployment rate has been typically higher than Missouri’s rate, but in 2010, this trend reversed, with Stoddard’s rate reaching 9.1% while Missouri’s exceeded it to reach 9.6%. Of the county’s top three employment categories 22.2% work in educational, healthcare, and social services; 20.3% in manufacturing; and 13.1% retail trade. The median household income from 2006 to 2008 was \$35,733, compared to \$46,408 for the state.

In 2000 29.5% of Stoddard County workers commuted to a workplace outside of Stoddard County. The average commute for Stoddard County residents was 21.5 minutes, compared to a state-wide average of 23.1 minutes (Office of Social and Economic Development).

Poverty

Poverty is an important health indicator as those with fewer resources have lower access to preventative health care, healthy food sources, and safe neighborhoods to play and exercise. Stoddard County has a higher rate of persons living in poverty than the state of Missouri. The difference between the county and state rate is especially pronounced in the youth and elderly populations.

Poverty Rates 2006-2008		
Office of Social and Economic Development	Stoddard	Missouri
Individuals in Poverty	18.5%	13.3%
Children in Poverty	23.8%	18.3%
Elderly in Poverty	15.8%	9.6%



Access to Care and Coverage

As a rural, low-income county with a high proportion of elderly and disabled, access to care and transportation can be a challenge. Stoddard County is considered a medically underserved area. Although the most current physician to population ratio of 1336:1 for primary care providers is an improvement, there are still some services that are not offered anywhere in the county (RWJ County Health Rankings). Stoddard County has one hospital, Missouri Southern Healthcare which offers a wide range of services. However, residents must travel outside the county to give birth in a hospital or to have a broken bone set. To offset problems of access, Stoddard County is home to two Federally Qualified Healthcare Centers: Cross Trails Medical Center in Advance, and SEMO Health Network in Bernie. These facilities offer services on a sliding fee scale; however, access is not always guaranteed. In order to increase access to preventative services, Stoddard County Public Health Center operates outreach clinics in addition to the main office in Bloomfield. Outreach clinics operate one day per month in Bernie and Puxico and half a day monthly in Advance and Bell City. A WIC program representative and public health nurse are available to perform services offered at the health center. Outreach programs in the communities offer many of the same services as the Bloomfield location.

Transportation

Distance from health care providers is a challenge in rural areas. Although most Stoddard County households do have a vehicle, 732 households, or 6% of the population do not, making access to healthcare a further challenge (2005-2009 ACS). High fuel costs make it increasingly expensive for low-income car owners to drive to health care facilities. Stoddard County's high proportion of elderly and disabled often have limited driving capability combined with an increased need for services.

Stoddard County Transit works to fill the transportation gap in Stoddard County. Medicaid supplements the cost for public transportation, however, Medicare does not. Stoddard County Transit provides transportation inside several of the towns in Stoddard and attempts to coordinate one round trip per week from smaller towns to Dexter. However, the trip is subject to postponement to the following week if fewer than five people are available to ride. An exception may be made if one of the riders has a doctor's appointment. The Transit System also travels once a month to Sikeston, Poplar Bluff, and Cape Girardeau when riders need to access providers outside the county.

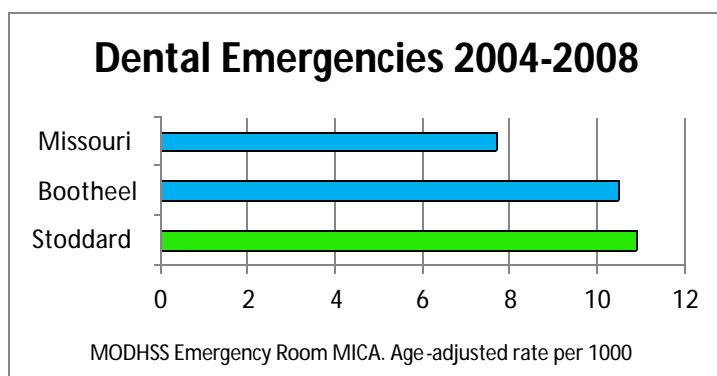
Coverage

One out of five (20%) Stoddard County residents, are uninsured compared to 15.3% for the state (MODHSS Health and Preventive Practices 2007 Profile). Nearly one quarter (23.3%) of Stoddard's under 65 population receive Medicaid benefits compared to 15.2% for the state (MODHSS Medicaid Participation Profile). The Kaiser Foundation Commission on Medicaid and the Uninsured estimated that in 2009 61% of the uninsured belonged to working families. Since unemployment has been rising and health insurance is often affordable to families only through employers, healthcare coverage has decreased. The national Affordable Care Act, passed in 2010, is designed to increase health care

coverage. Though some of the Act's provisions have already been enacted, such as mandating that insurance companies cover children on their parents' policies up to age 26, the bulk of the program will be enacted in 2014. Coverage will be increased primarily by creating health insurance pools to lower the cost of coverage and supplementing the cost of insurance for those who are not covered through another source and earn less than 400% of the poverty level. The Act will additionally assess a charge to those who do not purchase insurance, beginning with \$95 in 2014 (Kaiser Foundation). However, in the 2010 primary election, Missouri voters chose to exempt Missourians from mandated insurance coverage, so court proceedings may delay the initiation of the increased healthcare coverage.

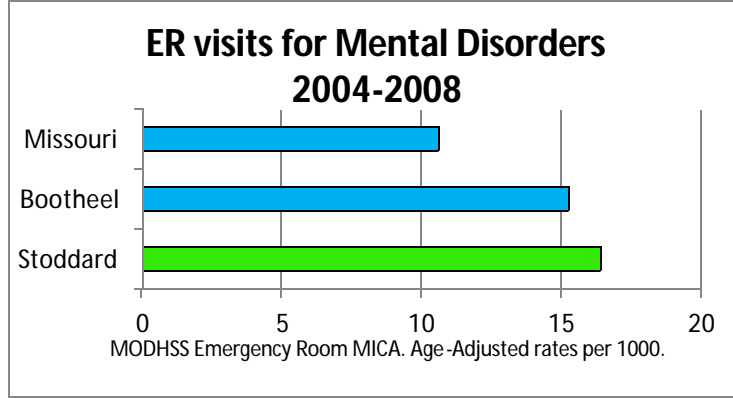
Oral health

Oral hygiene is important to overall health. Pain from dental problems can decrease overall functioning. Missouri is experiencing a shortage of dentists (Missouri Foundation for Health) and Stoddard County is in the midst of several dentists retiring. It has been especially difficult to find dentists who accept Medicaid or can provide services on a sliding fee scale for low-income patients. Currently Cross Trails Medical Center in Advance has a dentist on staff, but cuts to the Medicaid dental program have made it difficult to continue services. Southeast Hospital has partnered with local dentists to provide dental services in a mobile unit on Fridays, plus one Saturday every other month to low-income clients. The rate of emergency room visits for dental complaints in Stoddard County reflects a lack of access in Stoddard, with the rate in Stoddard exceeding that of the state and region. Women ages 15 to 44 account for the greatest proportion of dental related E.R. visits (MODHSS Emergency Room MICA).



