

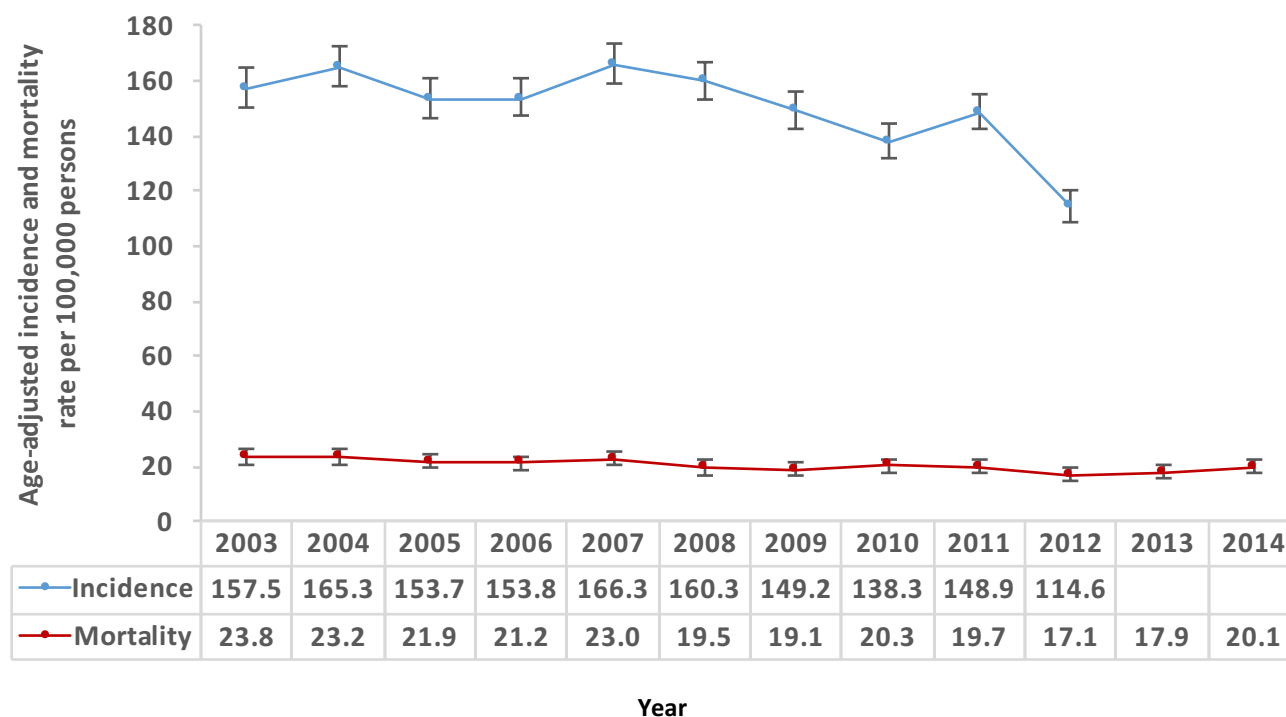
CHAPTER 7: PROFILES OF SELECTED CANCERS – PROSTATE

The prostate, a part of the male reproductive system, produces fluid that makes up a part of semen. Researchers do not yet agree on the factors that can influence a man’s risk of developing prostate cancer, either positively or negatively.⁹ In Kansas, prostate cancer is the most commonly diagnosed cancer, and for the time period 2008-2012, the third leading cause of cancer death, among men.

Prostate Cancer Incidence and Mortality

On average each year, more than 2,000 prostate cancers are diagnosed among Kansas males and approximately 250 men die of the disease. Age-adjusted prostate cancer incidence rates decreased significantly during the period 2003-2012 from 157.5 cases per 100,000 males (95% confidence interval: 150.5 to 164.7) in 2003 to 114.6 cases per 100,000 males (95% confidence interval: 109.2 to 120.2) in 2012 (Figure 7-1). Age-adjusted prostate cancer mortality rates also decreased significantly during the period 2003-2013 from 23.8 deaths per 100,000 males (95% confidence interval: 21.0 to 26.9) in 2003 to 17.9 deaths per 100,000 males (95% confidence interval: 15.7 to 20.3) in 2013.

