

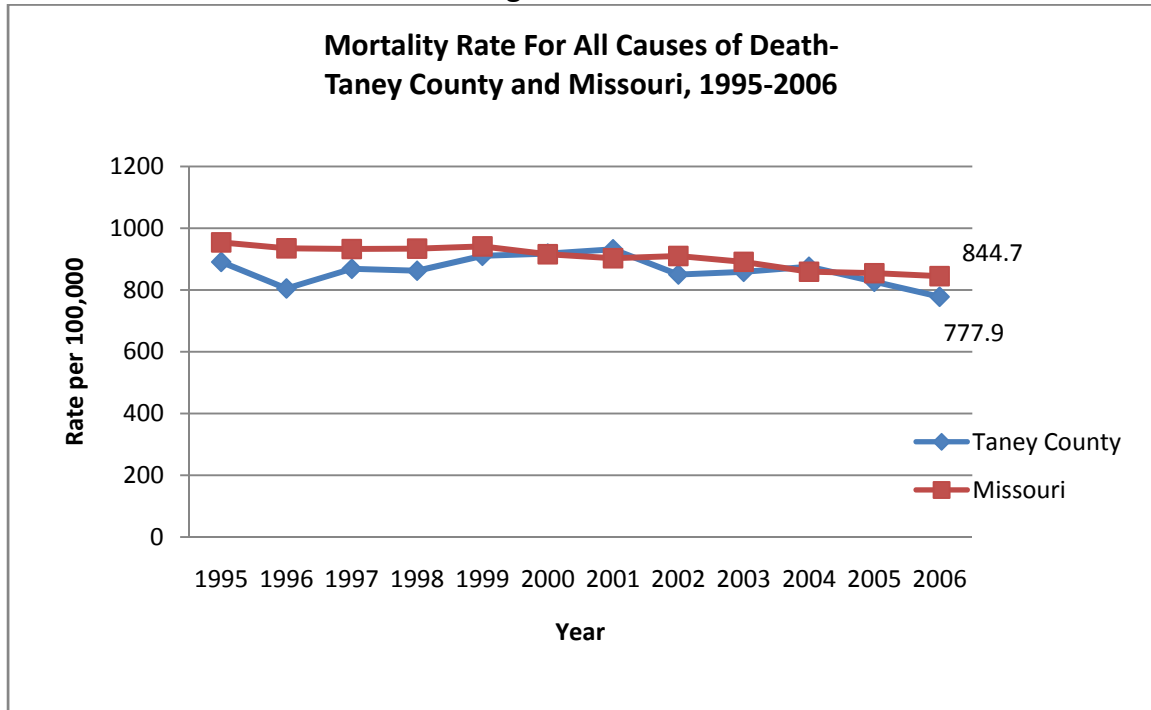
Chapter 5

Chronic Disease Issues

Chronic Disease Mortality

Figure 5.1 demonstrates that the mortality rates for all causes of death in Taney County and Missouri. The graph shows that the mortality rate has been slightly lower in Taney County as compared to Missouri.

Figure 5.1



Source: Missouri Department of Health and Senior Services, MICA

Table 5.1

Number of Deaths, By Age For All Causes of Death- Taney County, 2000-2006		
Age	All	Rate
Under 15	36	66.8
15 to 24	38	93.3
25 to 44	142	189.1
45 to 64	560	771.9
65 and Over	2,219	4,621.50
All Ages	2,995	859.1

Source: Missouri Department of Health and Senior Services

Table 5.1 illustrates the number of deaths for the residents of Taney County by age. The mortality rate in Taney County during the time period was 859.1 per 100,000 population.

Table 5.2 shows the profile of chronic diseases in Taney County, 1994-2004 in comparison to the state adjusted rate. Taney County had several rates for hospitalizations and emergency room visits that were higher than the state rate.

Table 5.2

Chronic Disease Profile for Taney County Residents, 1994-2004				
	Number of Events	Age-Adjusted Rate	Significantly Different	Age-Adjusted State Rate
Heart Disease		*		
Hospitalizations	4592	188.3	H	176.6
Emergency Room Visits	3107	14.5	H	12.1
Ischemic Heart Disease		*		
Hospitalizations	819	33.5	H	30.5
Emergency Room Visits	111	0.5	L	0.8
Stroke/Other Cerebrovascular Disease		*		
Hospitalizations	918	36.6	N/S	35.1
Emergency Room Visits	227	0.9	H	0.8
All Cancers (Malignant Neoplasms)		*		
Hospitalizations	1093	44.5	N/S	44.2
Colorectal Cancer		*		
Hospitalizations	147	5.8	N/S	5.8
Lung Cancer (SEER)		*		
Hospitalizations	142	5.6	N/S	5.7
Breast Cancer		*		
Hospitalizations	111	4.5	H	3.2
Cervical Cancer		*		
Hospitalizations	41	2	H	1.1
Prostate Cancer		*		
Hospitalizations	46	1.8	L	3.1
Diabetes Mellitus		*		
Hospitalizations	261	11.8	L	17
Emergency Room Visits	266	1.2	L	1.4
Chronic Obstructive Pulmonary Disease (COPD) Excluding Asthma				
Hospitalizations	375	14.9	L	23
Emergency Room Visits	1894	9.4	H	5
Asthma		*		
Hospitalizations	180	8.3	L	13.2
Emergency Room Visits	677	3.5	L	5.5
Arthritis/Lupus		*		
Hospitalizations	996	40.5	H	34.2
Emergency Room Visits	2611	13	H	8.1

Source: Missouri Department of Health and Senior Services, Community Data Profiles
Rates per 100,000 population and are Age Adjusted to the 2000 standard population

Table 5.3 illustrates that heart diseases accounted for the highest number of deaths from 1999 to 2006 for residents of Taney County with 997 deaths. Cancer accounted for the second highest number of deaths during this period with 811 deaths, 273 of which were cancers of the lung, bronchus and trachea.

Table 5.3

Number and Rate of Resident Deaths-Taney County and Missouri, 1999-2006												
Cause of Death	Age Group: Taney County										Taney County Rate	Missouri Rate
	Under 15		15 to 24		25 to 44		45 to 64		65 and over			
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate		
All causes	40	65.5	44	95.3	160	187.4	633	771.3	2,528	4,654.2	864.7	888.9
Cancer	2	@.@	1	@.@	26	30.5	236	287.6	546	1,005.2	200.6	201.8
Trachea/bronchus/lung Cancer	0	@.@	0	@.@	6	7.0	87	106.0	180	331.4	66.4	62.7
Colon/rectum/anus Cancer	0	@.@	0	@.@	3	@.@	23	28.0	42	77.3	17.1	20.1
Breast Cancer	0	@.@	0	@.@	5	5.9	20	24.4	27	49.7	13.3	15
Prostate Cancer	0	@.@	0	@.@	1	@.@	2	@.@	34	62.6	9.1	9.3
Non-Hodgkin's lymphoma	0	@.@	0	@.@	0	@.@	5	6.1	25	46	7.3	7.8
Leukemia	1	@.@	0	@.@	1	@.@	11	13.4	20	36.8	8.4	8
Diabetes	0	@.@	0	@.@	4	@.@	10	12.2	42	77.3	14.4	25.1
Alzheimer's Disease	0	@.@	0	@.@	0	@.@	1	@.@	57	104.9	14.8	20.1
Heart Disease	1	@.@	0	@.@	26	30.5	163	198.6	807	1,485.7	251.2	259.1
Acute Myocardial Infarction	0	@.@	0	@.@	19	22.3	108	131.6	310	570.7	110.1	83.6
Cerebrovascular Disease (Stroke)	0	@.@	0	@.@	2	@.@	21	25.6	173	318.5	48.7	58.0
Atherosclerosis#	0	@.@	0	@.@	0	@.@	1	@.@	89	163.9	23.0	4.5
Chronic liver disease & cirrhosis	0	@.@	0	@.@	6	7.0	11	13.4	17	31.3	9.0	7.2

Source: Missouri Department of Health and Senior Services, Community Data Profiles
 @.@- indicates that numbers are too small for calculations.

Table 5.4 provides information on the number and mortality rates for Taney County Residents from 2000 to 2006. During this period the top three leading causes of death included heart disease, stroke and cancer. Other mortality rates that were higher than the Missouri average included deaths due to Atherosclerosis, Chronic Liver Disease, Lung Cancer, Motor Vehicle Deaths, Suicide, and Pneumonia and Influenza.