Mental health

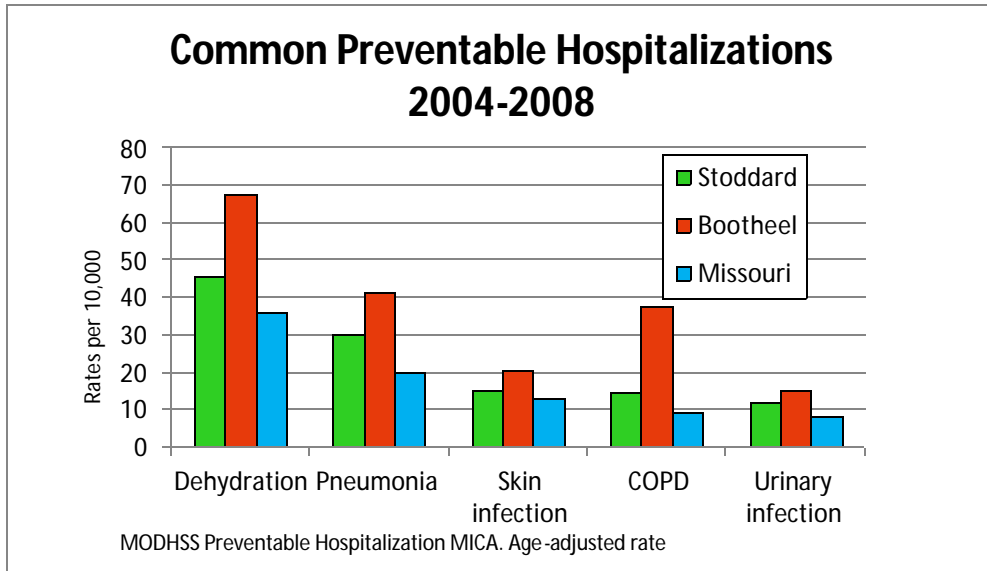
From 2004 to 2008, Stoddard County's rate of emergency room visits for mental disorders was higher than the regional and state rates. The rates were highest for women age 25 to 44. Stoddard's high rate for mental health related ER visits suggests a need for increased access to mental health care in the county. A branch office of the Bootheel Counseling Center is located in Bloomfield. The Health Center accepts Medicare and Medicaid and has access to grants to help fund those who cannot afford to pay. Currently there is no psychiatrist operating in Stoddard County and Southeast Missouri is experiencing a shortage of psychiatric services. Although drug and alcohol counseling are available in Stoddard County, there is no inpatient substance abuse treatment facility located in Stoddard County.



Preventable Hospitalization

A good indicator as to whether a county has sufficient access to care is the number of preventable hospitalizations. From 2006-2008 Stoddard County's preventable hospitalization rate was 25% higher than Missouri's. Stoddard experienced a general decline in preventable hospitalizations from the early to the late 1990's, but has seen a general increasing trend since the late 90's, especially by Medicare patients. From 2001 to 2008 preventable hospitalizations in Medicare patients rose 60%.

Each of Stoddard County's 5 most common causes of preventable hospitalization occur at a higher rate



than the state and a lower rate than the Bootheel. Children under age 15 were the most likely to be hospitalized for dehydration, likely due to vomiting or diarrhea. Women age 45 to 64 were most likely to be hospitalized for bacterial pneumonia and

men age 25 to 44 were most likely to be hospitalized for skin infections. For COPD, preventable hospitalizations were most likely to be experienced by women age 45 to 64. Preventable kidney and urinary tract infections were most likely to result in hospitalization for girls under age 15.

Chronic Diseases

According to the Robert Woods Johnson Foundation County Health Rankings, Stoddard County suffers from poorer general health than the state as a whole. In 2008, 21% of Stoddard County residents reported having “poor or fair” health. Chronic diseases, such as COPD contribute to the amount of poor health days experienced by Stoddard County residents.

During the 5 year period from 2005-2009, Stoddard county saw cancer emerge as the leading cause of death, while the previous leader, heart disease fell to second. This is partially consistent with state trends, as heart disease in Missouri has been decreasing faster than cancer; however, the state has not seen a reversal, as has Stoddard County. Stoddard’s cancer rate is 21% higher than the state’s rate. The county’s high smoking rate likely contributes to the high rate of cancer, but other environmental health hazards, such as exposure to chemicals used in agriculture or manufacturing may be responsible. Further study is warranted. Regarding the second leading cause of death, Stoddard’s heart disease rate is actually 10% lower than the state’s rate. (MODHSS Death MICA).

Leading Cause of Death 2005-2009

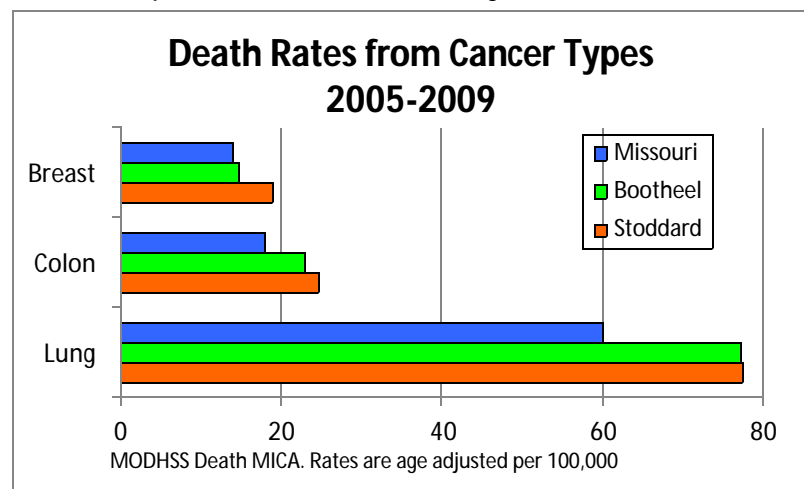
Disease	Number	Stoddard rate	Missouri rate
Cancer	454	230.7	191
Heart disease	406	195.7	216.3
Chronic lower respiratory diseases	199	101.5	50.1
Stroke	115	54.5	48.2
Alzheimer's disease	84	36.3	25.4
Pneumonia and influenza	46	21.4	20.7
Kidney disease	45	20.5	17.9

*Rates are per 100,000 and age adjusted. Source: Death MICA

Cancer

Stoddard’s three most common forms of cancer, consistent with the state of Missouri, are lung, colon, and breast cancer. Stoddard’s 2005-2009 cancer rate is 21% higher than the state’s. The difference between the leading forms of cancer is even more pronounced. Stoddard’s lung cancer rate exceeds the state’s by 29.2%, colon cancer by 38.2%, and breast cancer by 38.2%.

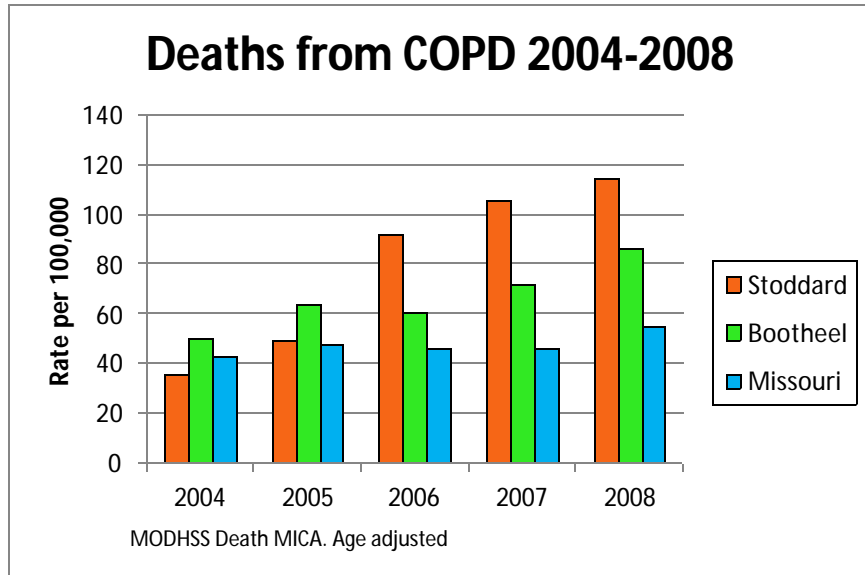
According to the 2007 County Level Study, Stoddard County’s rate of women over 40 who have never had a mammogram was 18%. This is twice as high as the state rate. However Stoddard County fared slightly better than the state when

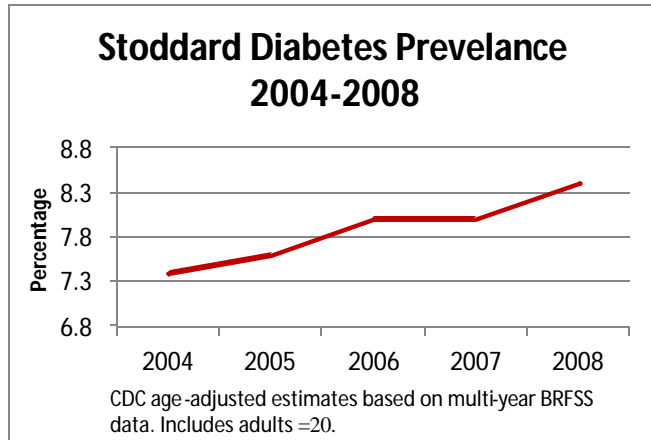


compared for men and women who have taken a blood-stool test, a method used to screen for colon cancer (MODHSS County Level Study 2007 Profile).

