

## EXECUTIVE SUMMARY

More than 13,000 Kansans are diagnosed with cancer each year, and approximately 5,300 die from the disease. In fact, cancer is one of the leading causes of death in the state. This report describes the current status of cancer incidence and mortality in Kansas, as well as associated risk and protective factors among Kansans. The purpose of this report is to help guide cancer stakeholders at the state and local levels in their cancer prevention and control activities by identifying gaps and establishing baselines for planning objectives. Ongoing surveillance of statewide data described in this report will continue to support stakeholders' need to monitor their progress and evaluate the impact of their work.



### Report Highlights

#### Incidence

- From 2003-2012, the age-adjusted cancer incidence rates have remained relatively stable in Kansas, while they decreased significantly in the U.S. from 2007-2012.
- In Kansas, overall cancer incidence is significantly higher among: males compared to females; African Americans compared to whites; and non-Hispanics compared to Hispanics. However, this varies by cancer type.
- Cancer incidence increases dramatically with age, with the highest rates among Kansans aged 80-84 years old.
- The most commonly diagnosed invasive cancers in Kansas are prostate, lung, and colorectal among men; and breast, lung and colorectal among women.

#### Mortality

- From 2003-2014, the age-adjusted cancer mortality rates decreased significantly in Kansas, and they also decreased significantly in the U.S. from 2003-2012.
- In Kansas, cancer mortality rates are significantly higher among males compared to females; African Americans compared to whites; and non-Hispanics compared to Hispanics. However, this varies by cancer type.
- Cancer mortality increases dramatically with age, with the highest rates among Kansans aged 85 years and older.
- The leading causes of cancer death in Kansas are lung, colorectal, and prostate among men; and lung, breast, and colorectal among women.

## Lung Cancer

- In Kansas, lung cancer is the leading cause of cancer death, and the second most commonly diagnosed cancer overall.
- In 2012, the age-adjusted lung cancer incidence rate in Kansas was 56.5 cases per 100,000 persons. In 2014, the age-adjusted lung cancer mortality rate in Kansas was 47.2 deaths per 100,000 persons.
- Age-adjusted lung cancer incidence and mortality rates are significantly higher among males compared to females; African Americans compared to whites; and non-Hispanics compared to Hispanics.
- In Kansas, the age-adjusted late stage lung cancer incidence rates dropped significantly among males, whites, non-Hispanics, and those who lived in rural counties from 2003-2007 to 2008-2012.

## Colorectal Cancer

- In Kansas, colorectal cancer is the second leading cause of cancer death among men and the third leading cause of cancer death among women. It is the third most commonly diagnosed cancer overall.
- In 2012, the age-adjusted colorectal cancer incidence rate was 40.7 cases per 100,000 persons. In 2014, the age-adjusted colorectal cancer mortality rate was 15.1 deaths per 100,000 persons.
- In Kansas, age-adjusted colorectal cancer incidence and mortality rates are significantly higher among males compared to females; African Americans compared to whites. Rates are significantly higher for colorectal cancer incidence only among non-Hispanics compared to Hispanics.
- In Kansas, the age-adjusted late stage colorectal cancer incidence rates dropped significantly among both males and females, whites, non-Hispanics, and those who lived in both rural and urban counties from 2003-2007 to 2008-2012.

## Female Breast Cancer

- Among Kansas women, breast cancer is the most commonly diagnosed invasive cancer, and the second leading cause of cancer death.

In 2012, the age-adjusted female breast cancer incidence rate in Kansas was 124.1 cases per 100,000 females. In 2014, the age-adjusted female breast cancer mortality rate was 18.6 deaths per 100,000 Kansas females.

- In Kansas, female breast cancer incidence rates are not significantly different between African American and white women. However, the mortality rates are significantly higher among African American compared to white women. Female breast cancer incidence and mortality rates are significantly higher among non-Hispanics compared to Hispanics.
- In Kansas, the age-adjusted late stage female breast cancer incidence rates dropped significantly among whites, non-Hispanics, and those who lived in urban counties from 2003-2007 to 2008-2012.

## Cervical Cancer

- In Kansas, the age-adjusted cervical cancer incidence rates are not significantly different during the period 2003- 2012 and the age-adjusted cervical cancer mortality rates also remained stable during the period 2003-2014.

- In 2012, the age-adjusted cervical cancer incidence rate was 6.5 cases per 100,000 Kansas females. In 2014, the age-adjusted cervical cancer mortality rate was 1.7 deaths per 100,000 females in Kansas.
- Racial comparison cannot be made for the age-adjusted cervical cancer incidence and mortality rates. However, age-adjusted cervical cancer incidence rates are significantly higher among Hispanic compared to non-Hispanic women in Kansas.
- In Kansas, the age-adjusted late stage cervical cancer incidence rates were not significantly different among whites, non-Hispanics, and population density groups between 2003-2007 and 2008-2012.

