SAINT LUKE’S
COMMUNITY HEALTH NEEDS ASSESSMENT
2015
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Executive Summary

About Wright Memorial Hospital
Wright Memorial Hospital is committed to serving the Grundy County, Missouri community. Wright Memorial Hospital is a critical access hospital providing Trenton, Mo., and surrounding communities with essential health care services and local access to Saint Luke’s Health System. The 25-bed full-service hospital features 24-hour emergency services, a maternity center with private labor/delivery/recovery rooms, surgical services, and outpatient imaging services, such as MRI, CT, and digital mammography. In addition, the outpatient Specialty Clinic welcomes many specialists, including cardiology, ENT, GI, oncology, orthopedics, podiatry, and more.

Wright Memorial Hospital Mission
Wright Memorial Hospital is a faith-based, not-for-profit community hospital committed to the highest levels of excellence in providing health care and health related services in a caring environment. As a member of Saint Luke’s Health System we are dedicated to enhancing the physical, mental, and spiritual health of the diverse communities we serve.

Wright Memorial Hospital Vision
The best place to get care. The best place to give care.

About Saint Luke’s Health System
Wright Memorial Hospital is part of the Saint Luke’s Health System in Kansas City. The health system has 10 hospitals throughout the Kansas City region. The health system also includes home health, hospice, and behavioral health care, as well as multiple physician practices.

Community Health Needs Assessment Objectives
Wright Memorial Hospital conducted its second Community Health Needs Assessment (CHNA) in order to better understand and serve the needs of the community. As part of the 2010 Affordable Care Act, all tax-exempt hospitals must complete a CHNA every three years. The CHNA addresses the health needs in the community and prioritizes the identified needs. The hospital is then responsible for completing an implementation strategy for the primary health needs identified.

Community Health Needs Assessment Summary
An effort to understand and create a healthier community requires collaboration and input from many community stakeholders. Through data research and key conversations in the Grundy County community, this CHNA pulls together community findings and addresses top health priorities to help improve community health over the next three years.
Community Health Needs
A wide range of primary and secondary data was used to identify four health priorities in Grundy County.

Priority 1: Access to Care
- Access to care is a national and local priority focused on the need to better support the uninsured, underinsured, and healthcare service shortages.
- In Grundy County, 42% of the population is at or below 200% of the Federal Poverty Level (FPL) leaving services out of reach because of the cost of care.
- Without the proper access to care, individuals are more likely to experience multiple chronic health problems, disabilities, and a shorter life expectancy.

Priority 2: Increased Access to Physical Activity and Nutrition
- Grundy County demonstrated a need for increased physical activity and better access to healthy foods.
- In recent years, the numbers of both obese and overweight residents have continued to increase in Grundy County.
- Approximately 10% of the population in Grundy County has been diagnosed with diabetes. Nationally, diabetes accounts for about $176 billion in annual medical expenses.

Priority 3: Behavioral Health Care
- Mental health disorders are one of the leading causes of disability in the United States.
- Community stakeholders identified behavioral health care as an ongoing community health need in Grundy County.

Priority 4: Smoking Cessation
- Smoking remains the leading preventable cause of premature disease and death in the United States.
- Despite decades of warnings on the dangers of smoking, nearly 42 million adults continue to smoke cigarettes.
- Grundy County has a higher percentage of adult smokers than the average Missouri County, leading to increased rates of chronic and deadly diseases.
Key Contributors

Hospital Leadership
President and Chief Executive Officer – Gary Jordan
Chief Financial Officer – Janet Buckman
Vice President and Chief Nursing Officer – Barbara Ball

Public Health Collaborations
Grundy County Health Department
Assessment Methodology

To prepare the CHNA, both primary sources and secondary data were compiled and analyzed. The CHNA team conducted multiple interviews with hospital leadership and community stakeholders to better understand the needs in the community. Secondary quantitative data was pulled and analyzed from multiple community and hospital sources to better understand the impact of each of the identified needs.

Primary Data
Primary data was collected by connecting with community stakeholders to discuss the needs of the Grundy County population. Stakeholders were chosen to represent broad interests of the community, including underserved populations. Stakeholders provided information, which was used to help identify and prioritize community needs.

Secondary Data
Secondary data was collected through multiple community resources. The most current data available was compiled and analyzed for key population health indicators.