COPD

COPD, or chronic obstructive pulmonary disease, is a common lung disease that makes breathing difficult. The leading cause of COPD is smoking (Pubmed Health). Deaths from COPD in Stoddard County increased dramatically from 2004-2008.

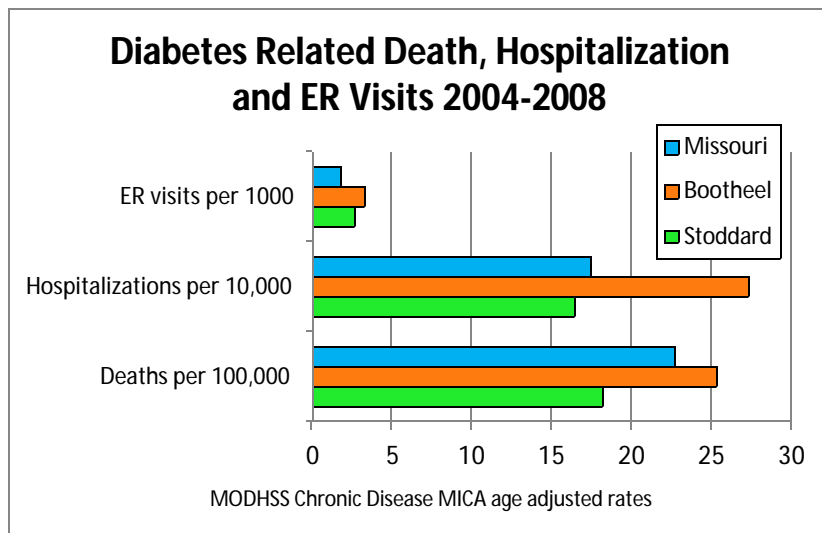




Diabetes

Stoddard County's diabetes prevalence rate, at 8.4, is only 6% higher than Missouri's rate of 7.9. However, Stoddard's rate appears to have steadily increased from 2004 to 2008. Stoddard has a lower rate of deaths and hospitalizations due to diabetes than the state. For emergency room visits, Stoddard County has a higher rate than the state but a lower rate than the Bootheel.

According to the Robert Wood Johnson County Health Rankings, Stoddard County ranks near the highest ten percent of counties nationally for the rate of diabetes screenings: 88% compared to Missouri's rate of 83%.



The Stoddard County Public Health Center is active in prevention and maintenance of chronic disease, offering blood sugar, cholesterol, and blood pressure assessments, as well as referrals.

Age-adjusted data from the 2007 County Level Study (MODHSS) suggests that Stoddard County has a higher rate of high blood pressure than the state (26.2% compared to 18.4%), but a similar level of high

cholesterol in the population over 35 years (20.7% compared to 19.6%).

Senior Citizens

The U.S. as a whole is faced with looming health care challenges as the generation known as the “baby boomers” is reaching its golden years. This disproportionately large segment of the population presents challenges to public health. This issue is especially relevant to Stoddard County, where the elderly population is overrepresented (17.6% compared to 13.7% for the state. Census Bureau Quick facts, 2009).

In Stoddard County, 15.8% of the elderly population lives in poverty, compared to less than ten percent for the state (ACS 2006-2008). The impoverished elderly population is disproportionately female since women tend to live longer, and have lower lifetime earnings. The elderly bear a substantial burden for out-of-pocket medical care. In 2006, Medicare only covered about half of all healthcare expenses and 77% of dental care was self-pay. Neither eye glasses nor hearing aids, are covered under Medicare (Older Americans 2010 Key Indicators of Well Being. Federal Inter-agency forum on aging related statistics).

Problems with vision and hearing are two of the components that can lead to isolation and depression in seniors. Depression lowers the quality of life as well as contributing to higher rates of other illnesses and injury, including a greater risk of falls. Rates of depression in the elderly increase with age and depression is more common in women. (Older Americans 2010 Key Indicators of Well Being. Federal Inter-agency forum on aging related statistics).

Communication problems such as vision and hearing loss are not the only communication challenges faced by Senior Citizens. They often suffer poor health outcomes as a result of low health literacy. Health literacy is the ability to correctly understand and communicate health related information. Although health literacy is often associated with lower levels of reading skills and education, the reading skills of individuals are only one contributor. Poor writing and communication skills of healthcare providers often result in confusing information. The Stoddard County Health Center offers programs geared toward improving senior health literacy as part of the Center’s arthritis exercise classes.

Injuries and deaths from falls are a serious problem in Missouri and in Stoddard County. Missouri’s death rate from falls in elderly is 30% higher than the national average. Falls usually occur as a result of tripping over obstacles, vision problems, acute or chronic illness, loss of balance or strength, or as a side-effect of medication. Stoddard County’s rate of injuries from falls for 2004-2008 was 13% higher than the Bootheel’s rate and 30% higher than Missouri’s rate (MODHSS Injury MICA). Falls are responsible for up to 40% of nursing home admissions (Show-me Falls Free Missouri). Exercise classes designed for the elderly, such as the “People with Arthritis Can Exercise” classes offered at the Stoddard County Public Health Center, can help to increase strength and balance which can prevent falls.

For the elderly who need assistance, Stoddard County is equipped with 662 total beds in long-term care facilities. 421 of these beds are located in skilled nursing facilities which offer the highest level of care and accept Medicaid and Medicare. Residential care facilities in Stoddard County can provide care for

165 residents and assisted-living facilities can provide for 76 residents. Several agencies also provide in-home nursing care for Stoddard County residents.

Communicable Disease Profile

The Stoddard County Public Health Center is active in the prevention of communicable diseases. The Center provides all childhood immunizations and provides some adult immunizations such as tetanus, Hepatitis A and B, Shingles and flu vaccinations. Vaccinations are provided at outreach sites and the nurses also travel to schools, nutrition centers, and other locations as requested, especially leading up to flu season.

In 2010 a pertussis outbreak affected 17 Stoddard County residents. The communicable disease nurse worked with the affected families to help improve vaccination to help prevent future outbreaks.

Sexually Transmitted Diseases

Sexually transmitted diseases (STDs) are an important health indicator because they can lead to infertility, pregnancy complications, discomfort, some types of cancer, and an increased risk of other STDs such as HIV/AIDS (The Role of STD Detection and Treatment in HIV Prevention - CDC Fact Sheet).

Chlamydia is one of the most common, but also most treatable STDs. In 2008, Stoddard County's chlamydia rate was 173 out of 100,000 compared to 422 for the state. This means that Stoddard's chlamydia infection rate was 59% lower than Missouri's (RWJ County Health Rankings).

In 2007 Stoddard County was estimated to have 6 people living with HIV (RWJ County Health Rankings). With proper treatment, HIV positive persons can now live many years. However the cost of treatment is very expensive. Prevention of one HIV infection is estimated to save \$355,000 of lifetime treatment costs (CDC's HIV Prevention Progress in the United States).

These numbers may be underreported because other healthcare providers in the region may not meticulously report their findings. Though the Health Center meticulously reports, we cannot ensure that these numbers are representative because of little oversight for reporting.

