

Addendum to 2009 Jefferson County Health Department Health Assessment

Racial/Ethnic Composition of Population:

According to the 2007 American Community Survey, three races comprise the majority of the population in Jefferson County. These races are Caucasian (97%), African American (1%), and Hispanic (1%). Other racial and ethnic groups make up a small portion of the population (<1%).

Medicaid:

According to data from the 2003-2007 Missouri Department of Health and Senior Services Health and Preventive Practices Community Data Profile, 9.7% of Jefferson County residents in 2007 had no health care coverage, while the same rate for Missouri was significantly higher at 14.7%. A comparison of the data shows that, while the Jefferson County rate of no health care coverage may be lower than Missouri's rate, there is still a large portion of Jefferson County residents (1 in 10) without health care coverage. This limits residents' access to healthcare, especially preventive medicine. According to the 2008 Medicaid Participation Community Health Profile by the Missouri Department of Health and Senior Services, the rate for Jefferson County's Medicaid participation was 10.4%, which is 31.6% lower than Missouri's rate of 15.2%.

Poverty:

According to the Missouri University Extension Social and Economic Profile of Jefferson County, the percentage of residents below the poverty rate in 2007 was 9.1%, while the Missouri rate was 13.3%.

Employment:

According to data from the Missouri University Extension Social and Economic Profile of Jefferson County, the number of employed residents in 2007 was 77,072. The unemployment rate for Jefferson County was 8.2%, while the Missouri rate was 7.0%. The largest employment sector for Jefferson County workers was construction, which differed from Missouri and its largest workforce category, retail trade. In the same Social and Economic Profile, it was shown that 65.0% of Jefferson County employed residents worked outside of the county, and over 51% had a commute of over 30 minutes to work.

Life Expectancy:

According to the United States Census, the average life expectancy of a person living in Jefferson County is 75.4 years, which is slightly lower than Missouri's average life expectancy of 76.8 years.

Hospitalization Rates:

The first category of hospitalizations analyzed was preventable hospitalizations. The age adjusted rate of preventable hospitalizations in 2007 was 135.9. The rate has risen over the last twelve years of available data. The most common diagnosis for these preventable hospitalizations was dehydration. The second most common was bacterial pneumonia. The next category of hospitalizations looked at was emergency room admissions. The age adjusted rate of emergency room admissions in 2006 was 240.7 per 1,000 people. The single largest cause of

admission was injury or poisoning, with the second leading cause being a respiratory (throat or lung) issue. The last category of hospitalizations assessed was hospital discharges. In 2006, the age-adjusted rate of hospital discharge for all diagnoses was 1,313.2 per 10,000 residents. Heart/circulation issues were the most common diagnoses for hospital discharges, occurring at an age-adjusted rate of 269.7 per 10,000. The next leading cause of hospital discharge was issues with the digestive system. (Missouri Information for Community Assessment)

Leading Causes of Injury:

The rate of all injuries in Jefferson County has steadily decreased since 2000. In 2000, the rate of injury was 11,507.5 per 100,000, higher than the most recent rate (2006) of 8,206.1 per 100,000. In 2006, the most recent data available, the three leading causes of injury were falls/jumps (28.6%), struck by/against by blunt object or fighting (16.1%), motor vehicle traffic (13.4%). (Missouri Information for Community Assessment)

Leading Causes of Death:

According to the Missouri Department of Health and Senior Services (DHSS), the leading cause of death in Jefferson County is heart disease. Heart disease was the cause of death for 5,046 Jefferson County residents during 1997-2007, with an age-adjusted rate of 307.1 deaths per 100,000 residents. This rate was 16.9% higher than the Missouri state rate. Cancer was the number two cause of death for residents, killing 4,004 people during 1997-2007. Lung cancer was the most prevalent form of cancer, killing 1,453 residents at an age-adjusted rate of 77.1, much higher than that of the state. Smoking attributable deaths were the third leading cause of death, with an age adjusted rate of 181.5 deaths per 100,000, significantly higher than the state average. All injuries, poisonings, and unintentional injuries were the fourth and fifth leading causes of death. Other significant causes of death for Jefferson County residents were stroke/cerebrovascular disease and chronic lower respiratory disease. The following table lists the top seven causes of death, number killed between 1997-2007, age-adjusted county rate, and age-adjusted state rate.

| Cause of Death | Number of People Killed | Age-adjusted county rate | Age-adjusted state rate |
|-----------------------------------|-------------------------|--------------------------|-------------------------|
| Heart Disease | 5,046 | 307.1 | 262.7 |
| Cancer | 4,004 | 216.4 | 202.6 |
| Smoking Attributable | 3,288 | 181.5 | 155.6 |
| All Injuries and Poisonings | 1,488 | 72.9 | 66.0 |
| Unintentional Injuries | 1,071 | 54.1 | 44.0 |
| Stroke/Cerebrovascular Disease | 994 | 62.1 | 58.3 |
| Chronic Lower Respiratory Disease | 952 | 56.5 | 47.2 |

The behavioral risks and age groups associated with the leading health problems are outlined in the “Leading Health Problems, Behavioral Risks, and Age Groups Most at Risk Report,” which is located in Essential Service #1, Performance Standard 5, Performance

Measure A. Smoking cigarettes and obesity/physical inactivity/poor diet were the two main behavioral risks associated with the leading health problems for Jefferson County. Middle school and high school students are most at risk for beginning these habits and middle age and elderly men are the highest group at risk for death from these issues. DHSS

Leading Health Problems:

The leading health problems identified in Jefferson County were heart disease, lung cancer, and chronic lower respiratory disease (CLRD). There are associated behavioral risk factors with these diseases in Jefferson County.

