

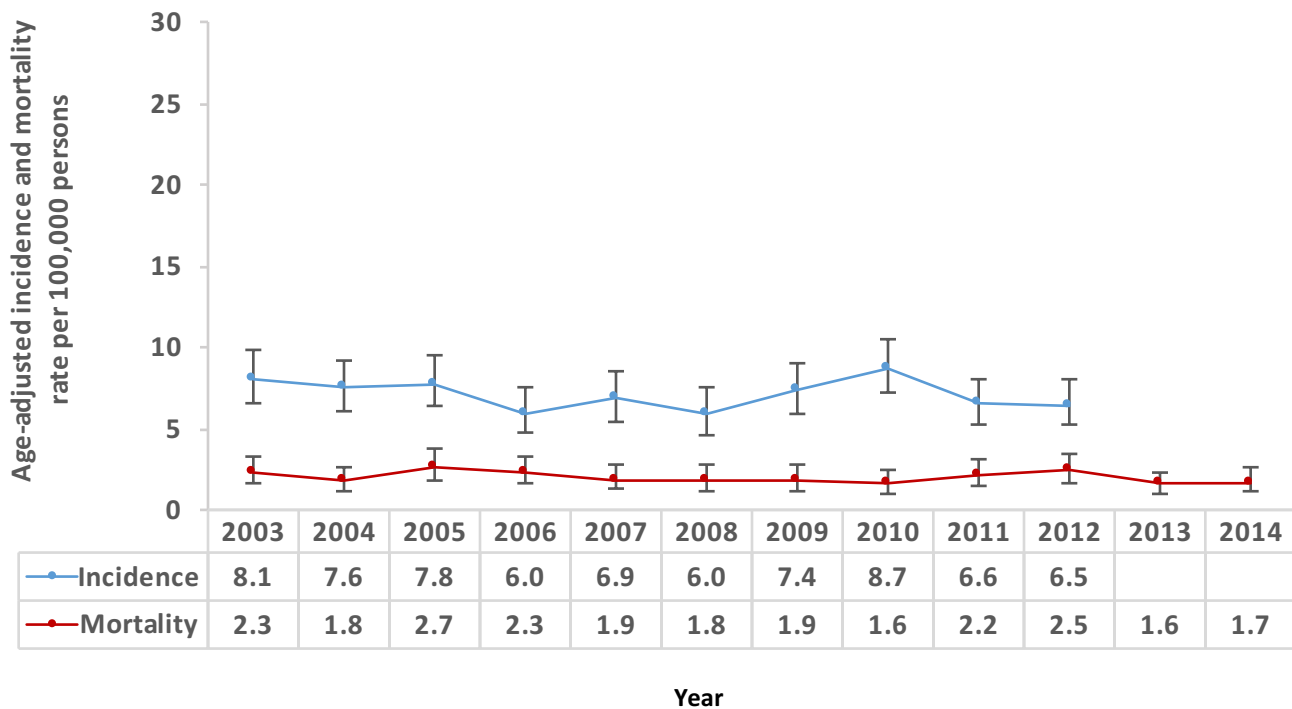
CHAPTER 6: PROFILES OF SELECTED CANCERS – CERVICAL

The cervix is the lower, narrow end of the uterus. The human papillomavirus (HPV) is the main cause of cervical cancer. Cervical cancer is highly preventable because screening tests and a vaccine to prevent HPV infections are available.⁸

Cervical Cancer Incidence and Mortality

On average, each year approximately 100 cervical cancers are diagnosed among Kansas females and approximately 30 Kansas females die of the disease. In Kansas, there was no statistically significant difference in the age-adjusted cervical cancer incidence rates during the period 2003-2012 (Figure 6-1). Age-adjusted cervical cancer mortality rates also remained stable during the period 2003-2014 from 2.3 deaths per 100,000 females (95% confidence interval: 1.6 to 3.3) in 2003 to 1.7 deaths per 100,000 females (95% confidence interval: 1.1 to 2.6) in 2014.

Figure 6-1. Age-adjusted cervical 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. Cervical cancer incidence was defined as ICD-O-3 codes C530-C539 (excluding histology codes 9590-9989) with a behavior code indicating invasive malignancy. Cervical cancer mortality was defined as ICD-10 code C53.