Secondary Data Sources
- County Health Rankings
- Missouri Department of Health and Senior Services
- National Institute of Mental Health
- Medicare’s Hospital Compare
- Healthy People 2020
- Centers for Disease Control and Prevention
- Hospital Industry Data Institute (HIDI)
- Sg2 Nielsen Population and Demographic Data
Community Analysis

Demographic Profile

This section outlines the demographic profile for Wright Memorial Hospital’s defined community.

Geography

Wright Memorial Hospital’s community is defined as Grundy County, Missouri (see Figure 1). Grundy County is located in the northwest quadrant of Missouri. The total land area is 438 square miles, and includes 4 zip codes.

Figure 1: Wright Memorial Defined Community, Grundy County, Missouri
**Population Characteristics**

As of 2015, the Grundy County population was 10,290. The age group 18 to 44 makes up the largest portion of the population at 30% or 3,096 people followed by the age group 45 to 64 at 25% or 2,518 people. The smallest age group is 65 and up at 22% of the population or 2,224 people.

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**Figure 2 : Grundy County Age Profile, 2015**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Population</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>00-17</td>
<td>2,452</td>
<td>24%</td>
</tr>
<tr>
<td>18-44</td>
<td>3,096</td>
<td>30%</td>
</tr>
<tr>
<td>45-64</td>
<td>2,518</td>
<td>25%</td>
</tr>
<tr>
<td>65-UP</td>
<td>2,224</td>
<td>22%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>10,290</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

*Source: Sg2 Population and Demographic Data

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**Population Growth**

The Grundy County population is expected to grow by 2% or 160 people in the next 5 years. In 2020, the 65 and up age group is expected to have the highest growth and increase by 8% or 182 people. The 65 and up age group is expected to account for 23% of the population in 2020. The age group 45 to 64 is expected to decrease by 8% or 191 people. The 00-17 and 18-44 age groups are expected to remain relatively steady from 2015 to 2020.

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**Figure 3: Projected Population Growth by Age Group, 2014-2019**

*Source: Sg2 Population and Demographic Data*
Gender Characteristics
Grundy County has a slightly higher percentage of females to males at 52.4% (or 5,388 individuals) to 47.6% (or 4,902 individuals). Based on population estimates, the gender ratio in Grundy County will remain steady from 2015-2020.

Ethnicity
The majority of the population in Grundy County is white (96.5 percent in 2015). The white population is expected to have the lowest growth rate from 2015 to 2020 at 0.5% (or approximately 42 individuals) and will account for 95.5% of the population in 2020. The multiple race population is the next largest at 1.4% of the population in 2015 with an expected growth of 32.5% (or 46 individuals) from 2015 to 2020. The black/African-American population is expected to grow from just under 1% of the population to 1.3% of the population during this time frame. The Asian and American Indian/Alaskan Native populations together account for less than 1% of the population in 2015 and 2020, but the Asian population will grow significantly by 41% during that time frame.

Figure 4: Projected Population Growth by Single Race 2015-2020

<table>
<thead>
<tr>
<th>Single Race</th>
<th>2015 Population</th>
<th>% of Total</th>
<th>2020 Population</th>
<th>% of Total</th>
<th>Population Change</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>9,853</td>
<td>96.5%</td>
<td>9,895</td>
<td>95.5%</td>
<td>42</td>
<td>0.5%</td>
</tr>
<tr>
<td>Multiple Races</td>
<td>142</td>
<td>1.4%</td>
<td>188</td>
<td>1.8%</td>
<td>46</td>
<td>32.5%</td>
</tr>
<tr>
<td>Black / African American</td>
<td>100</td>
<td>0.98%</td>
<td>134</td>
<td>1.3%</td>
<td>34</td>
<td>34%</td>
</tr>
<tr>
<td>Asian</td>
<td>64</td>
<td>0.62%</td>
<td>90</td>
<td>0.9%</td>
<td>26</td>
<td>41%</td>
</tr>
<tr>
<td>American Indian/ AK Native</td>
<td>47</td>
<td>0.5%</td>
<td>48</td>
<td>0.5%</td>
<td>1</td>
<td>2%</td>
</tr>
</tbody>
</table>

*Source: Sg2 Population and Demographic Data

Language
In 2015, 95.4% of the population spoke only English in Grundy County. The language mix is expected to stay consistent through 2020. Indo-European languages account for the second largest percentage of the population at 3.4%.