Heart disease was the cause of death of 5,046 Jefferson County residents during 1997-2007. The age adjusted rate of heart disease caused deaths was 307.1 per 100,000 residents, which is significantly statistically higher than the state rate of 262.7. The county rate is 16.9% higher than the state rate.

Lung cancer is another major health concern for Jefferson County residents. Lung cancer killed 1,453 residents during 1997-2007. The Jefferson County age adjusted rate of lung cancer caused deaths was 22.38% higher than the Missouri state rate.

The third major health issue in Jefferson County is chronic lower respiratory disease (CLRD). CLRD caused 952 deaths in Jefferson County during 1997-2007. The age adjusted rate for CLRD deaths per 100,000 residents in Jefferson County was 56.5, which is 19.7% higher than the state age-adjusted rate. CLRD is comprised of three diseases – chronic bronchitis, emphysema, and asthma. 80% of all cases of chronic bronchitis or emphysema are attributed to tobacco smoking. DHSS

Behavioral Risk Factors:

According to data compiled by the Missouri Department of Health and Senior Services County Data Profiles, the leading health problems in Jefferson County are heart disease, lung cancer, and chronic lower respiratory disease (CLRD).

Heart disease was the cause of death of 5,046 Jefferson County residents from 1997-2007. The age adjusted death rate for heart disease was 307.1 per 100,000 residents, which when compared to the state rate of 262.7, is statistically significantly higher. The county rate is 16.9% higher than the state rate. Behavioral risk factors for heart disease include obesity, lack of exercise, alcohol use, cigarette smoking, and diet. With regards to obesity, 34.1% of Jefferson County residents were found to be overweight (BMI 25.0-29.9) and 30.3% were found to be obese (BMI > 30.0). These figures are comparable to the state average. Another behavioral risk factor for heart disease is a lack of physical activity. Jefferson County residents who did not participate in leisure time physical activity represented 23.4% of the population, which was slightly lower than the state average. Diet is another risk factor for heart disease and is associated with other behavioral risk factors. Eighty percent (80%) of Jefferson County residents do not eat at least five servings of fruit and vegetables a day, which is 4.86% higher than the state rate during the same time. The final behavioral risk factor for heart disease is smoking. Twenty-four (24%) of Jefferson County residents report that they currently smoke cigarettes. The behavioral risk factors of obesity, poor diet, lack of exercise, and smoking have contributed to a high rate of heart disease in Jefferson County.

Lung cancer is a significant health concern for Jefferson County residents. Lung cancer was the cause of death for 1,453 residents during 1997-2007. The Jefferson County age adjusted death rate for lung cancer was 22.38% higher than the Missouri state rate. The main behavioral

risk factor associated with lung cancer is tobacco use. In 2007, twenty-four (24%) of Jefferson County residents reported to currently smoking cigarettes. The rate of lung cancer deaths for Jefferson County has remained significantly higher than the state rate since 1991 though. Both rates have declined over that period. This analysis demonstrates that cigarette smoking, a major behavioral risk factor for Jefferson County residents, is a risk to the population and is a factor in many of the leading health issues in the county.

The third major health issue in Jefferson County is chronic lower respiratory disease (CLRD). CLRD caused 952 deaths in Jefferson County during 1997-2007. The age adjusted death rate for CLRD deaths per 100,000 residents in Jefferson County was 56.5, which is 19.7% higher than the state age-adjusted rate. CLRD is comprised of three diseases – chronic bronchitis, emphysema, and asthma. Eighty percent (80%) of all cases of chronic bronchitis or emphysema are attributed to tobacco use. Therefore, tobacco use is a major behavioral risk factor for CLRD. As stated above, 23.7% of Jefferson County residents were found to smoke. In 2007, 19.4% of Jefferson County residents who work indoors were exposed to second hand smoke within the last week and 16.2% of Jefferson County residents were exposed to second hand smoke at home during the last week.

Upon analysis of the behavioral risk factor data for Jefferson County, two main behavioral risks were evident. The first was the health risk associated with a sedentary lifestyle and poor diet. It was reported that 64.4% of Jefferson County residents are obese or overweight (BMI > 25.0). With regards to physical activity, 23.4% of residents responded that they do not participate in physical activity during their leisure time. Finally, in relation to diet, 79.8% of residents reported not eating at least five servings of fruit and vegetables per day.

The second major behavioral risk factor is cigarette smoking. As stated above, 23.7% of residents reported smoking cigarettes, and 27.8% reported being a past smoker. This indicates that 51.5% of Jefferson County residents have either smoked or currently smoke, resulting in elevated risks for lung cancer, heart disease, and chronic lower respiratory disease. The number of smoking-attributable deaths in Jefferson County during 1997-2007 was 3,288. This was an age-adjusted rate of 181.5, which is 16.65% higher than the age-adjusted state rate. Also, 19.4% of Jefferson County residents who work indoors were exposed to secondhand smoke in the last week, and 22.8% of residents report living with someone who smokes.

Therefore, the two behavioral risk factors identified in Jefferson County that contribute to the leading health problems in the community are obesity/poor nutrition/physical inactivity and cigarette smoking.

Specific age groups are at a higher risk for these behavioral risk factors. Research indicates that many smokers begin smoking during their middle school and high school years. Jefferson County students are at a high risk for developing the behavioral risk of smoking cigarettes, especially due to the social norms about smoking in rural communities. The health effects of the behavioral risk of smoking cigarettes will affect middle-age populations and the elderly most highly. The issues related to obesity/physical inactivity/poor nutrition affect all age groups and both genders fairly equally.

References

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