Injury profile

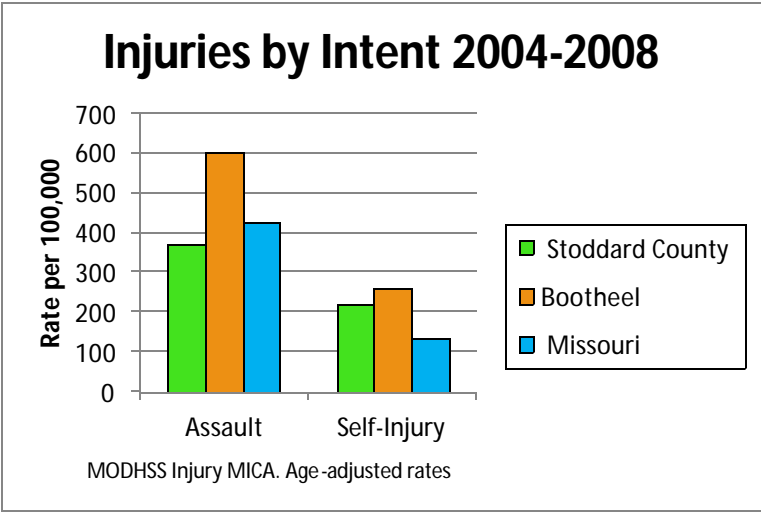
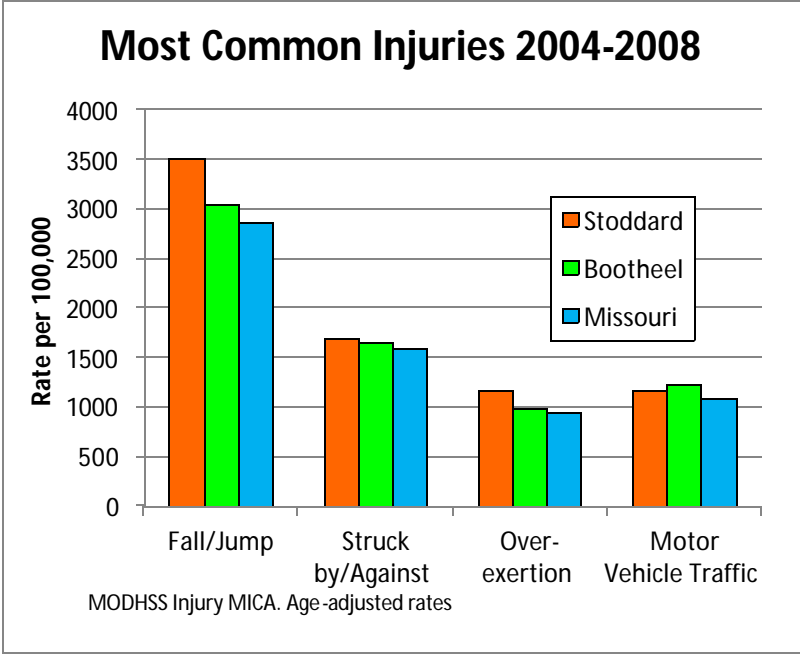
Stoddard County's overall injury rate is 9% higher than the Bootheel as a whole and 21% higher than the state's injury rate. Stoddard County has a very high number of injuries from falls. The age-adjusted rate is 22% higher than the state's rate and 15% higher than the Bootheel's rate. Since these figures are age-adjusted, the data suggests that there is a true difference in the rate of falls incurred in Stoddard County.

Stoddard's injury rate for over-exertion is also unusually high. While over-exertion ranks behind motor vehicle accidents for the state and region, it accounts for more injuries in Stoddard than traffic accidents. Though not leading causes of injury, Stoddard County also has

unusually high rates of burns (15% higher than the Bootheel and 43% higher than the state), and venomous bites or stings (73% higher than the Bootheel and 90% higher than the state).

From 2005-2009 the death rate from motor vehicle accidents was slightly higher for Stoddard County than for the Bootheel (26.6 per 100,000 compared to 26.1) but 54% higher than the state's rate of 17.3 (MODHSS Death MICA). However, data suggests that seatbelt usage is increasing (MODHSS Injury MICA).

When considering the intention of the injury, Stoddard County has much lower rates of injury from assault than the region and state (38%, and 12% lower, respectively). Although Stoddard's intentional self-injury rate is 16% lower the Bootheel's rate, Stoddard County's rate is 66% higher than the state's rate. This indicates a need for improved access to mental health care services in the region.



Environment

Housing

Old houses can present challenges to public health, such as lead-based paint. According to the American Communities Survey 31% of the houses in Stoddard County were built before 1950 (ACS2005-2009). In 2010, 493 children under age 6 were screened for high lead levels. Three of the children were found to have elevated lead levels (Missouri Bureau of Environmental Epidemiology). Additionally, 39 Stoddard County homes were found to have no plumbing, 57 had incomplete kitchen facilities, and 413 had no telephone service.

Climate

Recent flooding combined with typically warm and humid summers have resulted in an increased amount of complaints regarding mold in homes. The environmental health specialist fields questions and makes referrals. Mosquito abatement is always a concern in this region, but is also a heightened priority due to increased breeding areas created from the flooding. Mosquitos are a public health concern because they can spread some blood-borne illnesses. As of the release of this report The Health Center received a grant to obtain fogging equipment and spray from the Missouri Foundation for health for Stoddard's townships. In addition to mosquitos, Stoddard's climate is an excellent breeding ground for ticks, which can also transmit disease.

Outdoor Air Quality

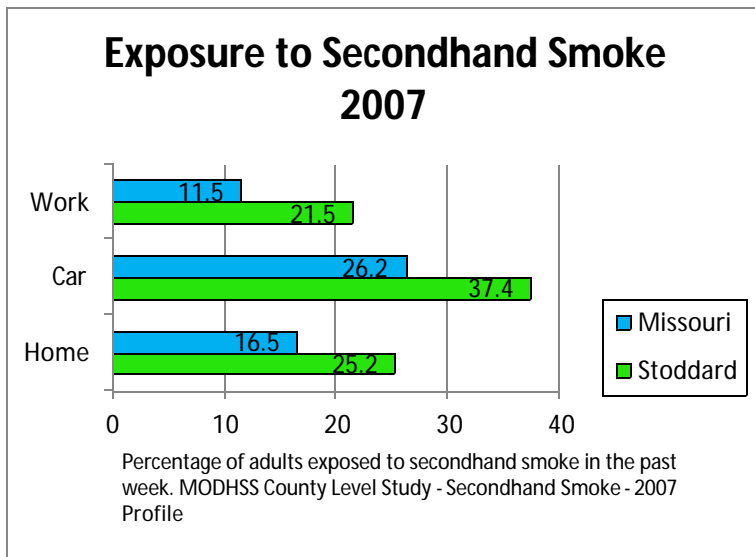
Air pollution contributes to poor health primarily by affecting the throat and lungs, but it also worsens cardiovascular disease. Stoddard County and the Bootheel are the highest areas in the state for "particulate matter days." This means that there is enough solid matter traveling in the air that it is unhealthy for vulnerable populations, such as children and the elderly. Particulate matter in the air can occur as a result of pollen, dust, smoke, fumes, and traffic exhaust. Agriculture and vegetation in the area are significant contributors to particulate matter. (County Health Rankings

<http://www.countyhealthrankings.org/missouri/stoddard/46>; CDC MMWR Unhealthy Air Quality- United States, 2006-2009)

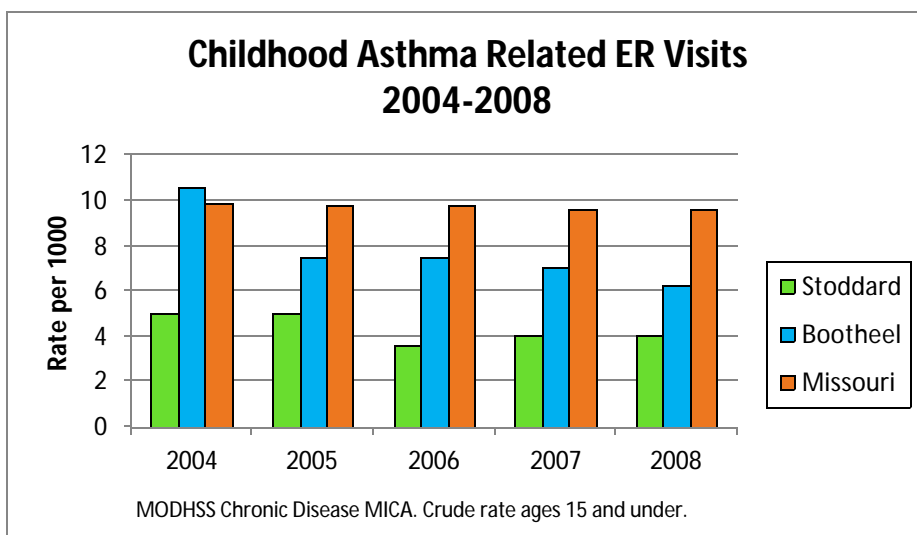
Stoddard County fares well in regard to low levels of ozone gas. Ozone is the main component of smog, which is created when certain pollutants are exposed to sunlight. Industries and automobiles are the main contributors to smog. Despite the distances that Stoddard County residents must drive for work, healthcare, shopping, and recreation, the effect of vehicle exhaust is lessened by the low population density (County Health Rankings <http://www.countyhealthrankings.org/missouri/stoddard/46>; CDC MMWR Unhealthy Air Quality- United States, 2006-2009).