Figure 5: Population Language Breakdown 2015

<table>
<thead>
<tr>
<th>Language</th>
<th>2015 Population</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Only English</td>
<td>9,144</td>
<td>95.4%</td>
</tr>
<tr>
<td>Indo-European</td>
<td>318</td>
<td>3.4%</td>
</tr>
<tr>
<td>Spanish</td>
<td>85</td>
<td>0.8%</td>
</tr>
<tr>
<td>Asian-Pacific</td>
<td>44</td>
<td>0.4%</td>
</tr>
</tbody>
</table>
**Education**

In Grundy County, 86% of the population over 25 years of age has a high school diploma or higher. Of that group, an additional 51% have at least a little college education and 28% have a professional, associate’s, or bachelor’s degree. About 13% of the population has not attained a high school diploma.

**Employment**

About 54% of the population above 16 years of age is employed in Grundy County. About 3.5% of the population is unemployed. The remainder of the population aged 16 years or younger is not considered to be part of the labor force.

**Uninsured Population**

In Grundy County, 78% of adults and 92% of children have health insurance. Grundy County lags behind the Missouri average in both of these categories.

Figure 6: Percent of Uninsured Adults under 65

![Bar chart showing percent of uninsured adults under 65](image)

**Health Status of the Population**

The following section focuses on measures related to the health status of the population that is served by Wright Memorial Hospital. The measures are specific to Grundy County, Missouri. The measures are compared against national and state averages or Healthy People 2020 goals in order to assess the specific health needs of the population of Grundy County.

**Mortality**

Mortality is a measure used to assess the overall health status of the population. Typically, the mortality rate is age-adjusted, which adequately describes the death rate in a population, but it fails to take into account the population health implications of premature deaths. Figure 7 below shows the premature death rate or years of potential life lost (YPLL) before age 75 per 100,000 population. The advantage of this specific type of mortality measure is that it focuses on the reasons for premature mortality in a population. The premature death measure avoids focusing on causes of death related to age. Grundy County has a premature death rate slightly
below the average Missouri County, but well above the top performing US counties. This measure indicates that the health status of the population in Grundy County is relatively good when compared to the state of Missouri, but has plenty of room for improvement.

Figure 7: Premature Death Rate

<table>
<thead>
<tr>
<th></th>
<th>Grundy County</th>
<th>Missouri</th>
<th>Top US Performers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Premature Death</td>
<td>7,140</td>
<td>7,714</td>
<td>5,200</td>
</tr>
</tbody>
</table>

Leading Causes of Death
It is important to identify the leading causes of death in a population in order to assess the health outcomes in the specific population. Identifying the leading causes of death also allows a community to develop programs or treatment options that address the needs of the population. The table below shows the top ten leading causes of death in Grundy County for years 2003-2013.
Figure 8: Leading Causes of Death

<table>
<thead>
<tr>
<th>Leading Cause of Death Profile for Grundy County Residents (2003-2013)</th>
<th>Number of Events</th>
<th>Age-Adjusted Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart Disease</td>
<td>398</td>
<td>212.6</td>
</tr>
<tr>
<td>All Cancers (Malignant Neoplasms)</td>
<td>352</td>
<td>201.4</td>
</tr>
<tr>
<td>Stroke/Other Cerebrovascular Disease</td>
<td>108</td>
<td>52.2</td>
</tr>
<tr>
<td>Lung Cancer</td>
<td>96</td>
<td>56.3</td>
</tr>
<tr>
<td>Chronic Lower Respiratory Disease</td>
<td>95</td>
<td>51.3</td>
</tr>
<tr>
<td>All Injuries and Poisonings</td>
<td>67</td>
<td>56.3</td>
</tr>
<tr>
<td>Alzheimer’s Disease</td>
<td>61</td>
<td>28.6</td>
</tr>
<tr>
<td>Total Unintentional Injuries</td>
<td>54</td>
<td>42.4</td>
</tr>
<tr>
<td>Kidney Disease (Nephritis and Nephrosis)</td>
<td>41</td>
<td>20.8</td>
</tr>
<tr>
<td>Pneumonia and Influenza</td>
<td>32</td>
<td>14.9</td>
</tr>
</tbody>
</table>

**Morbidity**

Morbidity measures are purported to measure the quality of life of individuals within a population. The goal of the measures is to focus on the impact that health status has on quality of life. The poor or fair health indicator is a self-reported measure of an individual’s perception of their overall health. The poor physical and mental health days indicators are self-reported measures of days of work lost for health-related reasons and are shown as an average number of days lost per month in the table below. The last indicator is low birth weight. According to County Health Rankings, low birth weight is an important morbidity measure because it is indicative of maternal exposure to health risks, the current and future morbidity of the infant, and risk of premature mortality.