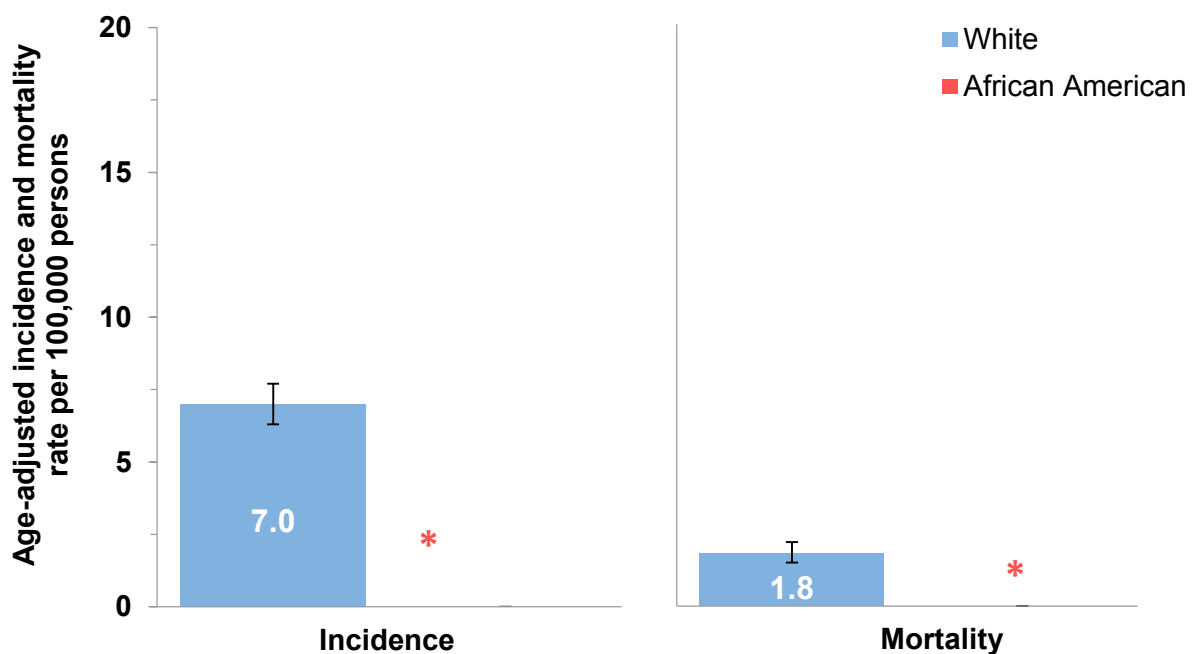
⁸ "Cervical Cancer." Division of Cancer Prevention and Control, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention. www.cdc.gov/cancer/cervical/index.htm

Cervical Cancer Incidence and Mortality among Race Groups

Due to the small number of cervical cancer cases among specified racial populations other than white during the most recent 5-year period, incidence and mortality rates are suppressed. Racial comparisons cannot be made.



Figure 6-2. Age-adjusted cervical cancer incidence (2008-2012) and mortality (2010-2014) rates among race groups, Kansas 2008-2014.