## Prostate Cancer

- In Kansas, prostate cancer is the most commonly diagnosed invasive cancer and the third leading cause of cancer death among men.
- In 2012, the age-adjusted prostate cancer incidence rate was 114.6 cases per 100,000 males. In 2014, the age-adjusted prostate mortality rate was 20.1 deaths per 100,000 males.
- In Kansas, prostate cancer incidence and mortality rates are significantly higher among African Americans compared to whites; and among non-Hispanics compared to Hispanics.
- In Kansas, the age-adjusted late stage prostate cancer incidence rates were not significantly different among race, ethnicity, and population density groups between 2003-2007 and 2008-2012.

## Melanoma

- In Kansas, age-adjusted melanoma incidence rates increased significantly during the period 2003-2012 while age-adjusted melanoma mortality rates remained stable during the period 2003-2012.
- In 2012, the age-adjusted melanoma incidence rate in Kansas was 23.5 cases per 100,000 persons. In 2014, the age-adjusted melanoma mortality rate was 3.0 deaths per 100,000 Kansans.
- During 2003-2013, the age-adjusted melanoma incidence and mortality rates were significantly higher among men compared to women in Kansas.
- In Kansas, the age-adjusted late stage melanoma incidence rates were not significantly different among both males and females, whites, non-Hispanics, and population density groups between 2003-2007 and 2008-2012.

## Cancer Screening Practices

- In 2015, 16 percent of Kansas adults had discussed with their health care provider whether or not to be screened for lung cancer. The percentages were higher among males, aged 55-80 years old, those who have health insurance, those who lived in frontier and semi-urban/urban counties, and those who are living with a disability.
- In 2014, 65 percent of Kansas adults aged 50-75 years old had met the U.S. Preventive Services Task Force (USPSTF) recommendation for colorectal cancer screening. The percentages were lower among Hispanics compared to non-Hispanic whites, and adults aged 50-64 years old, those who attained lower levels of education, those whose annual household income was less than \$50,000, those who did not have health insurance, and those who resided in frontier, rural, and densely-settled rural counties.
- In 2014, 68 percent of Kansas adults 50 years and older had ever had a sigmoidoscopy or colonoscopy.
- In 2014, 13 percent of Kansas adults 50 years and older had an FOBT in the past two years.

- In 2014, 71 percent of Kansas women aged 40 years and older had a mammogram within the past two years. The percentages were significantly lower among women who are Hispanics, aged 40-49 years old, those who did not graduate from high school, and those whose annual household income was less than \$15,000, those who lived in frontier and rural counties, and those who did not have health insurance.
- In 2014, 74 percent of Kansas women aged 18 years and older had a Pap test within the past three years. The percentages were lower among women aged 18-24 years old, those with less than high school graduate degrees, those whose annual household income was less than \$15,000, and those who did not have health insurance.
- In 2014, 45 percent of Kansas men aged 40 years and older had a PSA test within the past two years. The percentages were significantly lower among men aged 40-49 years old, who are Hispanics, those who did not graduate from high school, those whose annual household income was less than \$15,000, and those without health insurance.

## Cancer Risk and Protective Factors

- In 2015, 18 percent of Kansas adults 18 years and older were current smokers. In 2013, 10 percent of Kansas high school students in grade 9-12 currently smoked cigarettes.
- During 2014-2015, approximately 11 percent of Kansas males 18 years and older used smokeless tobacco products. In 2013, approximately 13 percent of male high school students in grades 9-12 in Kansas currently used smokeless tobacco.
- In 2015, 34 percent of Kansas adults 18 years and older were obese.
- In 2015, 42 percent of Kansas adults 18 years and older consumed fruits and vegetables 1 or more times per day.
- In 2015, 60 percent of Kansas adults 18 years and older met physical activity guidelines.

## Genetic Counseling and Clinical Trials

- In 2015, 24 percent of Kansas adults with a family history of breast, ovarian, or colorectal cancer received genetic counseling. The percentages of Kansans who received genetic counseling were lower among adults aged 18-39 compared to those aged 40 years and older.
- In 2015, 4 percent of Kansas adults 18 years and older talked to their health care provider about participating in a clinical trial. The percentages were higher among females, and adults aged 65 years and older, those who were college graduates, those whose annual household income was \$50,000 or more, those who lived in urban counties, and those living with a disability.
- In 2015, 31 percent of Kansas adults 18 years and older enrolled in a cancer clinical trial managed by their health care provider.

## Cancer Survivorship

- In 2014 and 2015, about 7 percent of Kansas adults have been diagnosed with cancer (excluding skin cancer).
- In 2014, the adjusted percentages of Kansans who are current smokers, self-reported fair/poor health, limited access in any activities due to physical/mental and emotional problems, physically and emotionally unhealthy for 14 days or more in the past month, and poor health interfered with usual activities for 14 days or more in the past month, uninsured, have a health care provider, and couldn't see doctor due to cost were significantly higher among adults with cancer diagnosis compared to those without cancer diagnosis.
- In 2015, the adjusted percentages of Kansans who had alcohol in the past 30 days, did not participate in any physical activities in the past 30 days, self-reported fair/poor health, limited access in any activities due to physical/mental and emotional problems, physically and emotionally unhealthy for 14 days or more in the past month, and poor health interfered with usual activities for 14 days or more in the past month, have a health care provider, and couldn't see doctor due to cost were significantly higher among adults with cancer diagnosis compared to those without cancer diagnosis.