Table 5.4

Mortality Rates –Taney County, 2000-2006						
Cause of Death	Number		Rate Per 100,000			Missouri
	Male	Female	Male	Female	Total	Rate Per 100,000
Alzheimer’s	18	33	@@	15.2	14.6	20.7
Atherosclerosis	26	43	19.1	19.1	19.7	4.4
Breast Cancer	0	46	@@	24.3	13.2	15.0
Cancer	399	326	251.9	167.4	203.0	201.0
Cerebrovascular Disease (Stroke)	68	102	45.2	48.9	47.6	56.8
Chronic Liver Disease/Cirrhosis	25	5	15.7	@@	8.9	7.2
Colon/Rectum/Anus Cancer	29	28	18.4	14.5	16.2	19.8
Diabetes	26	19	17.1	@@	13.1	24.9
Heart Disease	468	415	314.3	195.8	251.0	253.6
Kidney Disease	30	33	21.1	16.6	17.7	16.9
Leukemia	21	9	14.6	@@	8.8	8.0
Motor Vehicle Accidents	56	18	39.8	@@	25.2	19.7
Pneumonia & Influenza	61	44	44.0	20.4	29.6	23.7
Prostate Cancer	33	0	21.9	@@	9.2	9.1
Suicide	33	8	22.9	@@	13.6	12.6
Trachea/Bronchus/Lung Cancer	139	109	83.5	55.4	67.9	62.8
Total Deaths	1,578	1,417	1,050.4	700.8	859.1	881.8

Source: Missouri Department of Health and Senior Services, MICA

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Table 5.5 provides a comparison of the number of preventable hospitalizations of Taney County residents by racial group.

Table 5.5

Number of Preventable Hospitalizations By Race-Taney County,1999-2006						
Diagnosis	Number			Rate Per 10,000		
	White	Black	All Races	Male	Female	Missouri Total
Asthma	197	2	205	5.7	7.2	12.9
Chronic Obstructive Pulmonary Disease	250	0	252	6.7	7.6	11.1
Congestive Heart Failure	306	1	313	12.9	9.4	10.9
Dental Conditions	13	0	13	@@	@@	0.8
Diabetes	233	0	242	9.4	8.0	9.9
Hypertension	70	0	70	2.8	1.9	2.5
Nutritional Deficiencies	21	0	25	@@	@@	0.6
All Diagnoses	3,316	13	3,422	112.0	121.1	140.1

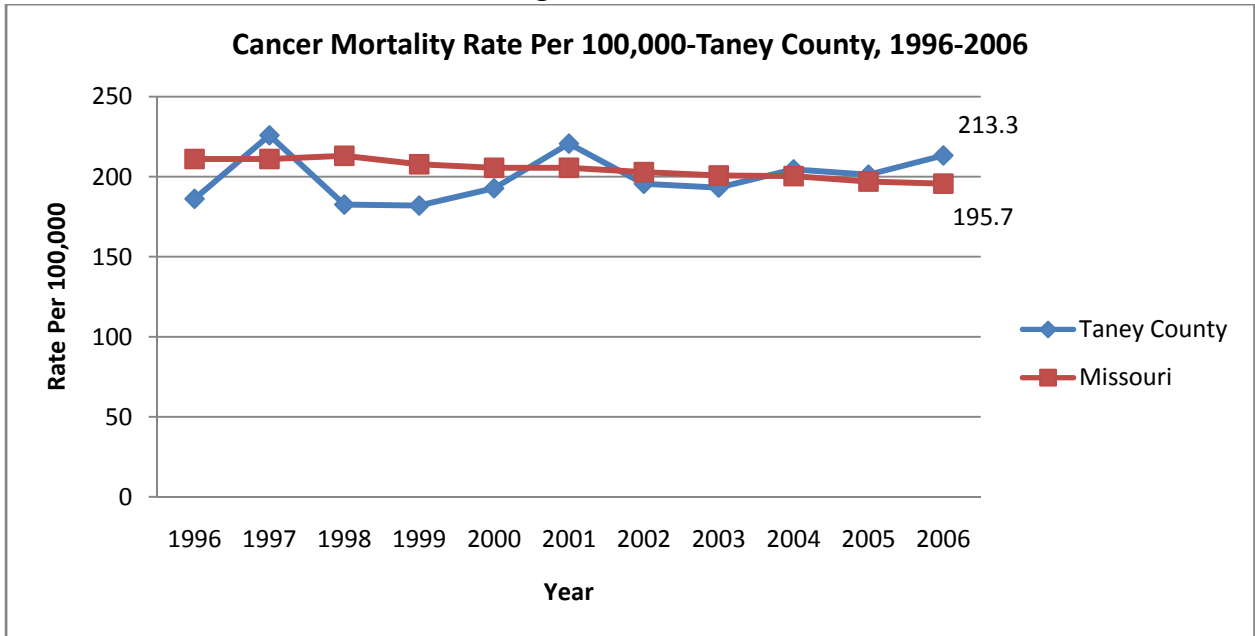
Source: Missouri Department of Health and Senior Services, MICA

@@- indicates that numbers are too small for calculations.

Figure 5.2 illustrates the cancer mortality rate in Taney County and Missouri between 1996-2006. The State has had a steady rate unlike the rates in Taney County, which has recorded a higher mortality rate than the State average between 1997-1998, and 2001-2002. The current trend shows that in 2006, the Taney County mortality rate was higher than the state rate.

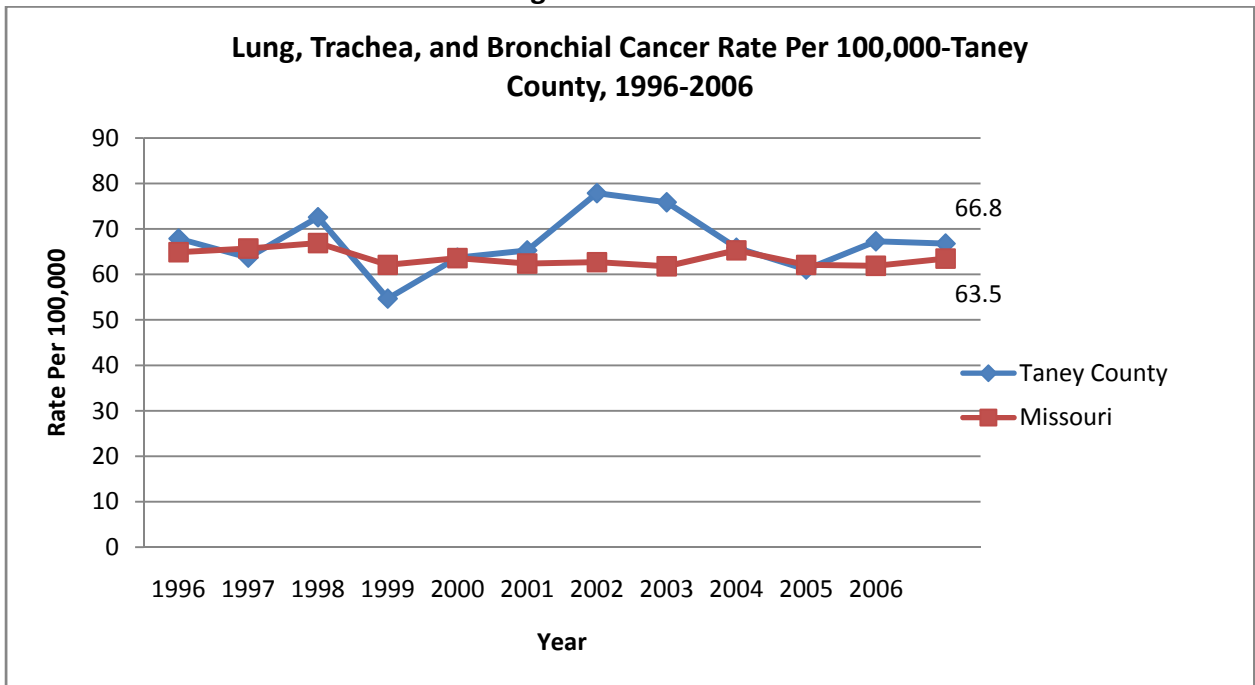
Figure 5.3 illustrates that the rate of Lung, Trachea and Bronchus cancer in Taney County and Missouri. Taney County has recorded a higher rate of these forms of cancer on several occasions in the last decade with the highest increase recorded between the years 2001-2002. In the year 2006, the rate of this form of cancer has increased above the state average.