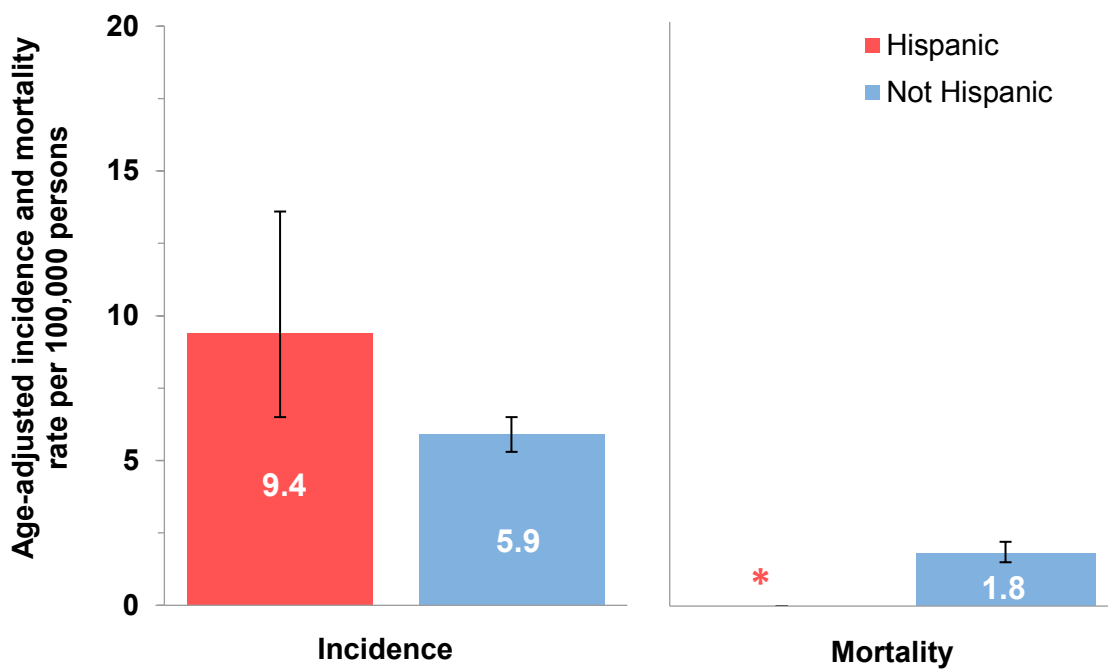


Source: 2008-2012 Kansas Cancer Registry. 2010-2014 Kansas Vital Statistics, Bureau of Epidemiology and Public Health Informatics, KDHE. * denotes that the rate is not reported due to insufficient number of cases. Rates were age-adjusted to the U.S. 2000 standard population using the direct method. See Technical Appendix for details on how rates were calculated. Vertical bars indicate 95% confidence intervals. Cervical cancer incidence was defined as ICD-O-3 codes C530-C539 (excluding histology codes 9590-9989) with a behavior code indicating invasive malignancy. Cervical cancer mortality was defined as ICD-10 code C53.

Cervical Cancer Incidence and Mortality among Ethnic Groups

In Kansas, the age-adjusted cervical cancer incidence rate was significantly higher for Hispanic females (9.4 cases per 100,000 females; 95% confidence interval: 6.5 to 13.6) as compared to non-Hispanic females (5.9 cases per 100,000 females; 95% confidence interval: 5.9 to 6.5) during the period 2008-2012 (Figure 6-3). The age-adjusted cervical cancer mortality rate for non-Hispanic Kansas females was 1.8 deaths per 100,000 females (95% confidence interval: 1.5 to 2.2) during the period 2010-2014. The mortality rate for Hispanic females in Kansas is not shown because the number of deaths was insufficient for computing a statistically reliable rate for this ethnic group.

Figure 6-3. Age-adjusted cervical 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. * denotes that the rate is not reported due to insufficient number of cases. 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. Cervical cancer incidence was defined as ICD-O-3 codes C530-C539 (excluding histology codes 9590-9989) with a behavior code indicating invasive malignancy. Cervical cancer mortality was defined as ICD-10 code C53. 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.

Cervical Cancer Late Stage Diagnosis

Among race groups in Kansas, the age-adjusted late stage cervical cancer incidence rate did not differ significantly among White women between 2003-2007 (3.1 cases per 100,000 persons; 95% CI: 2.6 to 3.5) and 2008-2012 (3.4 cases per 100,000 persons; 95% CI: 2.9 to 3.9). We were not able to make comparisons for the late stage age-adjusted cervical cancer incidence rates among African American women between 2003-2007 and 2008-2012 due to insufficient counts (Table 6-1).

Among ethnicity groups in Kansas, the age-adjusted late stage cervical cancer incidence rate did not differ significantly among Non-Hispanic women between 2003-2007 (2.9 cases per 100,000 persons; 95% CI: 2.5 to 3.4) and 2008-2012 (3.0 cases per 100,000 persons; 95% CI: 2.6 to 3.5). We were not able to make comparisons for the late stage age-adjusted cervical cancer incidence rates among Hispanic women during the same time period (Table 6-1).

Among population density groups in Kansas, the age-adjusted late stage cervical cancer incidence rates did not differ significantly among population density groups between 2003-2007 and 2008-2012 (Table 6-1).

Table 6-1. Age-adjusted late stage cervical 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	3.4	2.9	3.9	3.1	2.6	3.5
African American	-	-	-	5.6	3.4	8.9
Ethnicity						
Hispanic	-	-	-	-	-	-
Non-Hispanic	3.0	2.6	3.5	2.9	2.5	3.4
Population Density						
Rural	4.2	3.4	5.3	3.6	2.8	4.5
Urban	2.9	2.5	3.5	2.9	2.5	3.5

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

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

c. Data for African American women during 2008-2012 were insufficient to display in the table.

Source: 2003-2012 Kansas Cancer Registry. Cervical cancer incidence was defined as ICD-O-3 codes C530-C539 (excluding histology codes 9590-9989) with a behavior code indicating invasive malignancy.