# Arkansas Facts and Figures Overview

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### Purpose



The purpose of this presentation is to disseminate and communicate the latest available surveillance data for incidence, mortality, and survival of invasive and in-situ cancers along with a closer look into selected cancers (breast, prostate, colon & rectum, and lung & bronchus).

### Objectives:

- Describe the current incidence of state-specific rates and trends for invasive and in-situ cancers along with selected cancers.
- Provide an overview of mortality and survival for invasive and in-situ cancers.
- Identify groups and geographic areas in Arkansas with a high incidence of cancer rates among selected cancers.

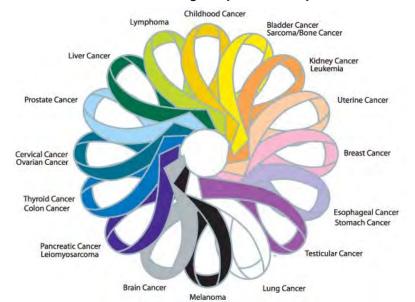
#### **DISCLAIMER:**

The views expressed in this presentation are those of the presenter and not necessarily those of the Arkansas Department of Health.

### **About Cancer**



- Cancer is the second leading cause of death in Arkansas and the U.S.
  - It is characterized as uncontrolled growth and spread of abnormal cells in the body
  - While cancer is an umbrella term used to define over 100 different cancers, every cancer has different risk factors, either exposure or genetics
- Lifestyle factors such as cigarette smoking, alcohol binge-drinking, consumption of foods with high fat, and physical inactivity remain major risk factors for many cancers
- Screenings: detect tumor (cancer) before symptoms present in an individual and treat early



Sources: CDC; Anand P, et al 2008

# About the Arkansas Central Cancer Registry (ACCR)



- ACCR is a population-based registry that collects and reports cancer data.
  - Facilities are required to report all malignant, specific in-situ cancers and reportable benign brain and central nervous system tumors - Excludes basal cell and squamous cell skin cancers, which are not required to be reported to cancer registries, and carcinoma in situ of the cervix.
- ACCR cancer surveillance:
  - Identify populations at increased risk of cancer.
  - Monitor trends in cancer incidence and mortality.
  - Investigate public concerns of suspected excesses of cancer due to environmental or other factors.
- ICD-O-3 is the current NAACCR standard for classifying tumor cases by:
  - Primary site (topography),
  - Histology (morphology), and
  - Behavior (2/3)

### Technical Notes for Cancer Reporting



US Cancer Data: The United States Cancer Statistics (CDC Wonder) are the official government statistics on cancer. These statistics include cancer registry data from CDC's National Program of Cancer Registries (NPCR) and the National Cancer Institute's (NCI) Surveillance, Epidemiology, and End Results (SEER) Program, as well as mortality data from CDC's National Center for Health Statistics. The statistics provide information on newly diagnosed cancer cases and cancer deaths for the whole U.S. population with readily available data tools available in the US Cancer Statistics Data Visualization Tool.

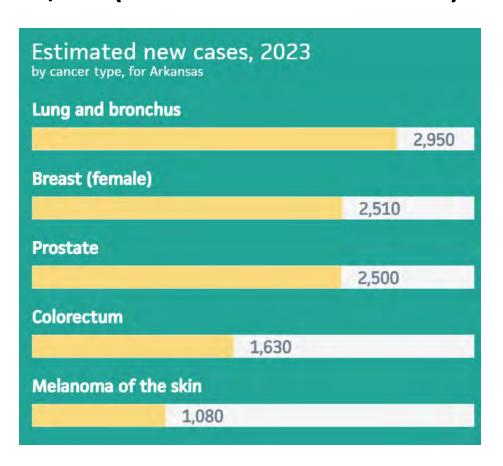
Arkansas Cancer Data: The Arkansas Central Cancer Registry (ACCR) is funded by the CDC NPCR and is a designated as a Registry of Distinction by NPCR and gold-certified by the North American Association of Central Cancer Registries (NAACCR). Arkansas incidence data is retrieved from ACCR's in-house database: CancerCORE v2 and SEER\*DMS. This real-time program contains statewide incidence data reported from all required facilities that diagnose and/or treat cancer.