Figure 5.2



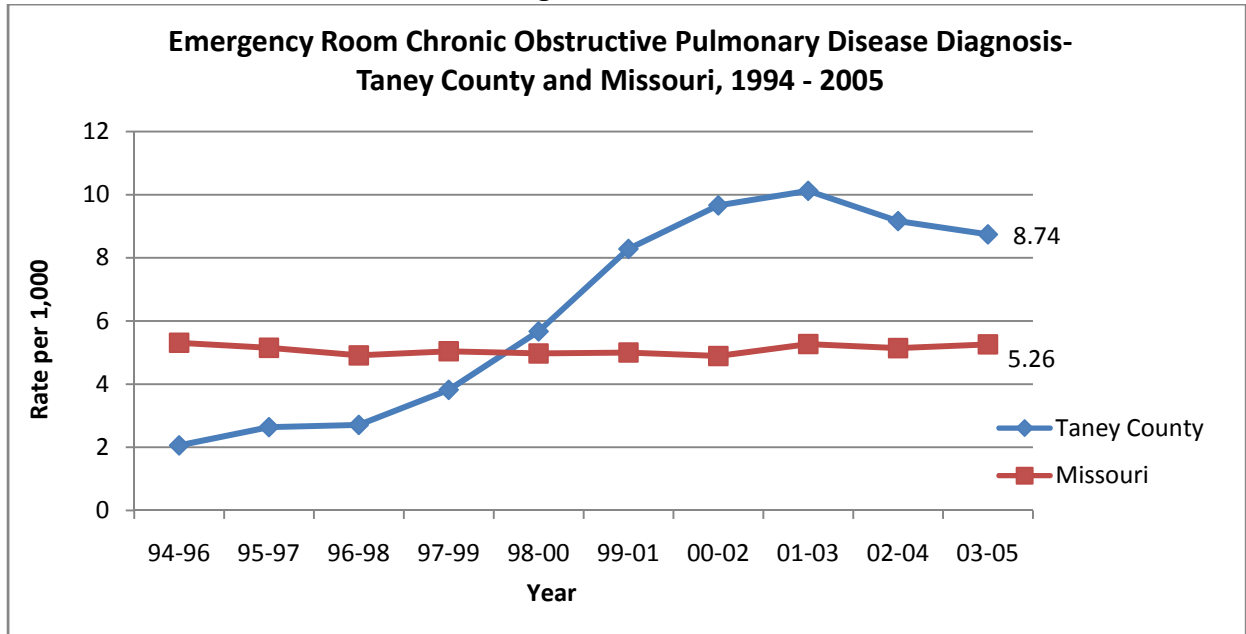
Source: Missouri Department of Health and Senior Services, MICA

Figure 5.3



Source: Missouri Department of Health and Senior Services, MICA

Figure 5.4



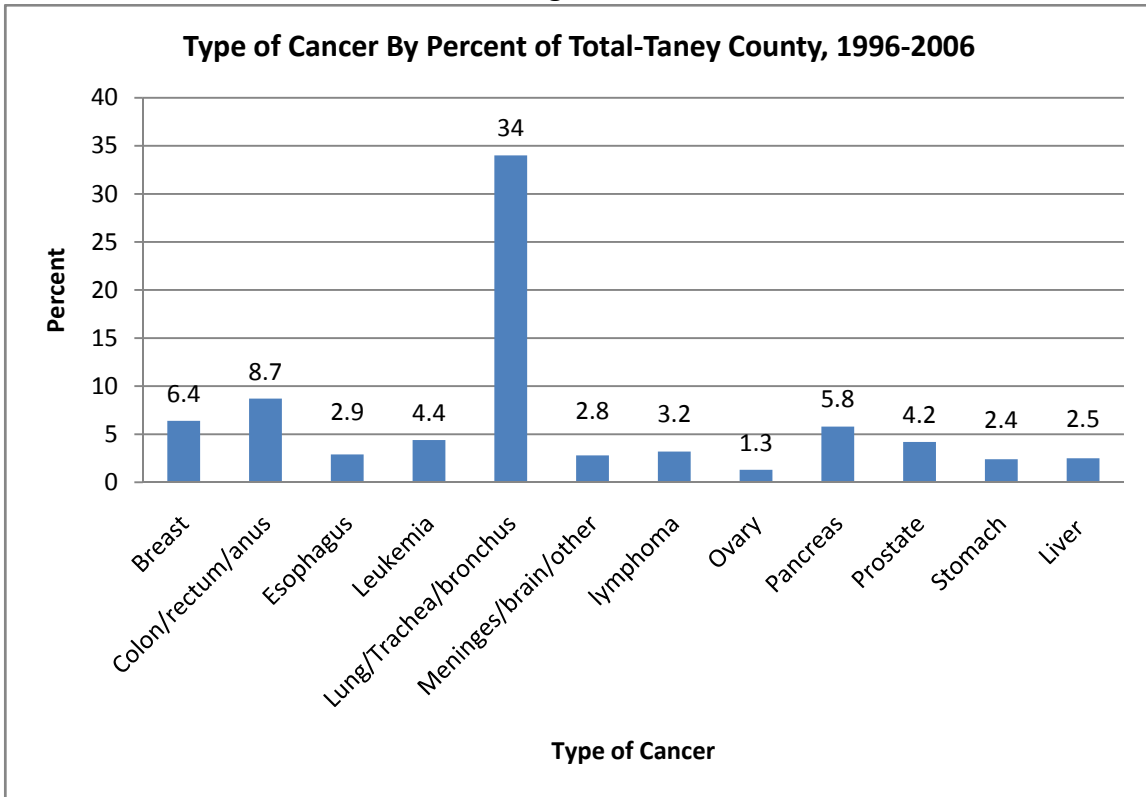
Source: Community Data Profiles

The emergency room diagnosis of COPD has increased significantly in the past few years. Figure 5.4 illustrates the trend of three year averages for Taney County as compared to Missouri. The rate in Taney County has been higher than the state rate for a few years since the year 2000.

Figure 5.5 illustrates the percent of deaths attributed to different forms of cancer in Taney County from 1996 to 2006. The graph shows that lung/trachea/bronchus cancer accounted for the highest percent of deaths with a staggering 34.0%. Ovarian cancer accounted for the lowest percentage of 1.3%.

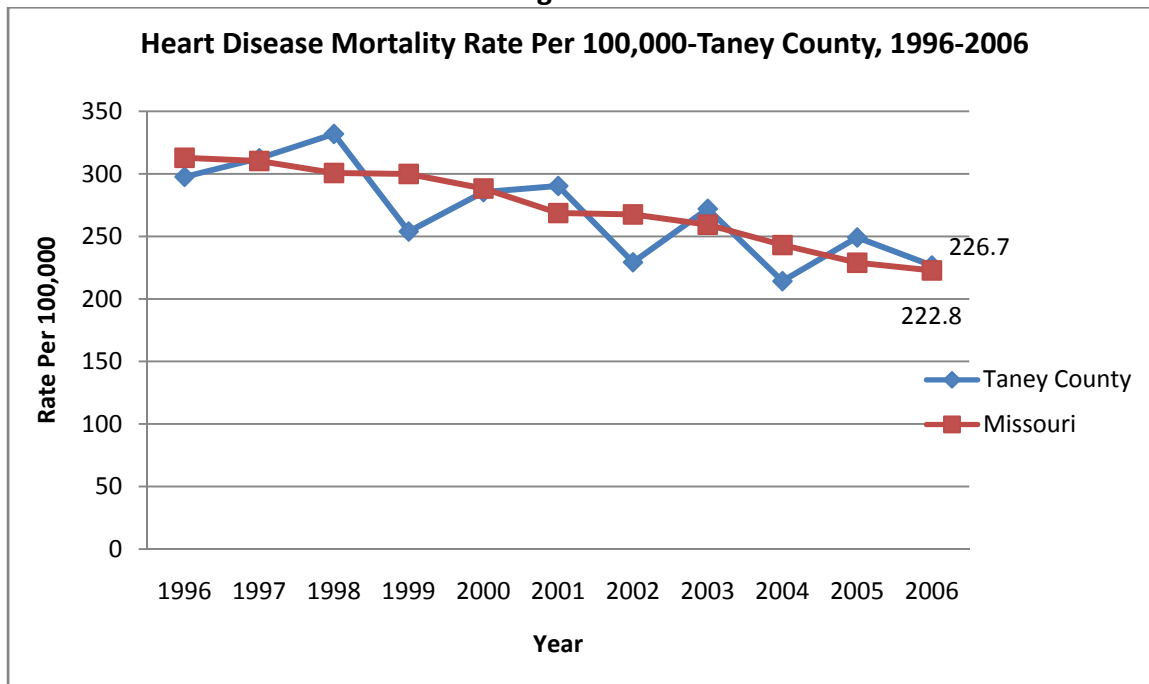
Figure 5.6 illustrates the rate of heart disease mortality in Taney County and Missouri. Since 1996, the mortality rate for heart disease in Taney County has decreased steadily as has the Missouri mortality rate.