Indoor Air Quality

Indoor air quality is another important consideration. Non-smoking adults who are routinely exposed to secondhand smoke in their home or work have a 20-30 percent increased risk of lung cancer and a 25-30 percent increased risk of heart disease. (CDC Secondhand Smoke Facts). Because of the higher rates of smoking in homes, places of work and cars, Stoddard County non-smokers are more likely to be exposed to secondhand smoke than residents in the state as a whole.



In children, secondhand smoke causes ear infections, respiratory infections, worsens asthma attacks and increases the risk of Sudden Infant Death (CDC Secondhand Smoke Facts). However, despite these increased risks, asthma related emergency room visits for children in Stoddard County are significantly lower than rates for the state or region.



Waste Management

In 1994, Lemons Sanitary Landfill, now owned by Allied Waste, was established in Stoddard County between Dexter and Bloomfield. The site is active, covers 162 acres, and is permitted to accept all types of special waste. Sanitary landfills are lined to prevent waste from contaminating groundwater and waste deposited is covered with a thin layer of soil to avoid air contamination. The landfill accepts waste from multiple counties. (MODNR).

Water

Stoddard County has four waste water treatment lagoons and about twenty other locations are permitted to treat waste water. Animal waste from the Tyson plant is spread over farmland to avoid localized concentrations (MODNR).

The towns of Dexter and Bernie both add fluoride to the community water supply; however, the other cities and townships do not. Bloomfield decided recently to stop adding fluoride to the city's water after learning that it was not mandated by the Department of Natural Resources and Advance stopped adding fluoride several years ago (MODNR). While some water supplies have naturally occurring fluoride, most water supplies in Stoddard County do not contain the recommended amount of fluoride unless it is added to the water. Fluoride in the drinking water supply can improve dental health in children and adults by preventing cavities. Numerous studies in peer-reviewed scientific journals have failed to uncover adverse effects of fluoride in community drinking water containing the recommended amount of the concentration (CDC).

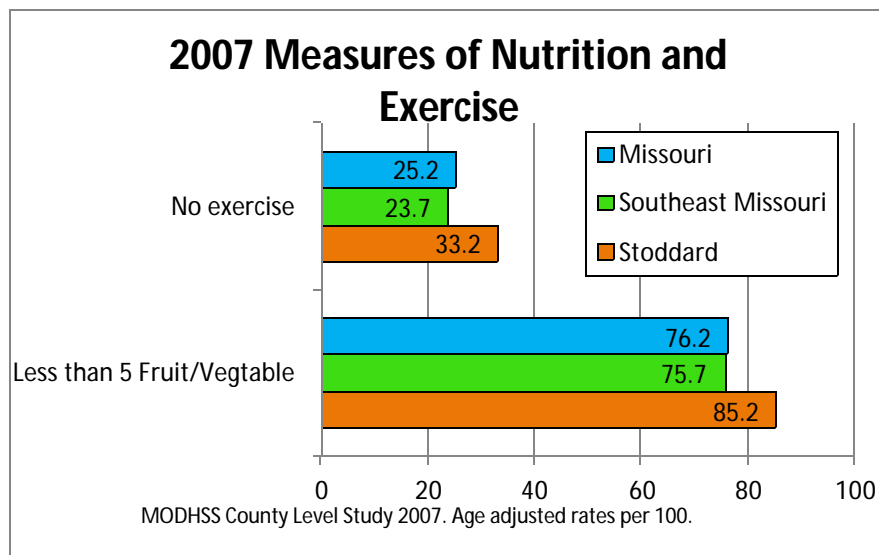
Nutrition and Exercise

Several measures indicate that the population of Stoddard County has room for improvement in their nutrition and exercise. According to the 2007 County Level Study, an estimated 85.2% of Stoddard County residents eat less than the recommended 5 fruits and vegetables per day, ranking the county in the lowest 20% for fruit and vegetable consumption.

According to the US Department of Agriculture, no part of Stoddard County contains a “food desert,” a low income area that is more than a mile from a grocery store that sells nutritious items such as fresh produce <http://www.good.is/post/usda-s-food-desert-locator-map/>. Stoddard County has 7 grocery stores, as well as several farmers markets, however, the cost of fresh fruits and vegetables can be prohibitive for low-income families. Puxico and Dexter each have a nutrition center that provides balanced meals on weekdays, primarily for the elderly population. Bloomfield and Advance also have nutrition centers open one day per week. However, Stoddard County is dotted with restaurants that are often loaded with high-calorie, high-fat menu options and offer few healthy choices. In addition, more than 20 convenience stores in Stoddard County make purchase of similarly low nutrient, high calorie food easy. With busy lives and little free time, fast and easy food often wins out.

The Stoddard County Public Health Center has a nutritionist on staff who is available for nutritional counseling. The Women Infant and Children Program helps to provide nutritional support to mothers and young children.

The 2007 County Level Study also found that 33.2% of Stoddard County residents get no exercise, outside of physical activity they may encounter at work or in daily living. This ranks Stoddard in the lowest 20% of Missouri counties for exercise. As a rural county, many areas of Stoddard are not “walkable,” meaning that there are few sidewalks or paths. However, there are several fitness centers



available in Stoddard County, and some public facilities such as schools and community centers make areas available for exercise in the mornings and evenings. Additionally, several local businesses have provided areas for employees to walk. The cost of membership fees to fitness facilities can be a deterrent, especially for low-income families and

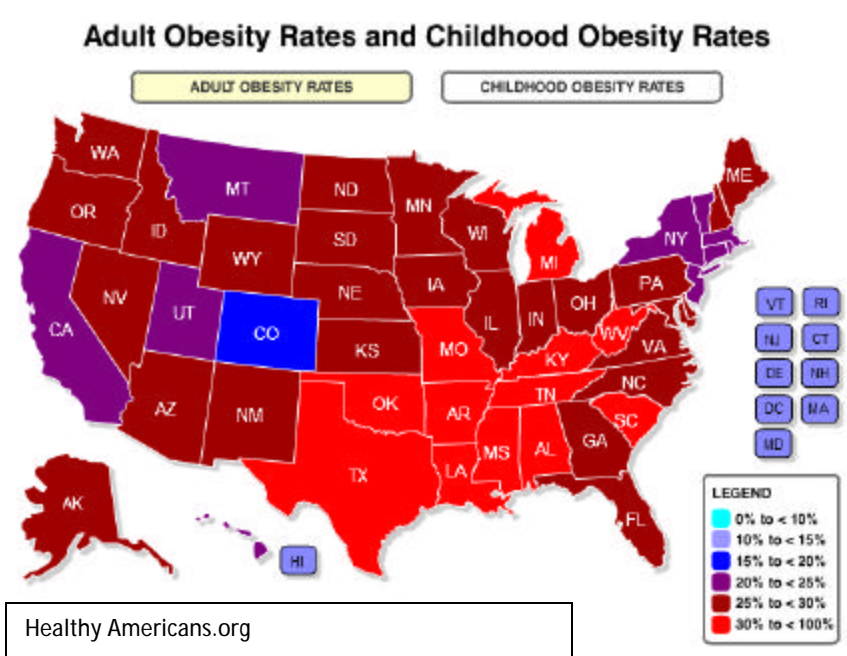
the climate can make walking outside uncomfortable or dangerous in inclement conditions, such as the heat and humidity of the summer season.