## Estimated new cancer cases and deaths, Arkansas, 2023



Number of new cancer cases:

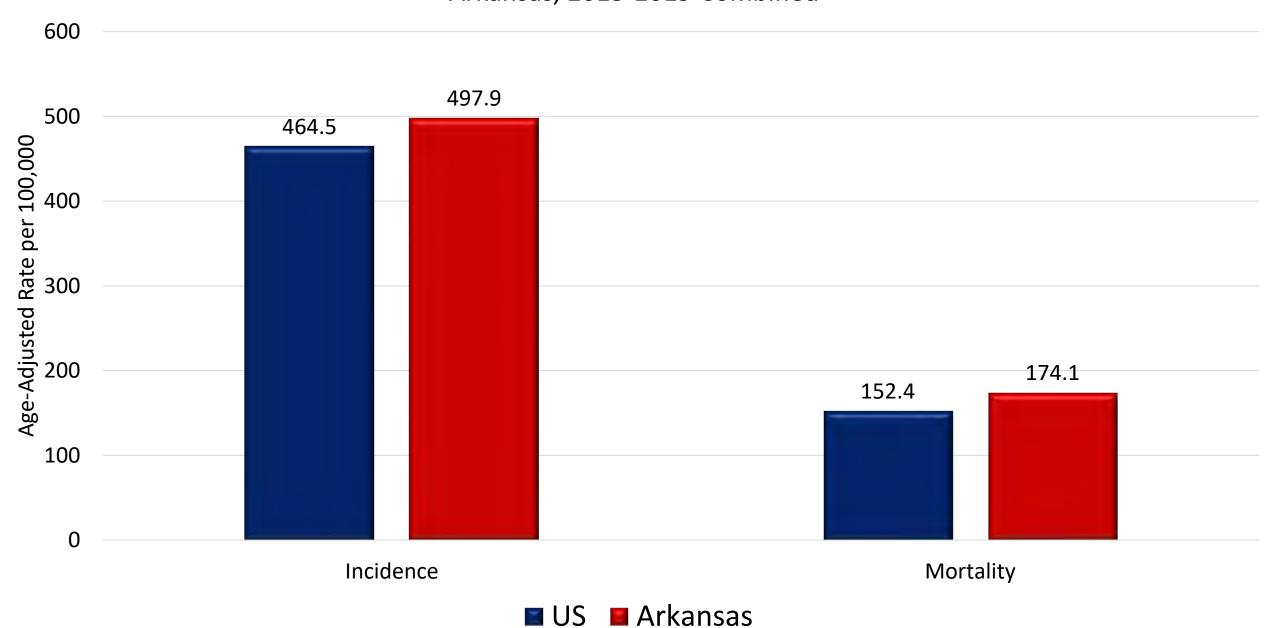
18,670 (+60 from 2022 estimates)