Figure 5.5



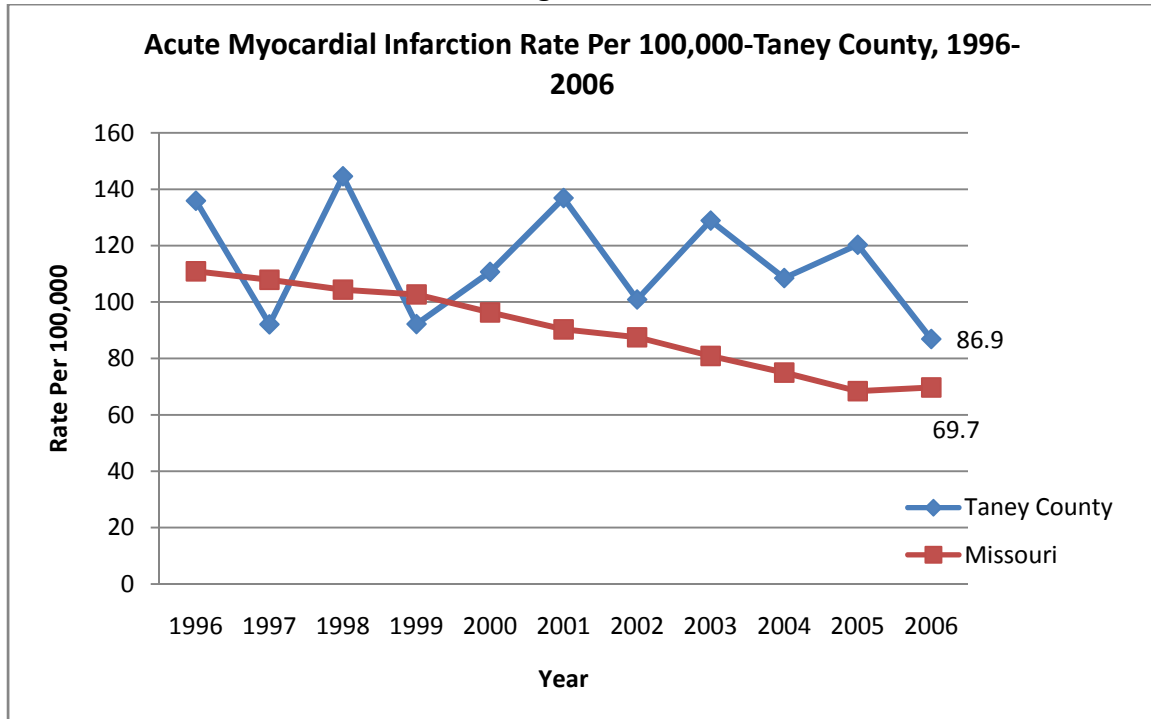
Source: Missouri Department of Health and Senior Services, MICA

Figure 5.6



Source: Missouri Department of Health and Senior Services, MICA

Figure 5.7

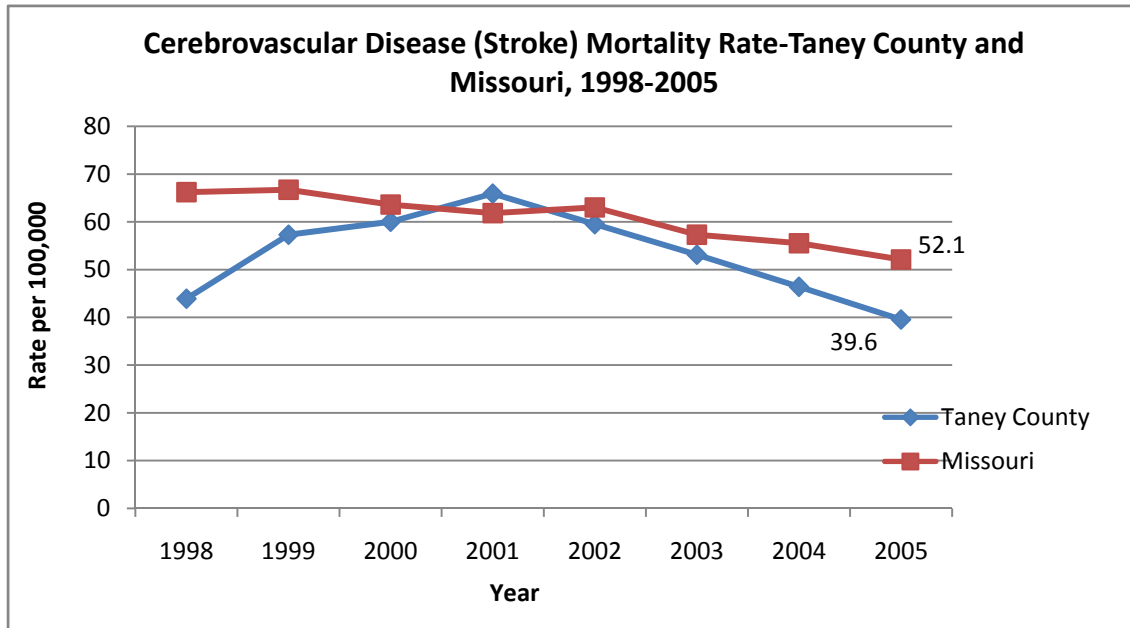


Source: Missouri Department of Health and Senior Services, MICA

Figure 5.7 illustrates the rate of Acute Myocardial Infarction in Taney County and Missouri. The graph shows that the State has experienced a steady decrease in the rate of cases reported unlike the haphazard rates recorded in Taney County. The graph reveals that the rate of cases reported in Taney County is much higher than the state average.

Figure 5.8 illustrates that the mortality rate for cerebrovascular disease (Stroke) in Taney County. There was an increase in the mortality rates in Taney County between 1998 to 2001 followed by a steady decrease through 2005. The mortality rate for cerebrovascular disease (Stroke) in Missouri experienced a steady decline overall.