Figure 9: Morbidity Measures

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Grundy County</th>
<th>Missouri</th>
<th>90th Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor Or Fair Health</td>
<td>15%</td>
<td>16%</td>
<td>10%</td>
</tr>
<tr>
<td>Poor Physical Health Days</td>
<td>3.6</td>
<td>3.7</td>
<td>2.5</td>
</tr>
<tr>
<td>Poor Mental Health Days</td>
<td>3.2</td>
<td>3.8</td>
<td>2.3</td>
</tr>
<tr>
<td>Low Birth Weight</td>
<td>6.4%</td>
<td>8.0%</td>
<td>5.9%</td>
</tr>
</tbody>
</table>
Heart Disease

Heart disease is the leading cause of death in Grundy County. According to the CDC, heart disease is the leading cause of death among both men and women in the United States and accounts for about 610,000 deaths each year, or 1 in 4 deaths. This is a major health issue in the United States. In fact, its prevention, along with stroke, is one of the main objectives of Healthy People 2020 with a goal to "improve cardiovascular health and quality of life through prevention, detection, and treatment of risk factors for heart attack and stroke; early identification and treatment of heart attacks and strokes; and prevention of repeat cardiovascular events" ("Heart Disease and Stroke," 2014).

Figure 11: Heart Disease

<table>
<thead>
<tr>
<th>Grundy County Chronic Disease Profile: Heart Disease</th>
<th>Number of Events</th>
<th>Age-Adjusted Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital Admissions</td>
<td>1,025</td>
<td>135.0</td>
</tr>
<tr>
<td>ER Visits</td>
<td>1,454</td>
<td>23.0</td>
</tr>
<tr>
<td>Deaths</td>
<td>398</td>
<td>212.6</td>
</tr>
</tbody>
</table>
Cancer
Cancer is the second leading cause of death in Grundy County and in the United States after heart disease. It is one of the biggest health concerns for the population. The cancers with the highest death rates in Grundy County are listed in Figure 12.

Figure 12: Deaths from Cancer in Grundy County (2002-2012)

<table>
<thead>
<tr>
<th>Cancer</th>
<th>Number of Events</th>
<th>Age-Adjusted Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lung Cancer</td>
<td>110</td>
<td>64.0</td>
</tr>
<tr>
<td>Colorectal Cancer</td>
<td>40</td>
<td>21.3</td>
</tr>
<tr>
<td>Colon and Rectum Cancer</td>
<td>40</td>
<td>21.3</td>
</tr>
<tr>
<td>Breast Cancer</td>
<td>23</td>
<td>13.7</td>
</tr>
<tr>
<td>Prostate Cancer</td>
<td>20</td>
<td>10.0</td>
</tr>
<tr>
<td>Total</td>
<td>233</td>
<td>130.3</td>
</tr>
</tbody>
</table>

Diabetes
Diabetes impacts many Americans and is a primary health concern in the United States. According to Healthy People 2020, diabetes impacts approximately 26.3 million people in the United States and it lowers life expectancy by up to 15 years, increases the risk of heart disease by 2 to 4 times, and is the leading cause of kidney failure, lower limb amputations, and adult-onset blindness. Measuring the prevalence of diabetes in a population is important in assessing the overall health of the population.

Figure 13: Percent of Adults Diabetic
Diabetic screenings are an important part of disease management. By regularly monitoring an individual’s diabetes, poor health outcomes and premature mortality can be avoided. The diabetic screening percentage below measures the percent of diabetic Medicare patients whose blood sugar control was screened in the past year. This is considered to be the standard of care for diabetes.