Obesity and Overweight

Although Stoddard residents do not differ greatly from the Southeast Missouri region or the state in terms of obesity and overweight, it remains a major health concern. Obesity and overweight in Missouri and in the nation as a whole has increased dramatically over the past twenty years. In 2011 Trust for America's Health ranked Missouri 11th in the nation for adult obesity. In the past 15 years, the combined overweight and obesity rate in Missouri has climbed from 53% to 66%. This is consistent with the national trend: fifteen years ago, the state with the highest obesity rate would today have the lowest obesity rate.

The professional health community is in agreement that the percentage of obese and overweight Americans represents a health care crisis. The health consequences for obesity are severe. It increases the risk of heart disease, high blood pressure, diabetes type 2, certain cancers, and infertility, to name a few (CDC).

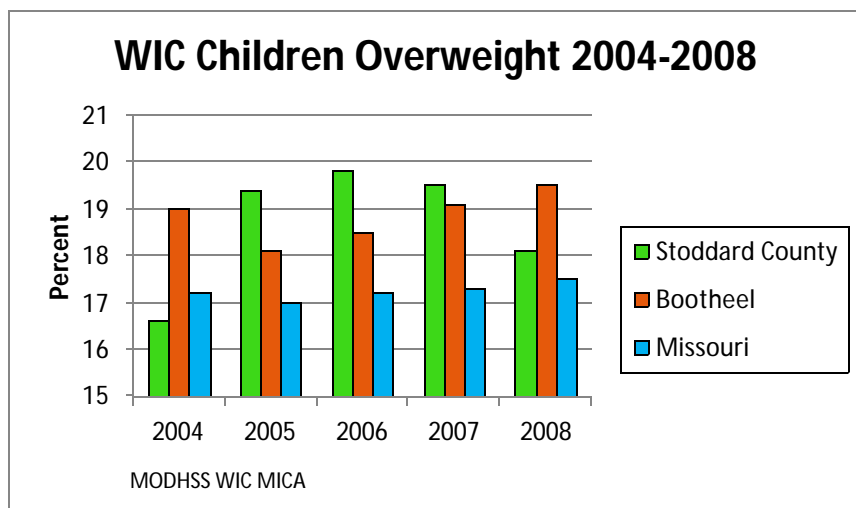
The contributing causes of the obesity crisis are believed to be the abundance of cheap and convenient food containing many calories and few nutrients, as well as a reduction in physical activity by Americans (CDC).



Obese and Overweight Children

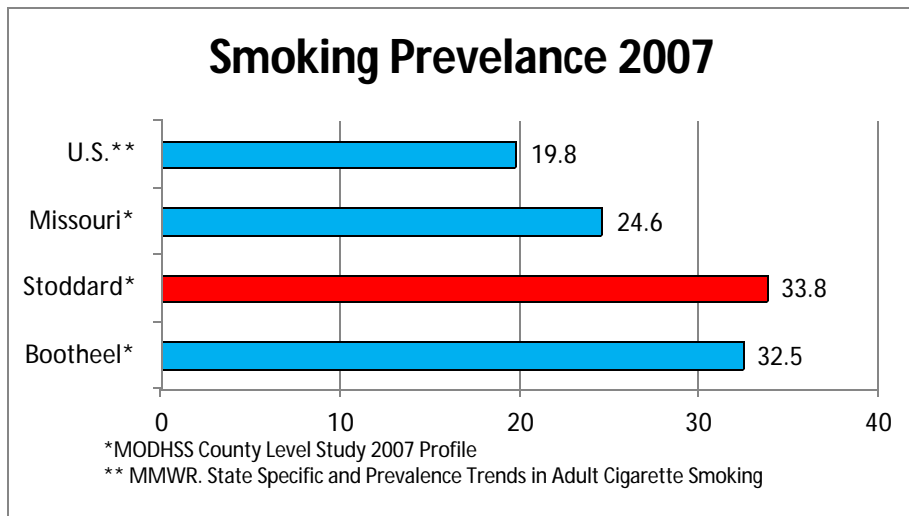
At 17%, the number of obese children age 2 to 19 in the United States has nearly tripled since 1980. Obese and overweight children are more likely to become obese and overweight adults and suffer the ill health effects of the condition. Obese children are also more likely to suffer social problems from discrimination, and psychological consequences such as depression (CDC Basics About Childhood Obesity).

County level data for the total overweight percentage of children is not available; however the number of overweight children enrolled in the Women Infant and Children program is a good indicator for the health status of low-income children. This is an important measure since low-income children represent a population more vulnerable to obesity and other health problems later in life (CDC Obesity Among Low-Income Preschool Children) The percentage of children enrolled in WIC who are overweight decreased from 2006 to 2008. During this same time period, both the regional and state rates increased. However, at 18.1%, Stoddard County's 2008 rate was still above the state's rate of 17.5 (MODHSS WIC MICA).



Smoking

To put the seriousness of Stoddard County's smoking rate of 33.8% into perspective, Stoddard County has one of the highest smoking rates in the state of Missouri, outranked only by Taney, Ripley, Mississippi, and New Madrid counties (MODHSS County Level Study, 2007). Missouri, in turn, has our nation's 4th highest smoking rate, with only Kentucky, West Virginia, and Indiana ranking higher.

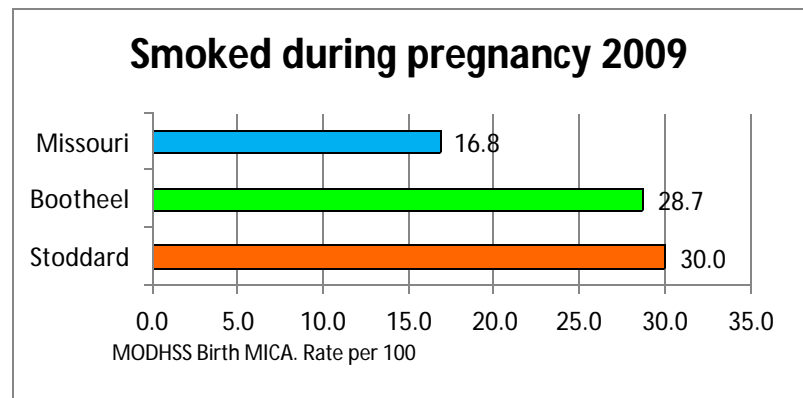


Missouri consistently ranks in the top 5 states for smoking rates. (Kaiser Foundation State Health Facts, 2008). This means that Stoddard County's smoking rate ranks one of the highest in the country.

Smoking causes an estimated 1 out of 5 annual deaths in the United States through

direct and second-hand exposure. Tobacco can cause or worsen the effects of various fatal cancers, heart, and respiratory diseases. (CDC Tobacco Related Mortality Fact Sheet). In the ten year period from 1999 to 2009, an estimated 772 Stoddard County deaths were attributed to smoking (MODHSS Leading Cause of Death Profile).

Nearly one in three pregnant women in Stoddard County smoke during all or part of their pregnancy (MODHSS Birth MICA). Smoking during pregnancy can result in low birth weight babies, still birth, pregnancy complications, premature birth, or Sudden Infant Death (CDC Smoking and Tobacco Use).