Figure 5.8

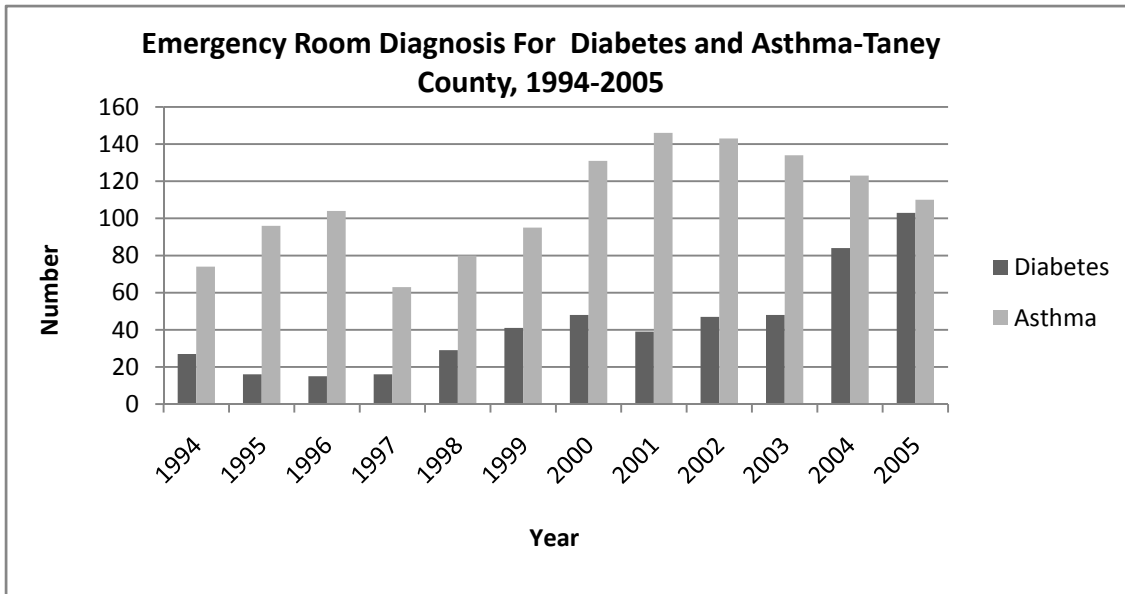


Source: Missouri Department of Health and Senior Services, MICA

Diabetes, Asthma, and Respiratory Diseases

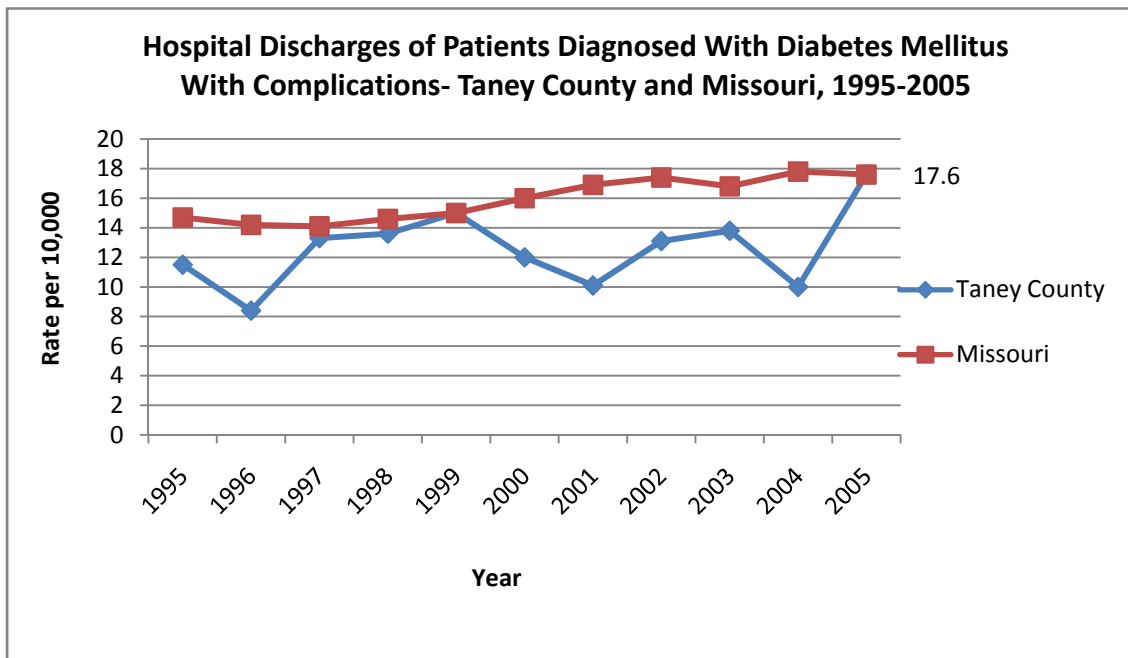
Fig 5.9 illustrates that the emergency room diagnosis for diabetes and asthma in Taney County. The graph shows that the number of cases diagnosed for asthma was more compared to the cases diagnosed for diabetes between 1994 to 2005. Based on the graph, the number of emergency room diagnosis for asthma have been declining contrary to the number of diabetes cases, which seem to be on the rise.

Figure 5.9



Source: Missouri Department of Health and Senior Services, MICA

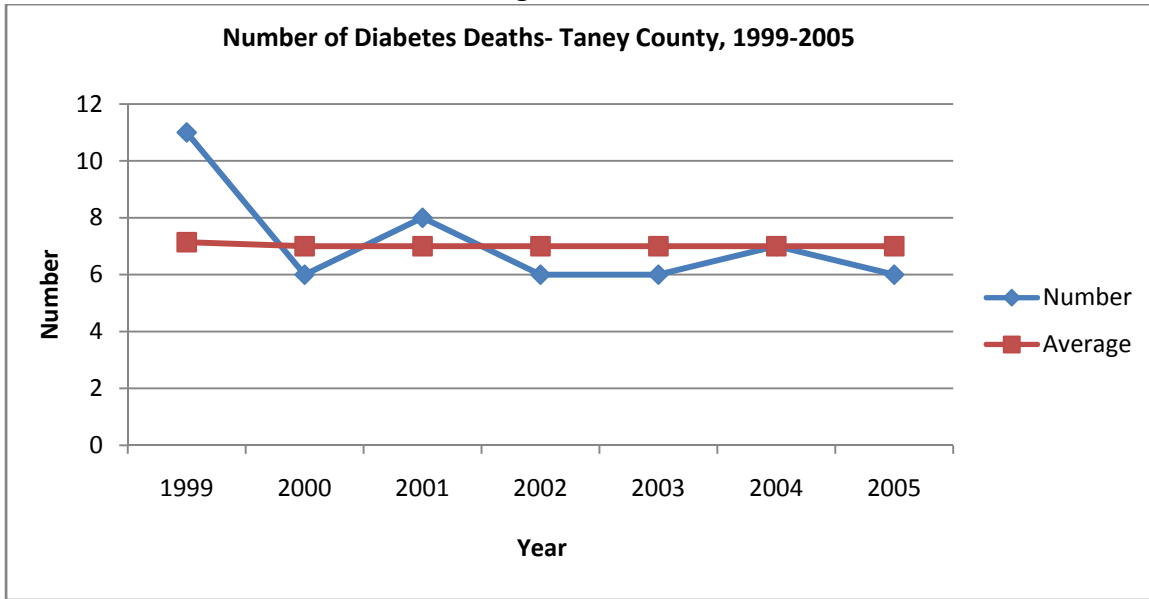
Figure 5.10



Source: Missouri Department of Health and Senior Services, MICA

Figure 5.10 displays hospital discharges of patients diagnosed with diabetes mellitus with complications in Taney County and Missouri. The graph shows that Taney has had lower hospital discharges on average for patients diagnosed with diabetes mellitus with complications compared to Missouri.

Figure 5.11



Source: Missouri Department of Health and Senior Services, MICA

Injuries

Injuries can impact the life of people by resulting in economic hardships and disabilities that can affect quality and length of life. The following charts and tables provide information on injuries that have occurred in Taney County. Table 5.6 provides data on the leading causes of injuries.

Table 5.6

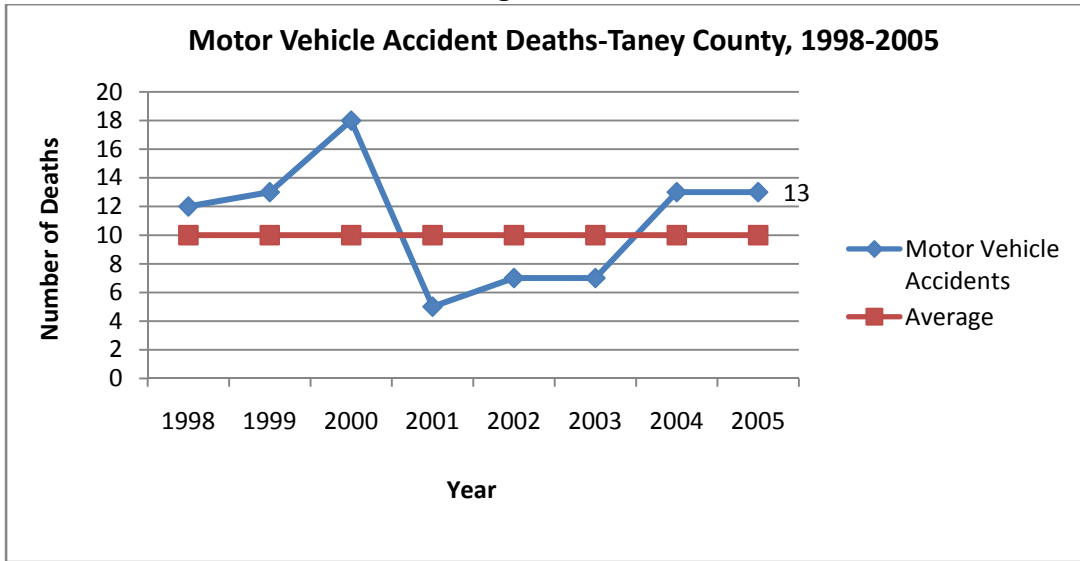
Type of Injuries By Age Group and Gender-Taney County, 2000-2006									
Type of Injury	Taney County								Missouri
	Age Groups					Total	Gender		Total
	Under 15	15 to 24	25 to 44	45 to 64	65 and Over		Male	Female	
Abuse/Neglect/Rape	44.5	@@	30.6	@@	@@	20.8	@@	30.7	42.7
Cut/Pierce	799.7	1,406.7	162.3	522.4	279.1	865.3	1,152.2	585.7	1,012.4
Fall/Jump	4,379.0	2,533.4	2,927.8	2,132.4	4,567.3	3,242.1	3,055.0	3,373.7	2,865.3
Fire/Burn	345.1	383.0	354.2	142.0	52.1	270.3	307.3	233.2	190.9
Firearm	@@	22.1	33.3	@@	@@	14.9	25.2	@@	30.4
Machinery	20.4	90.8	105.2	55.1	79.1	70.3	126.4	18.2	74.2
Motor Vehicle Traffic	731.1	3,670.1	2,208.8	1,109.6	626.9	1,657.1	1,603.3	1,708.6	1,226.3
Hot Weather	@@	34.4	33.3	16.5	16.7	21.6	30.4	@@	18.9
Dog Bites	324.7	88.4	98.5	78.6	37.5	134.3	150.0	117.8	111.9
Over-exertion	742.2	2,037.6	2,174.2	862.9	412.4	1,341.9	1,378.8	1,304.7	1,004.3
Poison/Overdose	272.8	491.0	476.6	270.2	120.8	345.4	302.7	385.2	245.0
Struck by/Against	2,959.6	3,166.8	1,959.8	798.1	501.9	1,910.2	2,396.7	1,428.0	1,744.2
All Injuries	13,842.2	17,277.5	14,512.4	7,408.9	7,828.8	12,392.4	13,350.4	11,395.3	10,738.1