Figure 7-1. Age-adjusted prostate cancer incidence and mortality rates, Kansas 2003-2014.



Source: 2003-2012 Kansas Cancer Registry. 2003-2014 Kansas Vital Statistics, Bureau of Epidemiology and Public Health Informatics, KDHE. Cancer incidence data for 2013 and 2014 were not available at the time the document was created. Rates were age-adjusted to the U.S. 2000 standard population using the direct method. See Technical Appendix for details on how rates were calculated. Vertical bars indicate 95% confidence intervals. Prostate cancer incidence was defined as ICD-O-3 code C619 (excluding histology codes 9590-9989) with a behavior code indicating invasive malignancy. Prostate cancer mortality was defined as ICD-10 code C61.

⁹“Basic Information about Prostate Cancer.” Division of Cancer Prevention and Control, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention.
www.cdc.gov/cancer/prostate/basic_info/index.htm

Prostate Cancer Incidence and Mortality among Race Groups

In Kansas, the age-adjusted prostate cancer incidence rate was significantly higher for African American men (207.8 cases per 100,000 males; 95% confidence interval: 191.1 to 225.9) than for white men (133.6 cases per 100,000 males; 95% confidence interval: 130.8 to 136.4) during the period 2008-2012 (Figure 7-2). Similarly, the age-adjusted prostate cancer mortality rate was significantly higher for African American Kansas men (44.1 deaths per 100,000 males; 95% confidence interval: 35.4 to 54.4) than for white Kansas men (18.0 deaths per 100,000 males; 95% confidence interval: 17.0 to 19.1) during the period 2010-2014.

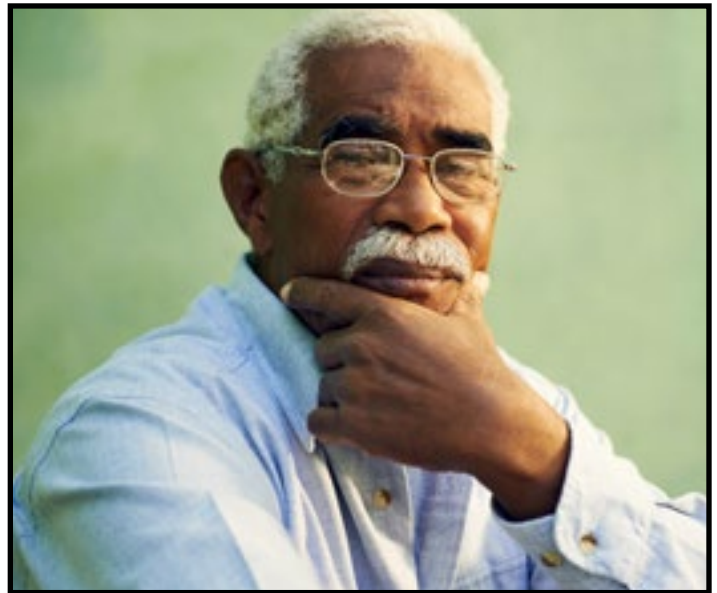
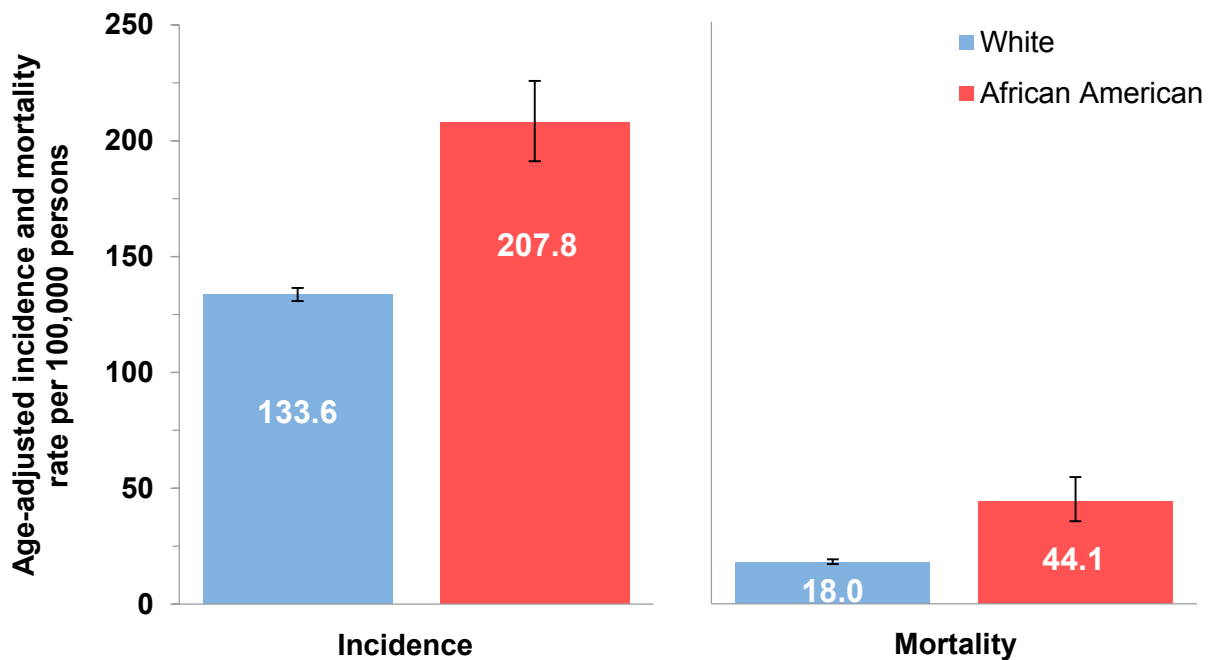