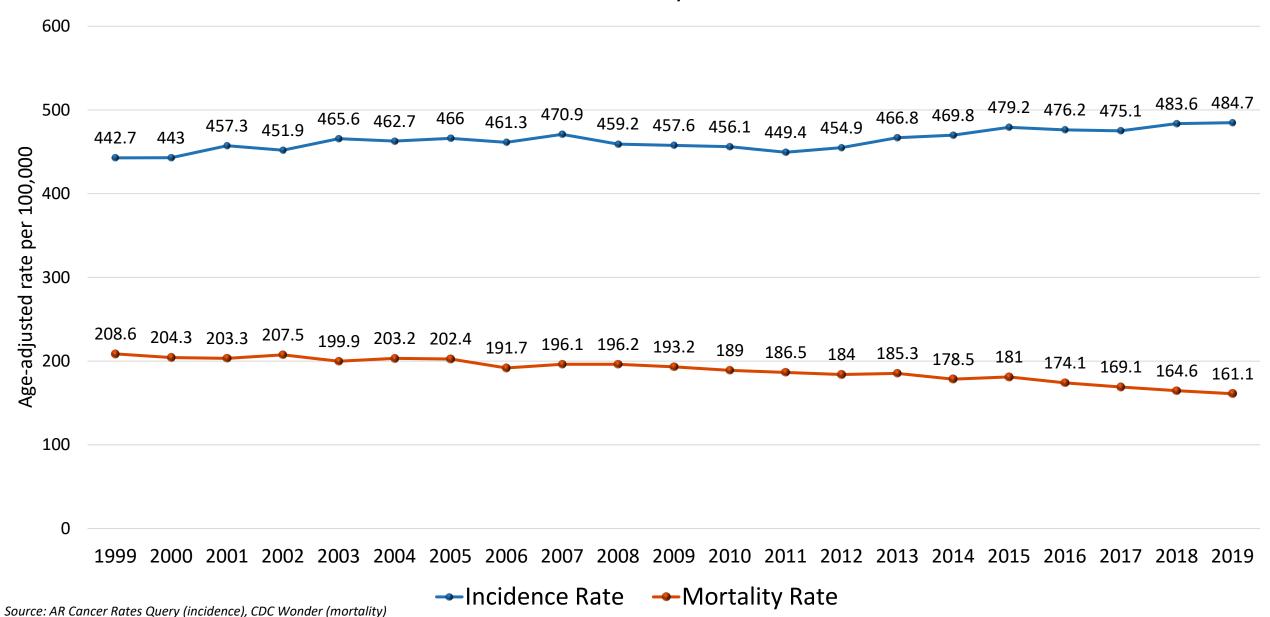
Number of cancer deaths: 6,340 (-120 from 2022 estimates)



Age-adjusted incidence and mortality rate of invasive and in-situ cancers, US and Arkansas, 2015-2019 Combined



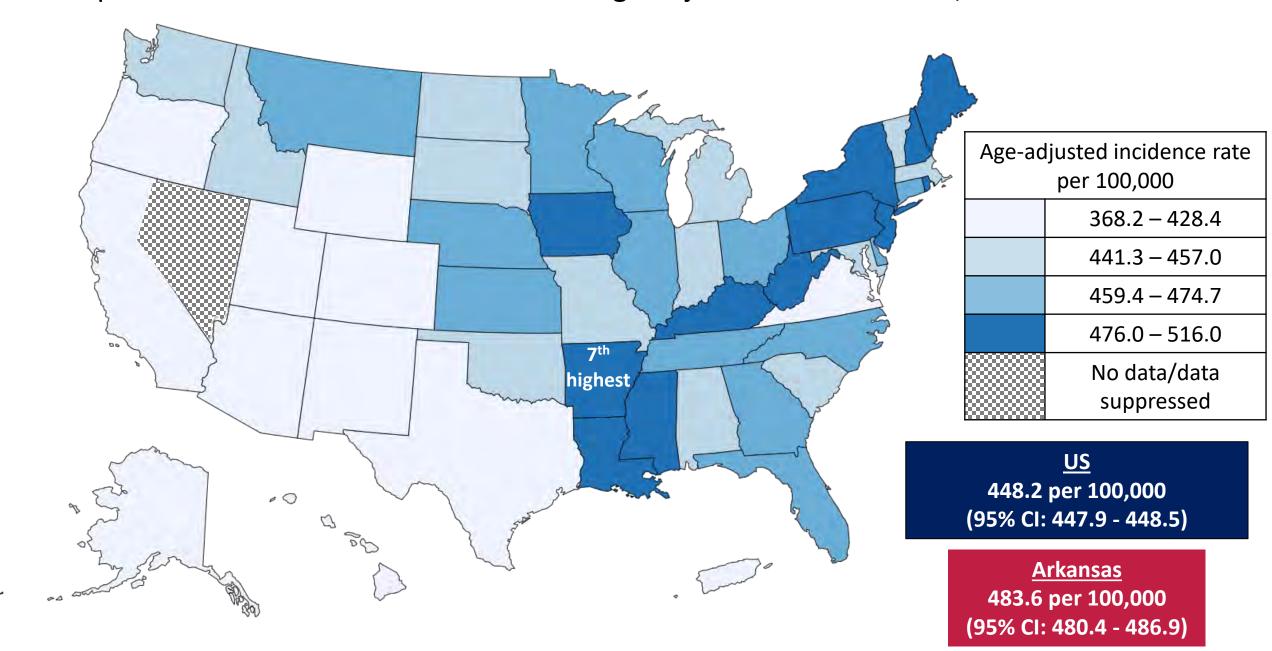
## Overall invasive and in-situ cancers incidence and mortality rate trend in Arkansas, 1999-2019