Source: MO DHSS, MICA

Motor Vehicle Injuries and Deaths

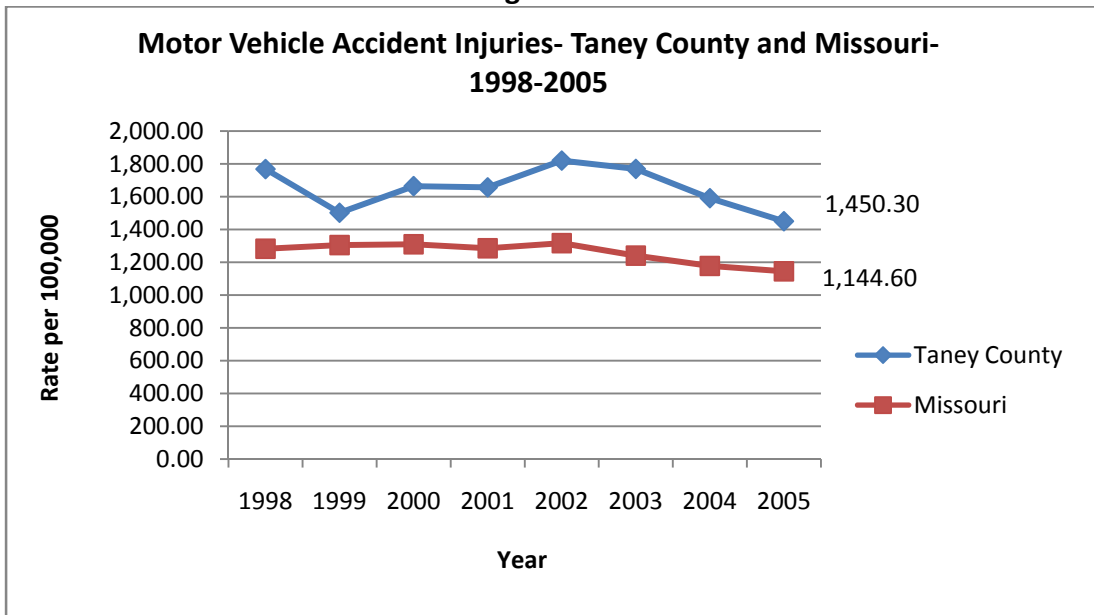
Figure 5.12 demonstrates the motor vehicle accident deaths in Taney County between 1998-2005. The graph shows that the number of deaths resulting for motor vehicle accidents in Taney County is higher than the average. From 2000 to 2001 the County recorded the sharpest decrease in the number of accident deaths reported in Taney County and then increased since then.

Figure 5.12



Source: Missouri Department of Health and Senior Services, MICA

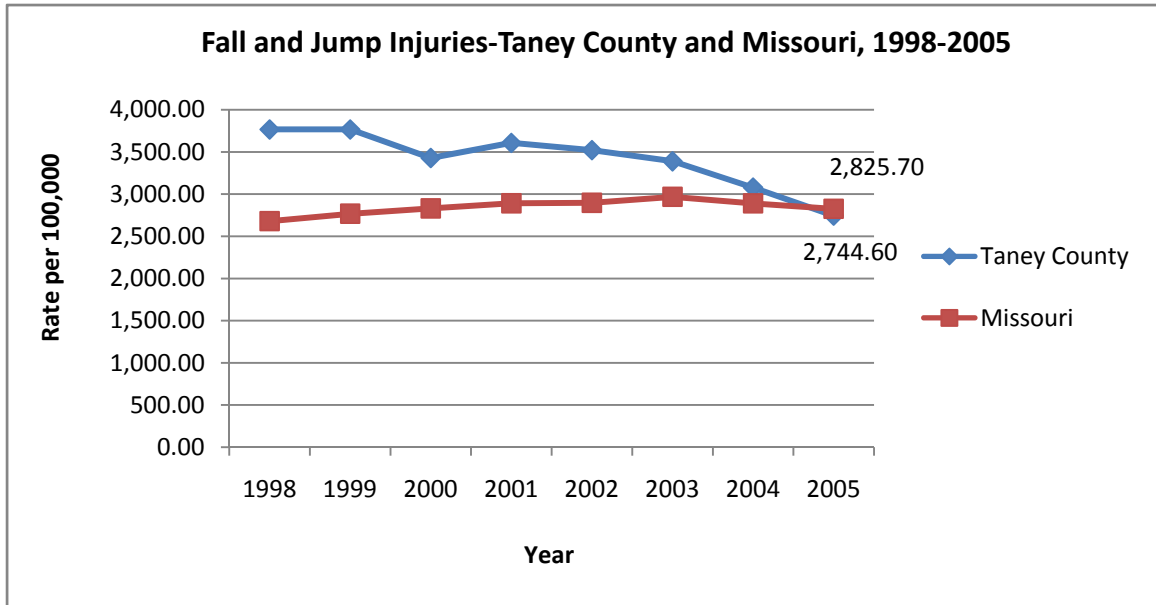
Figure 5.13



Source: Missouri Department of Health and Senior Services, MICA

Figure 5.13 illustrates motor vehicle accident injuries for Taney County and Missouri from 1998 to 2005. Taney County has a higher rate of motor vehicle accident injuries compared to Missouri based on the general trend.

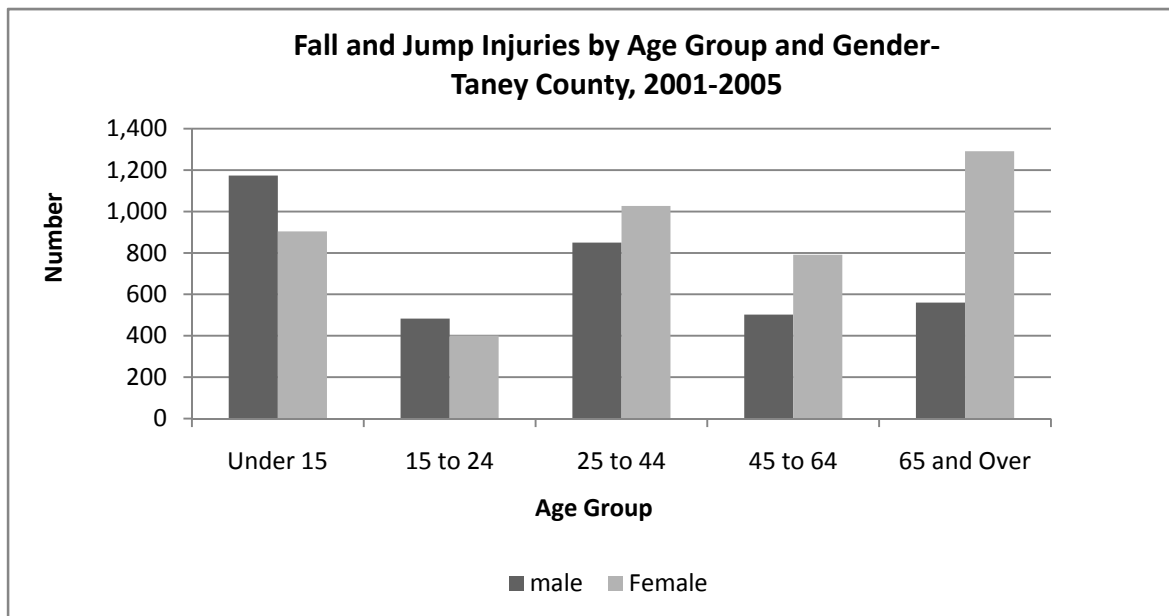
Figure 5.14



Source: Missouri Department of Health and Senior Services, MICA

Figure 5.14 examine the rate of fall and jump injuries in Taney County and Missouri from 1998 to 2005. The graph shows that the average in the number of falls and injuries in Taney County were higher compared to Missouri between 1998 to 2004. Both the County and the State recorded about the same rate of injuries in 2005. Between 2001 to 2005, Taney County recorded a steady decline in the rate of fall and jump injuries.