Figure 14: Diabetic Screening

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**Adult Obesity**

Adult obesity is important because obesity increases the risk of many other health conditions. These conditions include Type 2 diabetes, cancer, hypertension, heart disease, stroke, and more. Monitoring and improving obesity rates have the ability to have substantial impact on the health of a particular community.
Mental Health
Mental health disorders are one of the leading causes of disability. Mental illness can have a profound impact on the health of a population. Managing mental illnesses is vital to ensure a community is able to function appropriately and positively impact society. According to the National Institute of Mental Health, almost 13 million people suffer from mental illness in a given year. Mental health and physical health are interconnected. A person with mental illness can suffer from many other health problems if their mental state is not in a positive place. Mental health is an area in need of attention to help ensure all members of society are functioning at their highest level and contributing to the overall benefit of society. Healthy People 2020 has included mental health in its focus and has made it a priority for people to be aware of mental health.

Figure 16: Mental Health Factors

<table>
<thead>
<tr>
<th></th>
<th>Grundy County</th>
<th>State Median</th>
<th>National (top 10%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to Mental Health Providers</td>
<td>797:1</td>
<td>632:1</td>
<td>386:1</td>
</tr>
<tr>
<td>Poor Mental Health Days (per 30 Days)</td>
<td>3.2</td>
<td>3.8</td>
<td>2.3</td>
</tr>
</tbody>
</table>
Health Behaviors
The behaviors of a particular community are essential to assessing the overall health of the population. People who do not adopt healthy behaviors are at an increased risk for other health problems. Human behaviors have a direct impact on health outcomes. A large percent of preventable deaths are attributed to risky behaviors such as smoking, unhealthy diets, and risky sexual behavior. There are a multitude of factors influencing a change in behavior, including structural, educational, and environmental factors.

Figure 17: Health Behaviors

<table>
<thead>
<tr>
<th></th>
<th>Grundy County</th>
<th>State Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult Smoking</td>
<td>24.4%</td>
<td>22.6%</td>
</tr>
<tr>
<td>Food Environment Index</td>
<td>6.7</td>
<td>7.0</td>
</tr>
<tr>
<td>Physical Inactivity</td>
<td>28%</td>
<td>26%</td>
</tr>
<tr>
<td>Teen Pregnancy Rate</td>
<td>54</td>
<td>40</td>
</tr>
<tr>
<td>Sexually Transmitted Infections (Chlamydia) Per 100,000 population</td>
<td>348</td>
<td>462</td>
</tr>
</tbody>
</table>

Access to Care
Access to Primary Care Physicians
Primary care physicians include M.D.’s and D.O.’s under the age of 75. Primary care specialties include general practice medicine, family medicine, internal medicine, and pediatrics. This measure indicates not only financial access but also physical access to providers. The goal of increased access to primary care physicians is to reduce utilization of unnecessary services. There has been clear evidence of unnecessary utilization associated with specialist visits. An appropriate availability of primary care physicians is essential in order to provide referrals to appropriate levels of care for patients. Appropriate access to primary care can help reduce the hospital readmission rates as well because patients receive the right care at the right time. The Healthy People 2020 initiative for Adults with Health Insurance and children with health insurance is 100%.

Figure 18: Access to Care

<table>
<thead>
<tr>
<th></th>
<th>Grundy County</th>
<th>State Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Care Physician Ratio</td>
<td>5,169:1</td>
<td>1,439:1</td>
</tr>
<tr>
<td>Uninsured Adults</td>
<td>22%</td>
<td>19%</td>
</tr>
<tr>
<td>Uninsured Children</td>
<td>8%</td>
<td>7%</td>
</tr>
</tbody>
</table>
National Priorities
Healthy People 2020
The Healthy People 2020 initiative identifies 10-year national objectives to improve the health of the United States population. According to the United States Department of Health and Human Services, the mission of Healthy People 2020 is to strive to:

- Identify nationwide health improvement priorities.
- Increase public awareness and understanding of the determinants of health, disease and disability, and the opportunities for progress.
- Provide measurable objectives and goals that are applicable at the national, state, and local levels.
- Engage multiple sectors to take actions to strengthen policies and improve practices that are driven by the best available evidence and knowledge.
- Identify critical research, evaluation, and data collection needs.