Figure 7-2. Age-adjusted prostate cancer incidence (2008-2012) and mortality (2010-2014) rates among race groups, Kansas 2008-2014.

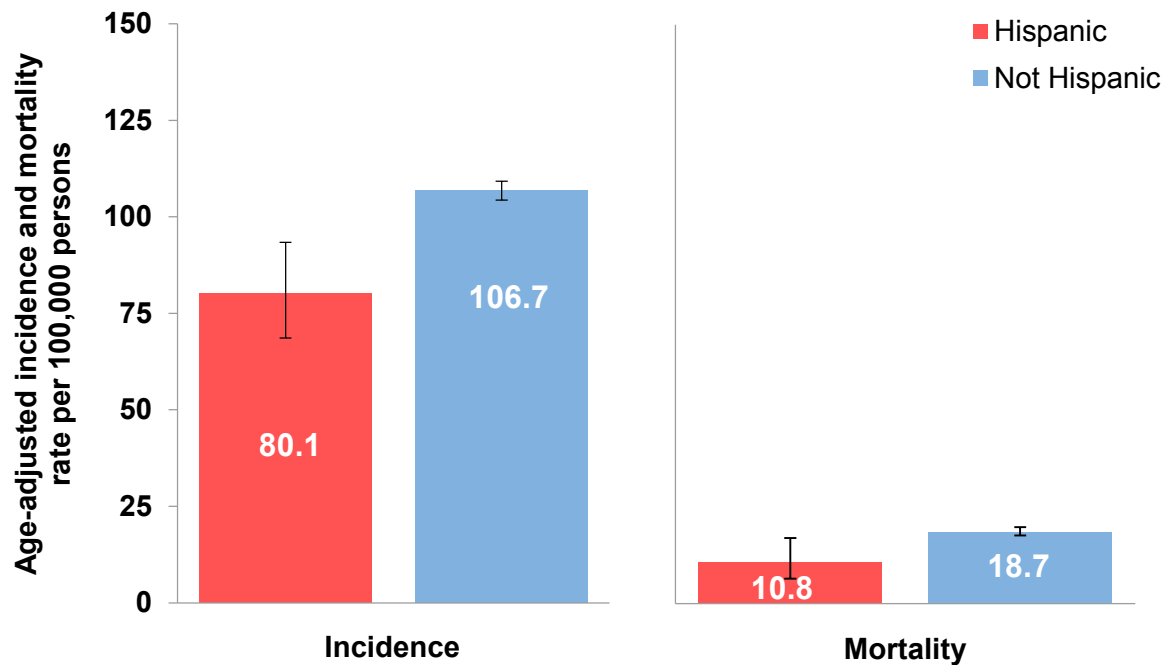


Source: 2008-2012 Kansas Cancer Registry. 2010-2014 Kansas Vital Statistics, Bureau of Epidemiology and Public Health Informatics, KDHE. Rates were age-adjusted to the U.S. 2000 standard population using the direct method. See Technical Appendix for details on how rates were calculated. Vertical bars indicate 95% confidence intervals. Prostate cancer incidence was defined as ICD-O-3 code C619 (excluding histology codes 9590-9989) with a behavior code indicating invasive malignancy. Prostate cancer mortality was defined as ICD-10 code C61.

Prostate Cancer Incidence and Mortality among Ethnic Groups

In Kansas, the age-adjusted prostate cancer incidence rate was significantly lower for Hispanic men (80.1 cases per 100,000 males; 95% confidence interval: 68.6 to 93.4) than for non-Hispanic men (106.7 cases per 100,000 males; 95% confidence interval: 104.3 to 109.2) during the period 2008-2012 (Figure 7-3). Similarly, the age-adjusted prostate cancer mortality rate was significantly lower for Hispanic Kansas men (10.8 deaths per 100,000 males; 95% confidence interval: 6.5 to 17.0) as compared to non-Hispanic Kansas men (18.7 deaths per 100,000 males; 95% confidence interval: 17.7 to 19.8) during the period 2010-2014.

Figure 7-3. Age-adjusted prostate cancer incidence (2008-2012) and mortality (2010-2014) among ethnic groups, Kansas 2008-2014.



Source: 2008-2012 Kansas Cancer Registry. 2010-2014 Kansas Vital Statistics, Bureau of Epidemiology and Public Health Informatics, KDHE. Rates were age-adjusted to the U.S. 2000 standard population using the direct method. See Technical Appendix for details on how rates were calculated. Vertical bars indicate 95% confidence intervals. Prostate cancer incidence was defined as ICD-O-3 code C619 (excluding histology