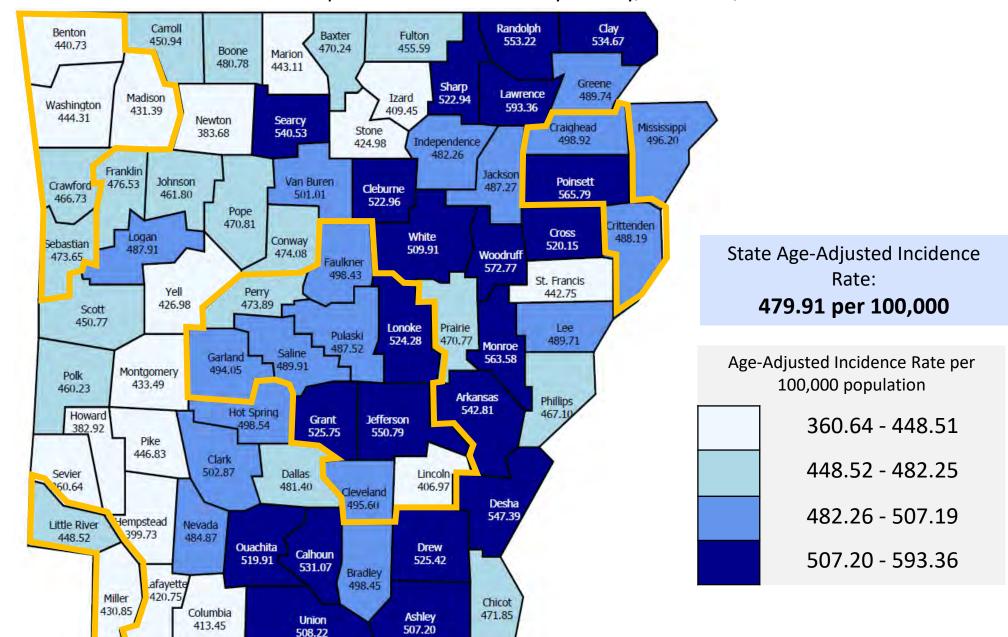
# Invasive Cancers Age-Adjusted Incidence Rates in Arkansas