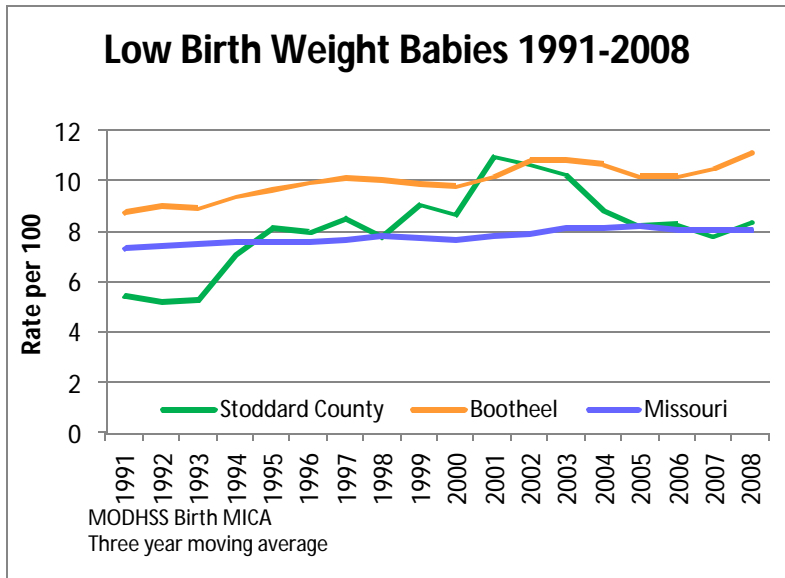
Missouri's cigarette tax, at \$0.17 per pack, is currently the lowest in the country. It has been well documented that as cigarette taxes increase, smoking rates decrease. Youth are less likely to initiate smoking in states where cigarettes cost more (Tobacco Free Kids).

Maternal and Child Health

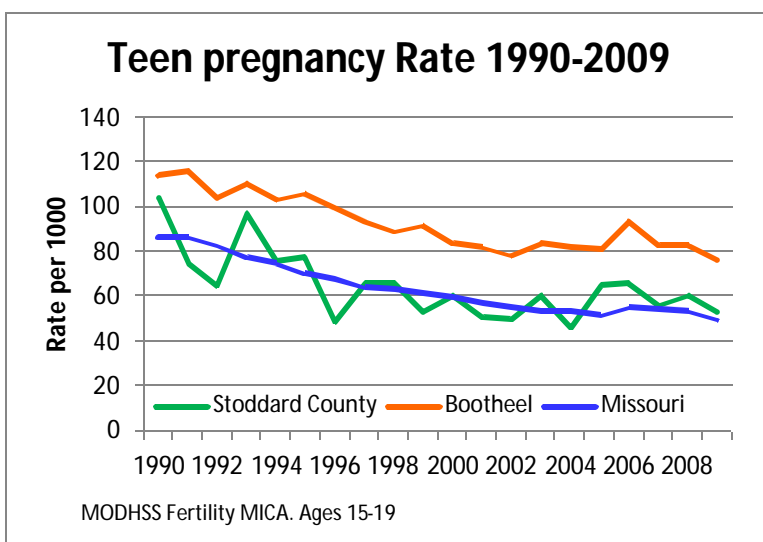
Full time female employees in Stoddard County earn an average of \$9,089 less than full-time male employees (American Communities Survey 2006-2008). Due to lower incomes for women, higher health care costs, and a higher percentage of income spent on child care, women represent a vulnerable population in terms of health care.

This can then result in more children living in poverty. For most maternal and child health indicators and outcomes, Stoddard County generally demonstrates worse health than the state as a whole, but better health than the Bootheel as a whole.

The Stoddard County Public Health Center works to reduce disparities by offering a wide range of preventative services to mothers and children. The Women Infant and Children program (WIC) helps mothers and children under five by providing breastfeeding education and support, nutrition counseling and access to nutritious foods. Breast and cervical cancer screenings are offered through Show-Me Healthy Women. The Center also offers childhood immunizations, pregnancy testing, and family planning services.



Teen Pregnancy



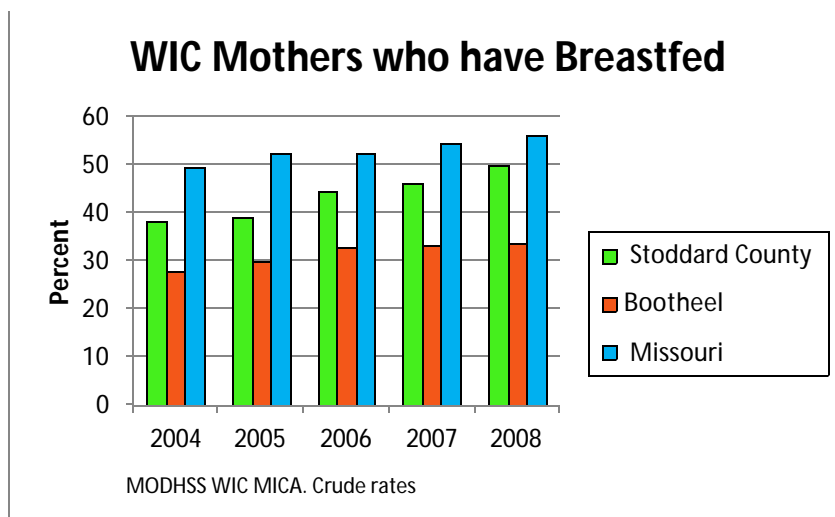
Teen pregnancy has been a long-standing concern in the Bootheel region. Prevention is important because more mature mothers result in better health outcomes for both mother and child in addition to saving tax dollars. The Center has been active in all 7 of Stoddard County's school districts, presenting an intensive annual course: "Postponing Sexual Involvement" to middle school students. From 2007 to 2009, Stoddard's teen pregnancy rate of 56.5 per 1000 was only slightly higher than the state's rate of 52.6, but much lower than the Bootheel's rate of 80.6.

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Unfortunately, the U.S. as a whole does not fare well in regard to teenage pregnancy. According to the World Health Organization, the U.S. has a higher teenage fertility rate than over 80 countries (2003 to 2008).

Breastfeeding

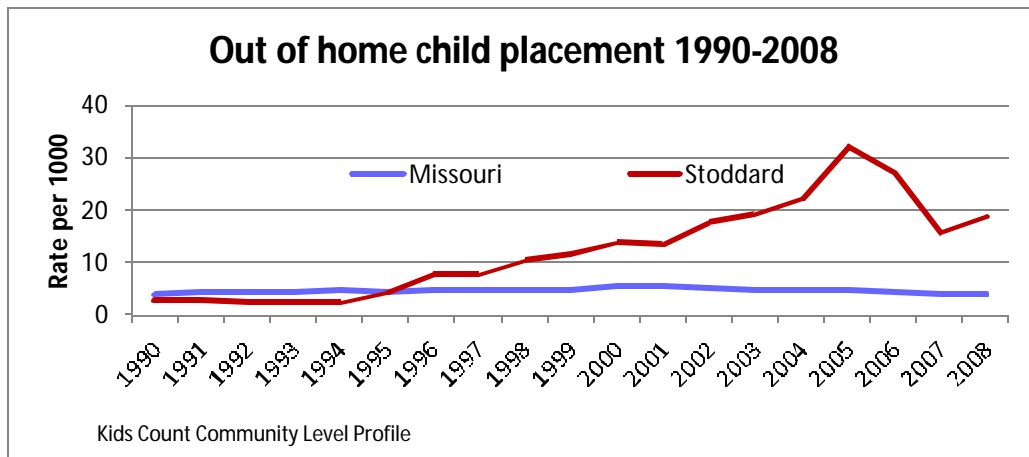
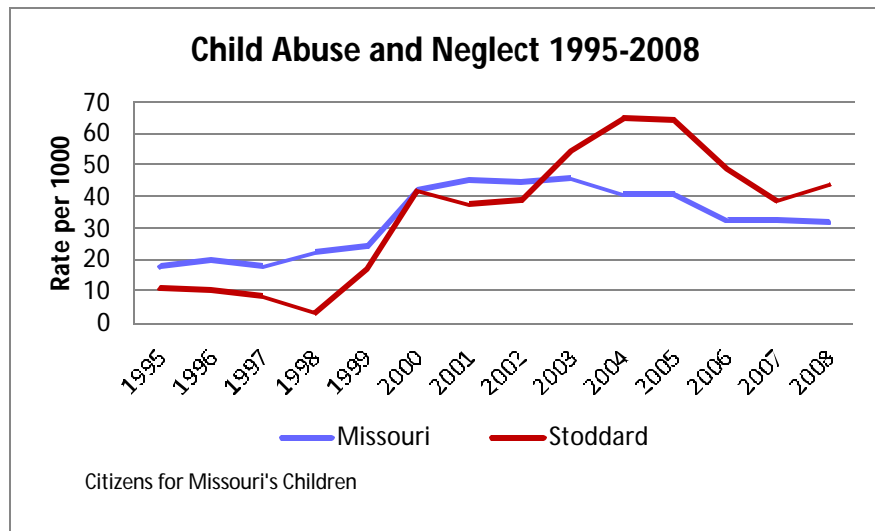
There are many health benefits to mothers and children who breastfeed. It protects the child from infections, promotes bonding, helps to prevent obesity in both mother and child, and may even help prevent breast and ovarian cancer (March of Dimes). The Stoddard County Public Health Center actively promotes breastfeeding by clients through a peer mentoring program. Although the state's rate of breastfeeding among WIC participants is higher than Stoddard County's, Stoddard's breastfeeding rate is high for the region and has made steady gains (MODHSS WIC MICA).