This mission is achieved through the development of Leading Health Indicators (LHIs). The United States Department of Health and Human Services developed an LHI framework that analyzes both determinants of health and health disparities and health across the life stages. The Healthy People 2020 LHIs include the following:

- Access to health services
- Clinical preventive services
- Environmental quality
- Injury and violence
- Maternal, infant, and child health
- Mental health
- Nutrition, physical activity, and obesity
- Oral health
- Reproductive and sexual health
- Social determinants
- Substance abuse
- Tobacco
Summary of Findings
Community Health Needs

Priority 1: Access to Care

Overview
Access to care is a national and local priority through the Healthy People 2020 initiative. Insufficient access to health services can be caused by many different issues including: lack of insurance, underinsurance, primary care provider availability, provider quality, and costs of care. Access to primary care providers and/or a health center has a major impact on individual health. Adequate access to both primary and specialty care is of even more importance to individuals with chronic conditions such as cancer and heart disease. Individuals with access to care are more likely to receive preventive care that improves quality of life and helps detect and manage chronic conditions.

Prevalence
In Grundy County, 78% of adults and 92% of children have health insurance. Healthy People 2020 has a goal of 100% health insurance coverage for adults and children.

Poverty rates in Grundy County are also an area of concern because of the financial costs of health care. Many individuals will forego medical care if they are unable to afford services. In 2013, 15.7% of the population or 1,573 persons in Grundy County were at or below the FPL. A better indicator of overall numbers of individuals that are struggling financially is to look at the population at or below 200% the FPL. In 2013, 42% of the population or 4,260 persons in Grundy County were at or below 200% of the FPL. These indicators are relevant because poverty creates barriers to access including health services, healthy food, and other necessities that contribute to poor health status.

Impact
Access to primary care providers and available health facilities has a major impact on individual health. People without access to health insurance are less likely to receive routine checkups and preventive health care, exacerbating chronic or untreated illnesses and increasing the overall costs to the health system. Regular and reliable access to care can prevent disease, detect illness, increase quality of life, and increase life expectancy.
Priority 2: Increased Access to Physical Activity and Nutrition

Overview
Grundy County demonstrated a need for increased physical activity and nutrition for the community as a whole. Physical activity and nutrition play a vital role in the overall health of members of a community, and Grundy County demonstrated a need to improve on a few areas in order to help improve the health of the population in the future. The county as a whole has failed to improve on measures such as obesity, physical inactivity, and diabetes.

Prevalence
Physical Activity/Nutrition – The chart below shows the physical activity indicators as well as the nutrition factors for Grundy County in comparison to the state median value. These values demonstrate some needs for Grundy County in terms of availability of health food options for the members of the community.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Grundy County</th>
<th>State Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Inactivity</td>
<td>28%</td>
<td>26%</td>
</tr>
<tr>
<td>Access to Exercise Opportunities</td>
<td>48%</td>
<td>77%</td>
</tr>
<tr>
<td>(population who live close to park/rec facility)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food Insecurity</td>
<td>14%</td>
<td>17%</td>
</tr>
<tr>
<td>(percent of population)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limited Access to Health Foods</td>
<td>13%</td>
<td>6%</td>
</tr>
</tbody>
</table>

Diabetes – In Grundy County, 10% of adults over the age of 18 have been diagnosed with diabetes. While this is less than the Missouri average of 11%, the risk of getting diabetes can increase as physical inactivity and nutrition statistics become worse.

Obesity/Overweight – In Grundy County, the percent of adults who are obese (BMI > 30) and adults who are overweight have both been increasing over time. The obesity percentage is above the state average, and represents an area of concern for the county as a whole.
Figure 21: Adult Obesity

**Impact**

Physical Activity/Nutrition – Decreased physical activity has been related to several disease conditions such as Type 2 diabetes, hypertension, cardiovascular disease, cancer, stroke, and premature mortality. Lack of physical activity can be attributed to 11% of premature deaths in the United. Nutrition is imperative to maintaining a healthy community as well. Food insecurity and low access to healthy food will leave the community at an increased risk for adopting unhealthy lifestyle choices and lacking proper nutrition on a daily basis. People who live further away from grocery stores are more likely to choose to eat at fast food restaurants, which can lead to higher incidences of obesity and obesity-related health problems. Physical exercise and proper nutrition are both imperative in order to help improve the health of the community as a whole.