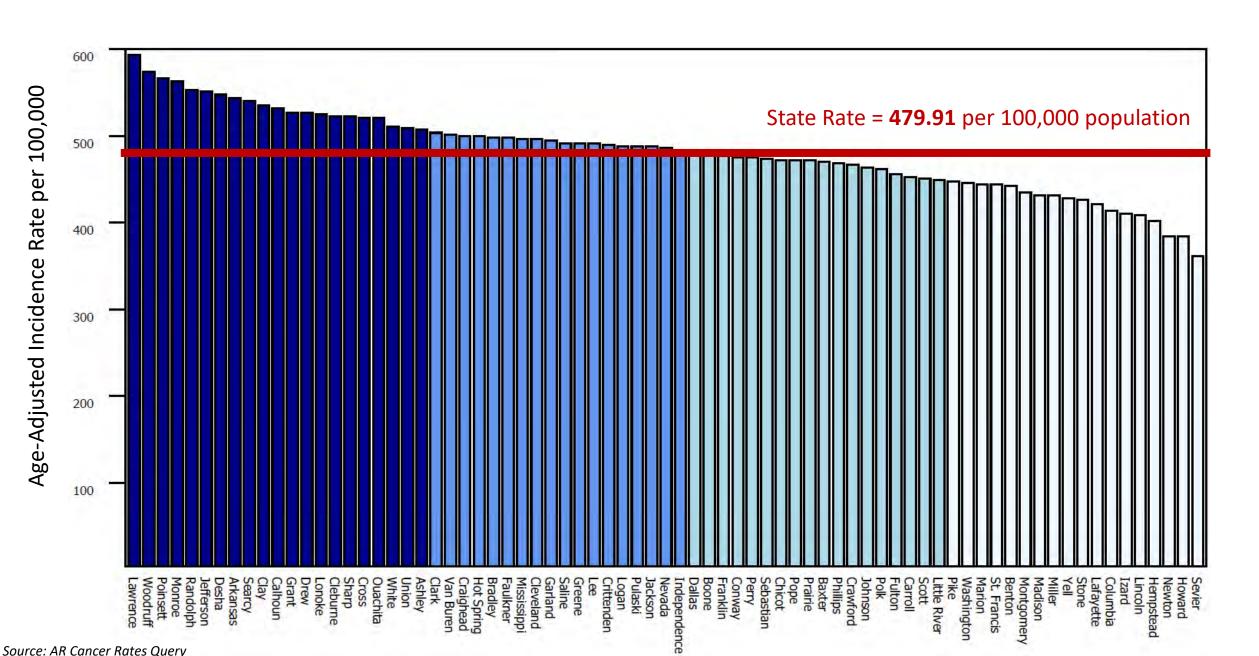
US map of overall invasive and in-situ cancer age-adjusted incidence rate, 2015-2019 Combined



Map of age-adjusted incidence rate of invasive and specific in-situ cancers by county, Arkansas, 2015-2019 Combined