codes 9590-9989) with a behavior code indicating invasive malignancy. Prostate cancer mortality was defined as ICD-10 code C61. Hispanics were defined as persons of Mexican, Puerto Rican, Cuban, South or Central American, Other Spanish, Spanish not otherwise specified, or Dominican Republic ethnicity. Persons with Spanish surname only or unknown ethnicity were excluded.

Prostate Cancer Late Stage Diagnosis

In Kansas, the age-adjusted late stage prostate cancer incidence rates did not differ significantly for white and African American race groups between 2003-2007 and 2008-2012 (Table 7-1).

In Kansas, the age-adjusted late stage prostate cancer incidence rates did not differ significantly for Hispanic and non-Hispanic ethnicity groups between 2003-2007 and 2008-2012 (Table 7-1).

During the same time period, the age-adjusted late stage prostate cancer incidence rates did not differ significantly for rural and urban population density groups between 2003-2007 and 2008-2012 (Table 7-1).

Table 7-1. Age-adjusted late stage prostate cancer incidence rates by years and selected characteristics, Kansas, 2003-2012.

Characteristics	2008-2012			2003-2007		
	Age-adjusted Rate	95% Confidence Interval		Age-adjusted Rate	95% Confidence Interval	
Race						
White	20.5	19.4	21.6	20.9	19.8	22.1
African American	40.5	33.4	49.0	32.1	25.2	40.6
Ethnicity						
Hispanic	15.5	10.9	21.8	13.2	8.4	20.9
Non-Hispanic	18.3	17.3	19.3	18.3	17.2	19.4
Population Density						
Rural	17.4	15.8	19.2	19.7	18.0	21.6
Urban	23.6	22.2	25.0	22.3	20.9	23.8

* a. Late stage was defined as the combination of regional and distant stage of diagnosis.

b. Due to insufficient count, data for Asian/Pacific Islander and American Indian/Alaska Native were not displayed in the table.

Source: 2003-2012 Kansas Cancer Registry. Prostate cancer incidence was defined as ICD-O-3 code C619 (excluding histology codes 9590-9989) with a behavior code indicating invasive malignancy.