Violence in the Home

Child abuse

Stoddard County's child abuse and neglect rate trended upward from 1998 to 2005, but the rates decreased from 2005-2008. However, at 44.1, Stoddard's rates were still 37% higher than Missouri's rate of 32.1 in 2008. Stoddard County's rate of removing children from their homes also indicates a high rate of child abuse and neglect. However, the large number of removals may also reflect differences in standards and procedures used by local county court systems.

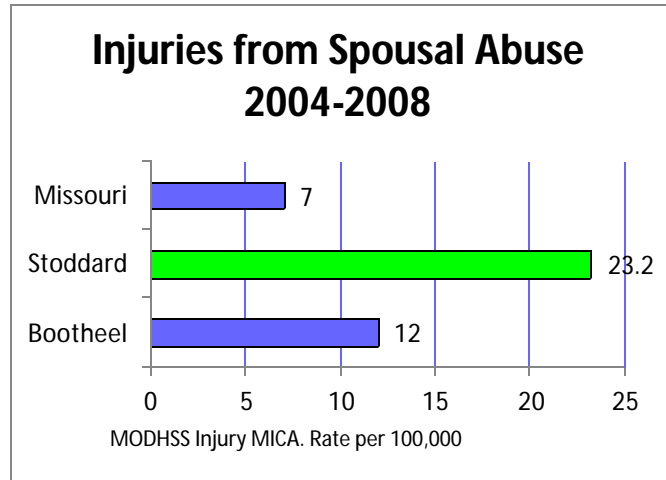


Spousal Abuse

During the 5 year period from 2004-2008, Stoddard County's spousal abuse rate of 23.2 was over three times the state's rate of 7.0 and nearly double the Bootheel region's rate of 12.0. The cause of injuries is reported by individual hospitals and the data is then collected by the Missouri Department of Health and Senior Services. Although these numbers are cause for concern and warrant further investigation, the

disturbingly high rate in Stoddard as opposed to the region and state could indicate inconsistencies in categorization of injuries or reporting procedures (MODHSS Injury MICA).

The Stoddard County Children's home serves as a temporary shelter for Stoddard County children age birth to 18 years. The capacity of the home is 10, but sibling waivers can be obtained to avoid breaking up sibling groups which will allow the home to serve up to 11 or 12. Although there is no women's shelter physically located in Stoddard County, a shelter in Dunklin County serves Stoddard County women and can temporarily house up to 18 women and children.

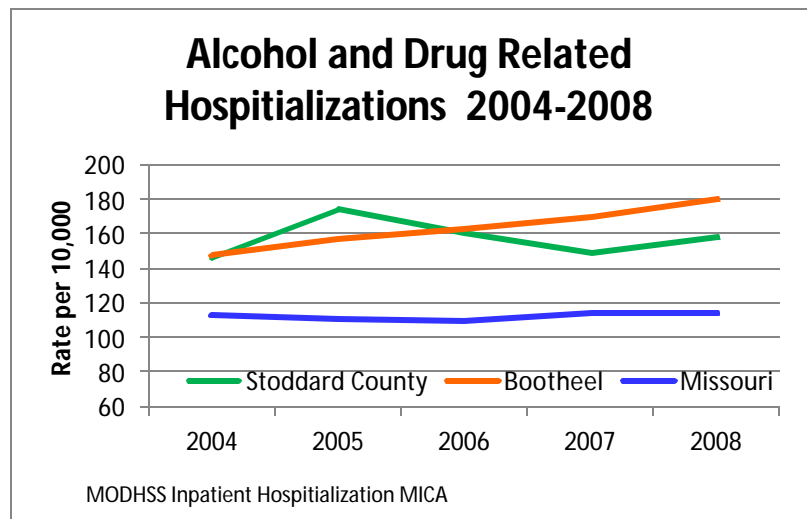


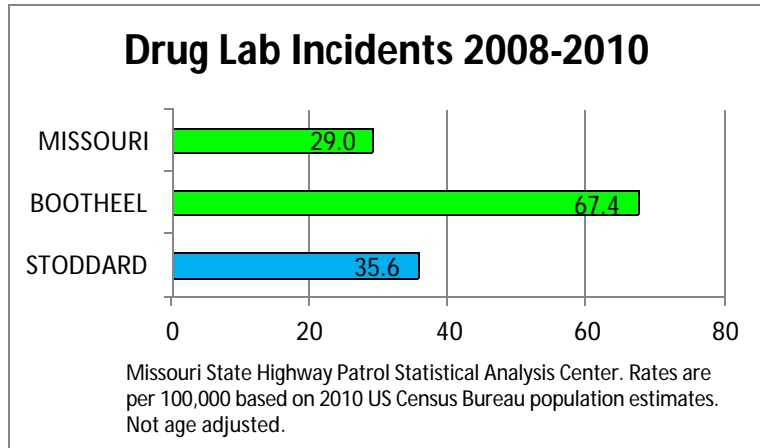
Drugs and Alcohol

Although indicators suggest that the drug and alcohol problem in Stoddard County is not as severe as the Bootheel as a whole, Stoddard's rates do appear to be generally higher when compared to the state. For example, Stoddard's alcohol and drug related hospitalization rate for 2004-2008 was 38% higher than Missouri's rate but 12% lower than the Bootheel's rate. This is not to suggest that alcohol and drug use is not a problem in Stoddard County, however. Stoddard has a high number of children who are removed from their homes. From 2006 to 2008, 245 out of 406 children who were removed from their homes, or 60%, were removed due to drug and alcohol problems in the home. In the same time period there were also 148 alcohol and drug related motor vehicle crashes and 118 juvenile drug or alcohol related offenses (Missouri Department of Mental Health).

Drugs and alcohol are also a likely contributor to Stoddard Counties high spousal abuse rate (MODHSS Injury MICA).

Although drug lab incidents are on the rise in all of Missouri, data from the Missouri Highway Patrol suggests that production of methamphetamines is less common in Stoddard County than in some of its neighboring counties. (Missouri State Highway Patrol.)





Summary of Finding for Stoddard County

This 2011 Community Health Assessment has revealed the following priorities for Stoddard County:

A: Community Conditions and Disease Indicators:

- Chronic Obstructive Pulmonary Disease (COPD)
- Heart Disease
- Motor Vehicle Accidents
- Alcohol- and Substance-Related
- Stroke/Other Cerebrovascular Diseases
- Diabetes
- Infant Health Problems
- Lung Cancer
- Colorectal Cancer
- Arthritis/Lupus

B: Prioritization of Selected Risk Factors in Stoddard County:

- No Exercise
- Obesity
- Mother Overweight
- Smoking
- No Mammography
- No Cervical Cancer Screening
- High Blood Pressure
- Smoking During Pregnancy
- Out-of-Wedlock Births
- High Cholesterol

C: Stoddard County's Three Public Health Priorities:

- Obesity
- Smoking and Tobacco
- Chronic Disease and Prevention