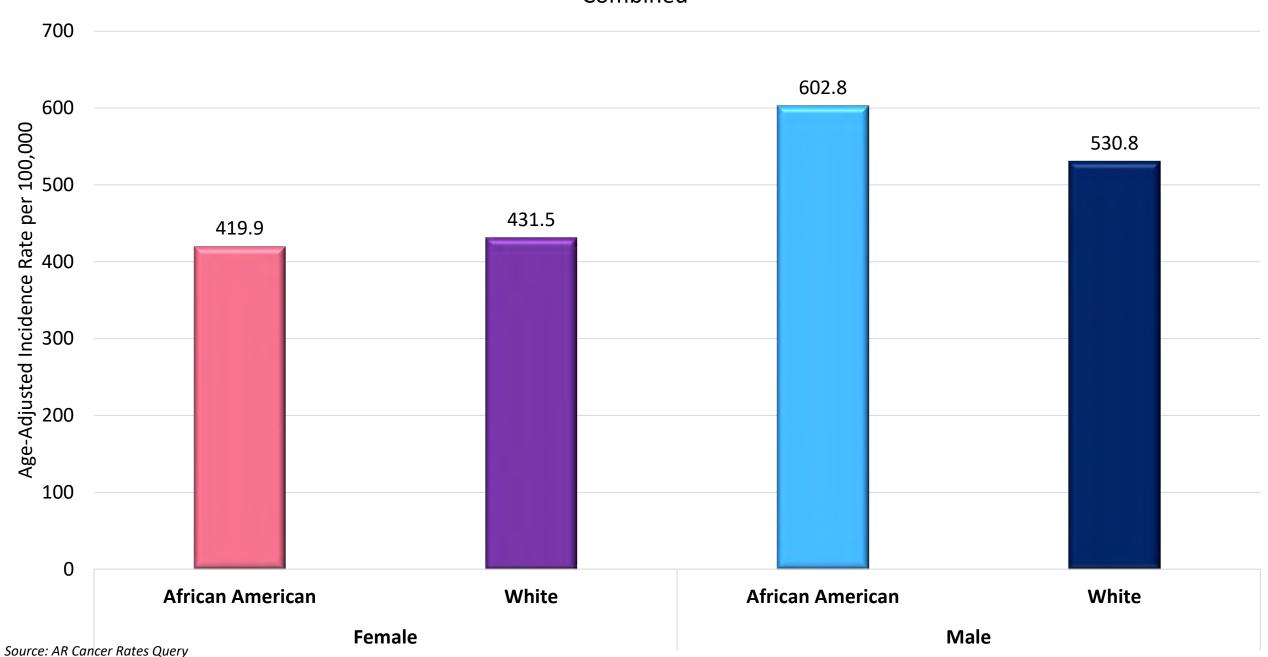


Source: AR Cancer Rates Query

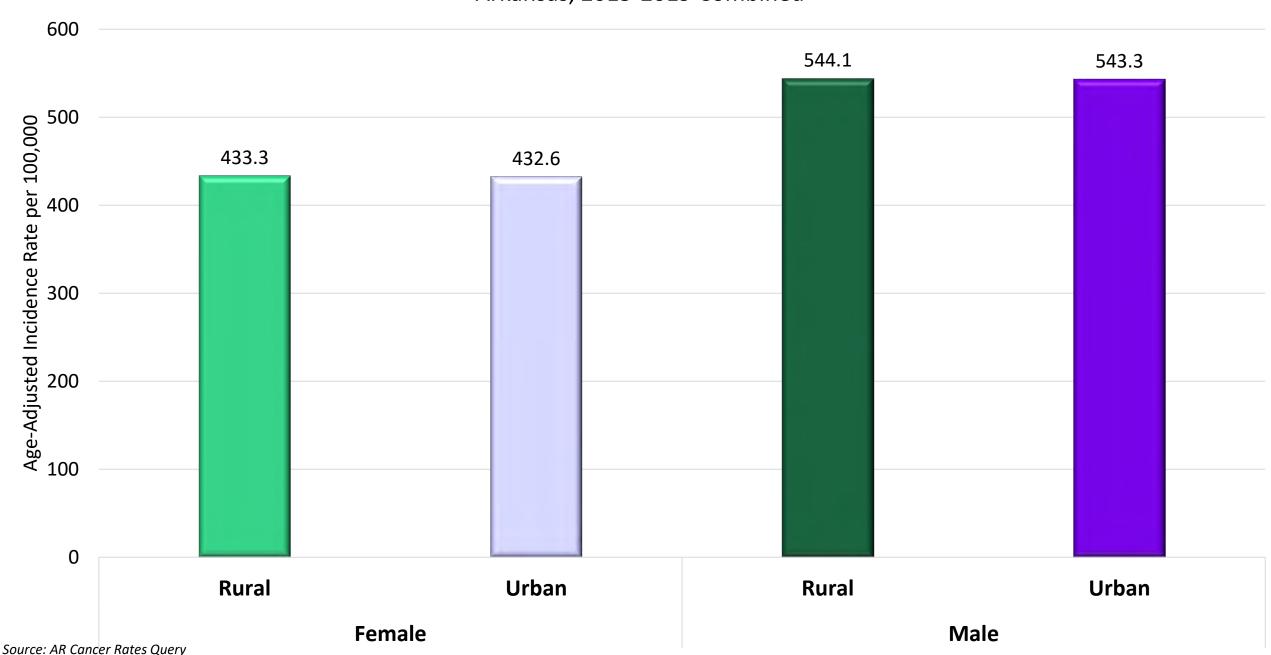


Age-adjusted incidence rate of invasive and in-situ cancers by race and sex, Arkansas, 2015-2019