Diabetes – Poor nutrition and a lack of physical activity can lead to diabetes. Diabetes is the eleventh leading cause of death in Grundy County, and ranks in the top ten of leading causes of death nationally. Diabetes can lead to many other medical complications including blindness, end-stage renal disease, and possible amputation. According to the American Diabetes Association, diabetes accounts for roughly $176 billion in direct medical expenditures.

Obesity/Overweight - Adult obesity is important because obesity increases the risk of many other health conditions. These conditions include Type 2 diabetes, cancer, hypertension, heart disease, and stroke. Monitoring and decreasing obesity rates can have substantial positive impact on the health of a particular community.
Priority 3: Behavioral Health Care

Overview
Behavioral health care is a term which refers to a continuum of services for individuals at risk of, or suffering from, mental, behavioral, or addictive disorders. These disorders are health conditions characterized by alterations in thinking, mood, or behavior (or some combination thereof), and associated with distress and/or impaired functioning. These disorders cause a host of problems that may include personal distress, impaired functioning and disability, pain, or death.

Prevalence
The burden of mental illness is among the highest of all diseases, with roughly one-fourth of adults and one-fifth of children having a mental health disorder in the past year.

Primary data sources identified behavioral health needs as high priority for the community. Additionally, interviews with Wright Memorial Hospital and the Grundy County Health Department staff identified behavioral health as a common secondary diagnosis to multiple acute episodes.

Impact
Unfortunately, comorbidity between mental and medical conditions is the rule rather than the exception. One nationally representative epidemiological survey shows 68% of people with a diagnosed mental disorder report having at least one general medical disorder and 29% of people with a medical disorder had a comorbid mental health condition. Data from analyses of Medicaid claims indicate that more than half of disabled Medicaid enrollees with psychiatric conditions also had claims for diabetes, heart disease or pulmonary disease, substantially higher than rates of these illnesses among persons without psychiatric conditions (Druss and Walker, 2011). Consequently, the impact of the need for more behavioral health care affects the biomedical needs of the Grundy County community as well.
Priority 4: Smoking Cessation

Overview
Smoking remains the leading preventable cause of premature disease and death in the United States. The chemicals and chemical compounds in tobacco smoke are carried in the blood to all parts of the body. Smoking can cause cancer, heart attack, stroke, asthma attacks, COPD, emphysema, and chronic bronchitis among other conditions.

Exposure to secondhand tobacco smoke has also been linked to cancer, respiratory and cardiovascular diseases, and to adverse effects on the health of infants and children.

Prevalence
Despite decades of warnings on the dangers of smoking, nearly 42 million adults and more than 3.5 million middle and high school students continue to smoke cigarettes. Significant disparities in tobacco use persist among certain racial/ethnic populations, and among groups defined by educational level, socioeconomic status, and geographic region. The majority (88%) started smoking before 18 years of age, and nearly all first use of cigarettes occurs before 26 years of age (USDHHS 2014).

In Grundy County, approximately 24.4% of the population self-report currently smoking cigarettes some days or every day. This is higher than the state average of 22.6%, and significantly higher than the national average of 17.84%.

Figure 22: Adult Smoking

<table>
<thead>
<tr>
<th>Report Area</th>
<th>Total Population Age 18</th>
<th>Total Adults Regularly Smoking Cigarettes</th>
<th>Percent Population Smoking Cigarettes (Crude)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grundy County, MO</td>
<td>7,796</td>
<td>1,902</td>
<td>24.4%</td>
</tr>
<tr>
<td>Missouri</td>
<td>4,532,155</td>
<td>1,024,267</td>
<td>22.6%</td>
</tr>
<tr>
<td>United States</td>
<td>232,556,016</td>
<td>41,491,223</td>
<td>17.84%</td>
</tr>
</tbody>
</table>

Impact
A conclusive body of evidence exists showing the adverse impact of tobacco use on human cells and organs and on overall health. Health statistics show that all populations are affected.

In addition to the impact that smoking has on health and well-being, the United States pays enormous financial costs because of smoking. Productivity losses from premature death alone now exceed $150 billion per year. Additionally, the value of lost productivity due to premature deaths caused by exposure to secondhand smoke is now estimated to be $5.6 billion per year. The annual costs of direct medical care of adults attributable to smoking are now estimated to be over $130 billion.