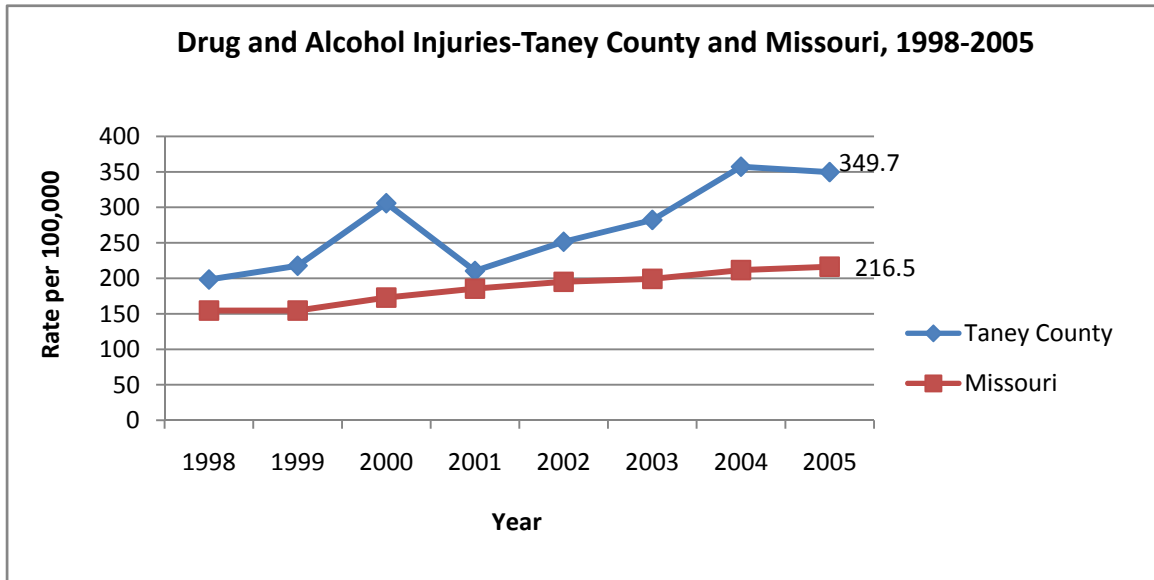
Figure 5.15



Source: Missouri Department of Health and Senior Services, MICA

Figures 5.15 examine the fall and jump injuries by age group and gender in Taney County between 2001 through 2005. The graph indicates that the group under 15 years exhibits the highest number of fall and jump related injuries in the County. Females over 65 years and over had the highest number of injuries followed by males under 15 years old. The graph reveals that females sustained more fall and jump injuries than males on average.

Figure 5.16

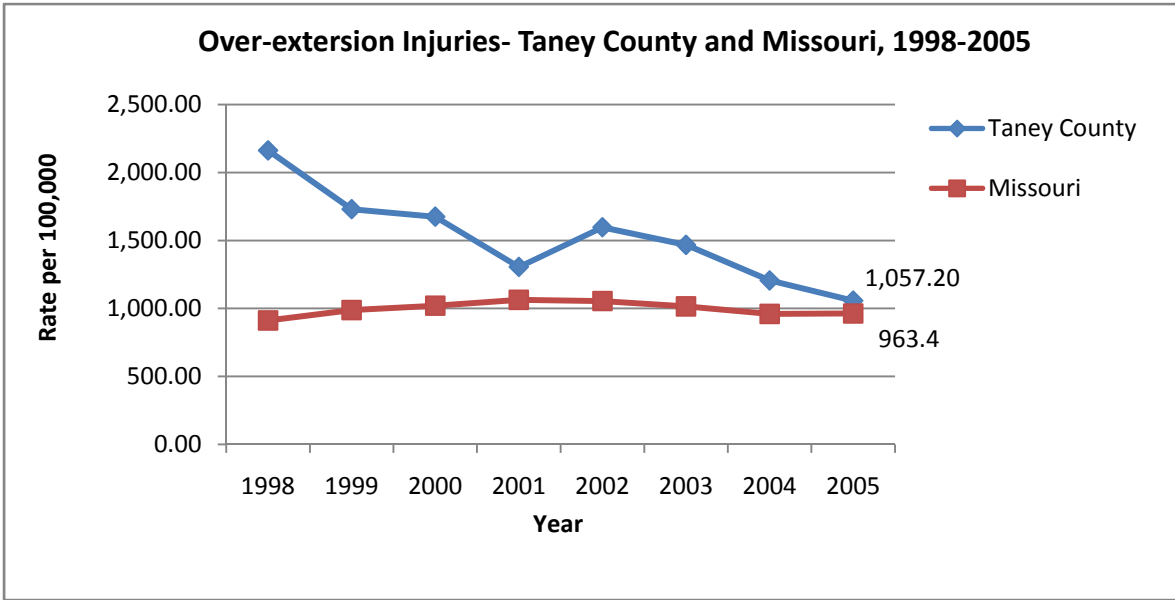


Source: Missouri Department of Health and Senior Services, MICA

Fig 5.16 illustrates the rate of drug and alcohol related injuries in Taney County and Missouri between 1998 through 2005. The graph shows that the rate of Drug and alcohol related injuries in Taney County are higher than in Missouri. The graph illustrates that Missouri has had a steady increase in the rate of drug and alcohol related injuries. The only one time that Taney County recorded a decrease in the rate of drug and alcohol related injuries was between 2000 to 2001 but since then, the County has experienced an increase in the rate of cases reported.

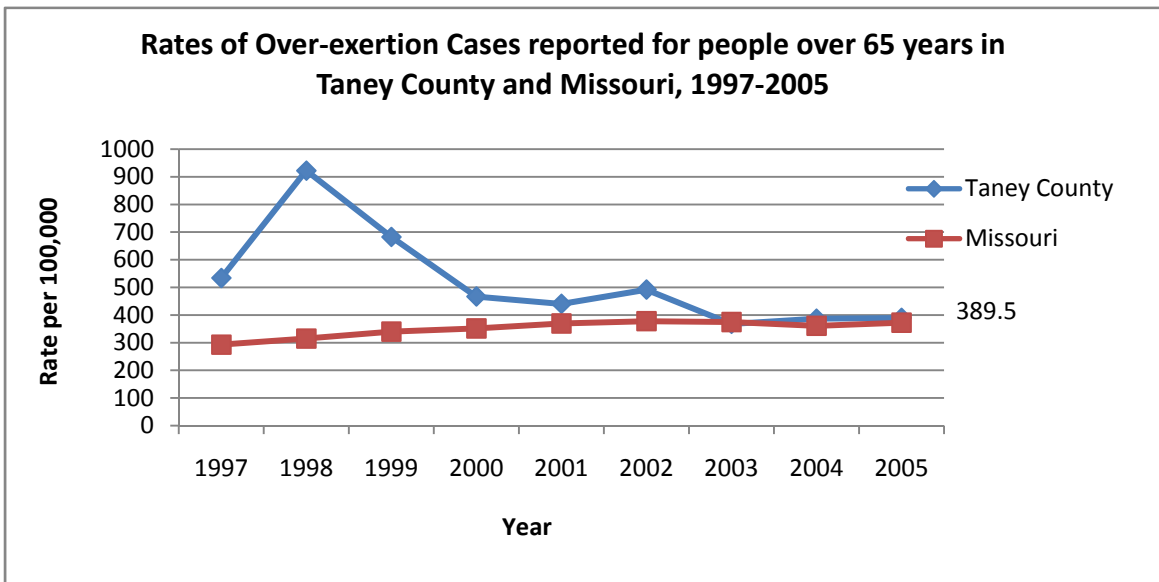
Fig 5.17 demonstrates the rate of Over-exertion injuries in Taney County and Missouri. Taney County has experienced a higher rate of these injuries compared to the State. There is an overall declining trend in the rate of cases in the last four year in the County. Taney County recorded an increase in these injures was in 2001. Missouri’s rate of over-exertion injuries has been consistent on overall. Overall, the rate of these injuries in the County has declined from a high of 2163.30 per 100,000 in 1998 to 1057.20 in 2005.