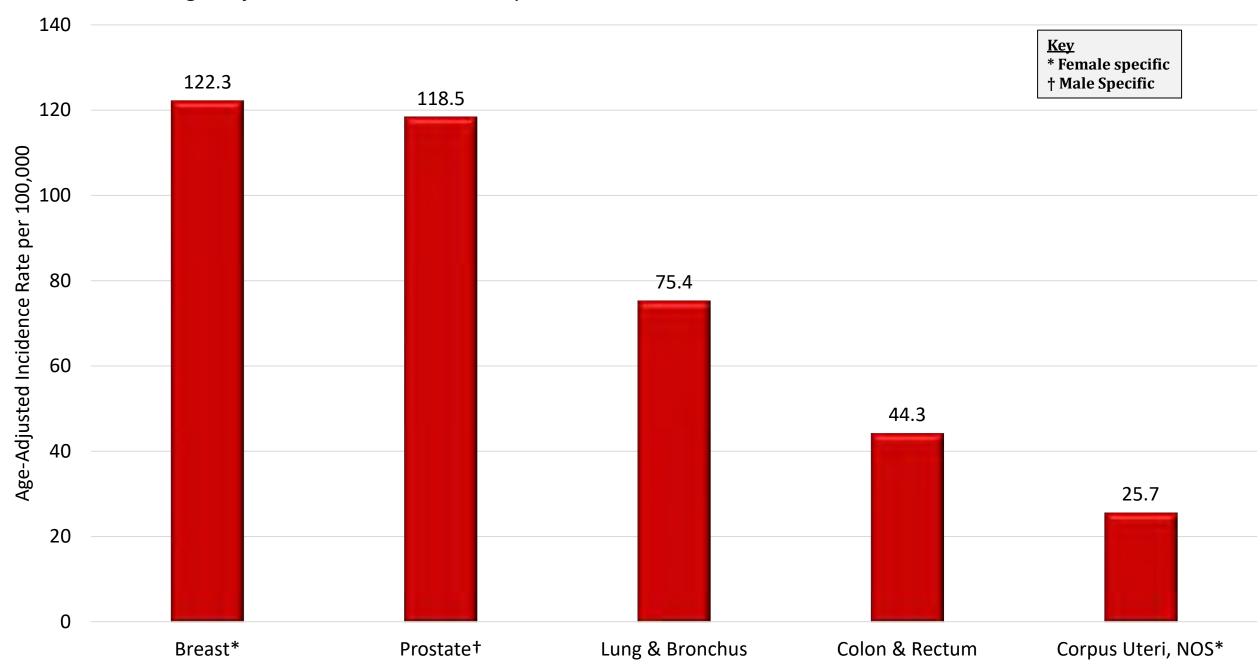
Combined



Age-adjusted incidence rate of invasive and in-situ cancers by geographic counties and sex, Arkansas, 2015-2019 Combined