Figure 5.17



Source: Missouri Department of Health and Senior Services, MICA

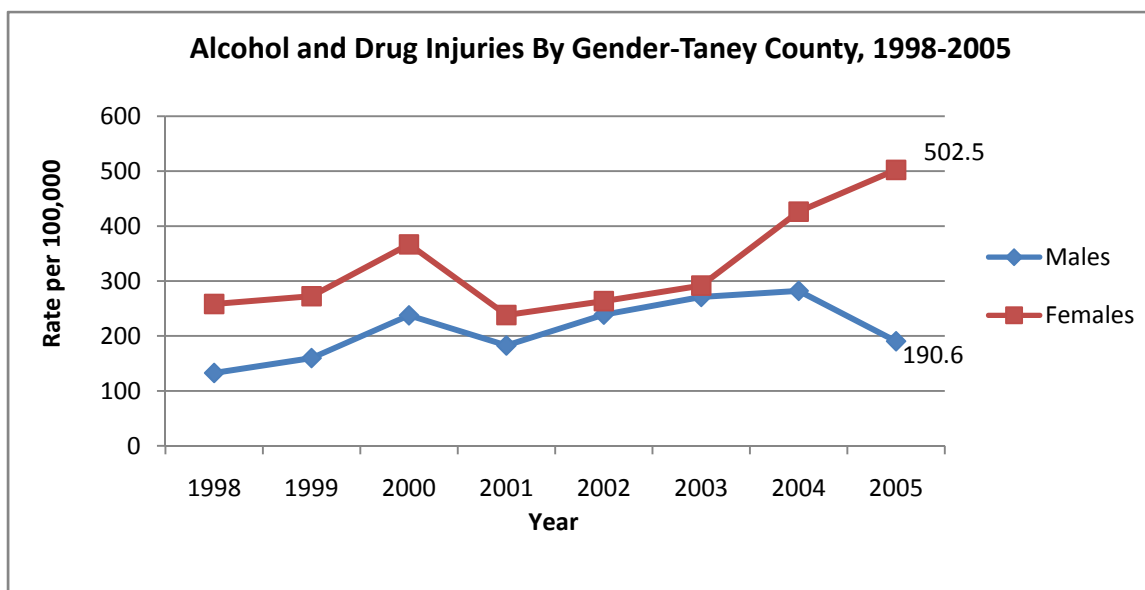
Figure 5.18



Source: Missouri Department of Health and Senior Services, MICA

Figure 5.18 illustrates that the rate of over-exertion injuries in Taney County and Missouri between 1997-2005. From 1997 to 1998, the rates for these injuries for people 65 years and older in the County increased drastically then decreased through 2001 although it was still above the State's rate. In the last two years, the rates have almost matched up with the state's marking the closest difference recorded in the last decade.

Figure 5.19

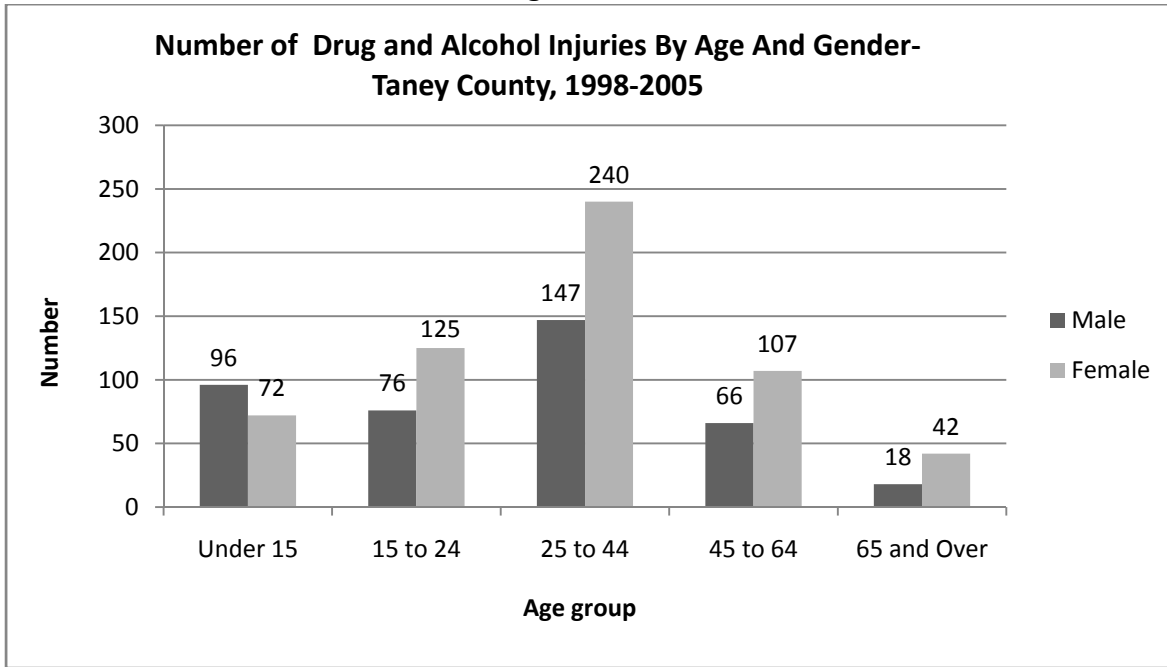


Source: Missouri Department of Health and Senior Services, MICA

Figure 5.19 illustrates the trends of alcohol and drug injuries by gender in Taney County. The graph depicts that females exhibit a higher rate of alcohol and drug related injuries than males. According to the graph, females and males showed a consistent increase in injuries between 1998 to 2000 followed by a decrease in 2001. Generally, the widest gap between the rate of alcohol and drug related injuries for females was 502.5 per 100,000 compared to 190.6 males in 2005.

Figure 5.20 shows that the rate of injuries recorded in males and females between 25 to 44 years old reveal a higher incident rate for injuries associated with drug and alcohol abuse in Taney County between 1998-2005. Overall, females had a higher rate of injury than males except those less than 15 years old. Based on this graph, it is evident that irrespective of gender identity the older people showed a progressive decrease in the rate of injuries as depicted by the shift in recorded level.

Figure 5.20



Source: Missouri Department of Health and Senior Services, MICA

Table 5.7

Number of Assault Injuries by Race – Taney County, 2000-2005					
	White	Black	American Indian/ Alaska Native	Other	Unknown
2000	143	2	0	0	3
2001	165	2	1	1	0
2002	131	2	1	1	0
2003	149	1	1	0	0
2004	187	2	1	2	1
2005	140	0	0	1	0

Source: Missouri Department of Health and Senior Services, MICA

Table 5.7 indicates that the number of assault injuries among white population was highest in 2004 while those among African Americans/ Black remained almost the same throughout the six years. However, the rates for the assault injuries in the county by race were not obtained due to low numbers and therefore could not yield stable rates.

Behavioral Risk Factors

Many of the numerous deaths due to cancer, heart disease, stroke and other chronic diseases that occur every year are the result of behaviors that negatively impact health. Healthy Lifestyle changes can help prevent many chronic diseases. Early detection and treatment are also important to help improve outcomes of these diseases. Table 5.8 provides information on the behavioral risk factors that were identified among Taney County residents in 2003. The 2007 survey was completed prior to this assessment, but the results for the county were not determined during the survey.

Taney County had a high percentage of respondents who reported having poor health, no health insurance, smokers, overweight and obese people. What is concerning, is the amount of women who reported not having a mammogram or breast exam within the last year.

Table 5.8

Behavioral Risk Factor Survey-Taney County, 2003				
	Percent			
	Taney County	Southwest Region	Missouri	United States
Health Status Reported Fair or Poor	19.0	18.8	16.9	14.8
No Health Insurance	21.0	17.4	12.3	14.5
Physical Inactivity	25.8	24.3	23.0	23.1
Current Smoker	34.4	26.7	26.5	22.0
Overweight (BMI >25-29.9)	41.8	35.6	35.3	35.0
Obese (BMI>30)	17.8	23.4	23.4	30.0
High Blood Pressure	20.1	27.9	28.5	24.8
High Cholesterol	30.5	37.2	37.3	33.1
Asthma	11.3	11.6	10.7	11.7
Diabetes	6.1	6.4	7.2	7.2
Never had a Mammogram	24.2	17.9	13.4	30.4
No Mammogram or Breast Exam in Last Year				
40-49 years old	68.1	52.3	49.4	--
50-64 years old	52.1	43.3	35.9	--
65 and older	52.6	51.3	47.4	--

Source: Missouri Department of Health and Senior Services, BRFSS