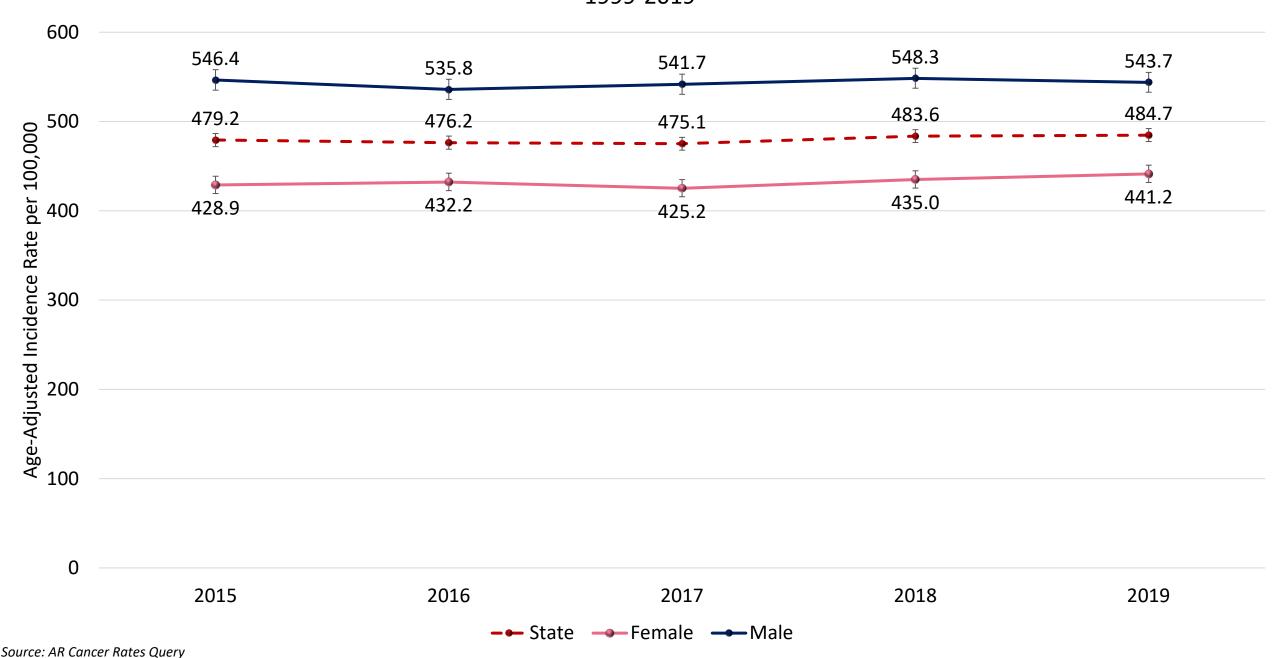


Age-adjusted incidence rate of top 5 cancers in the state, Arkansas, 2015-2019 Combined

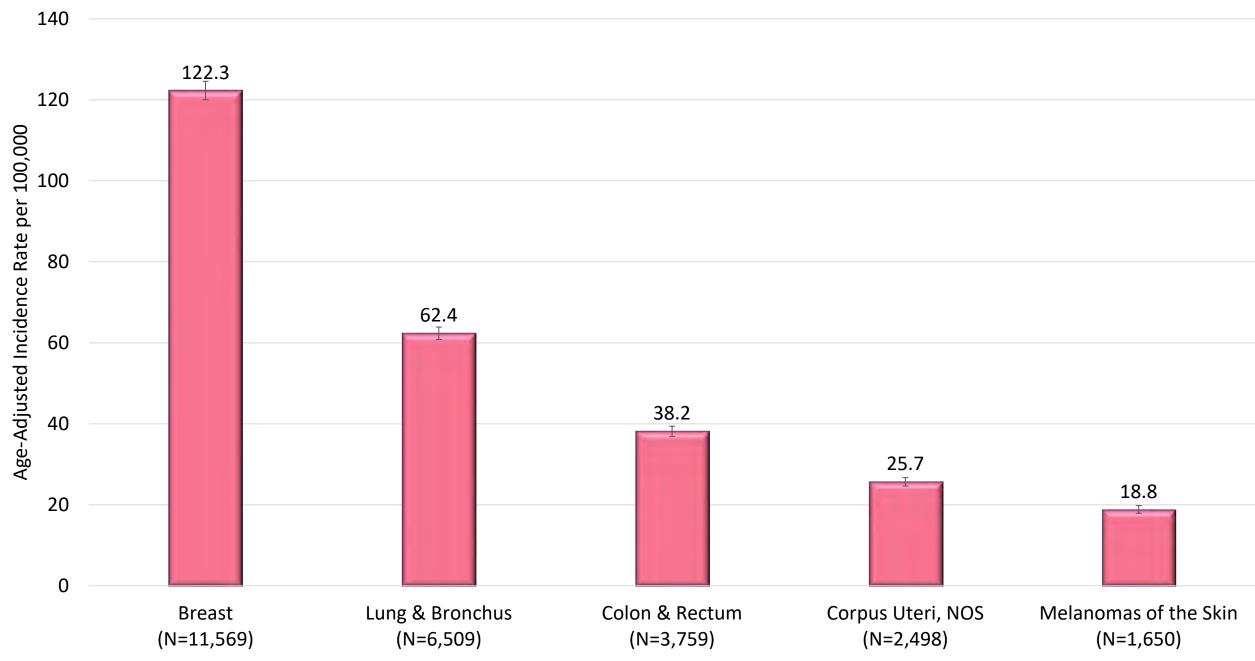


Source: USCS Data Visualization Tool

Age-adjusted incidence rate of invasive and in-situ cancers by diagnosis year and sex, Arkansas, 1999-2019

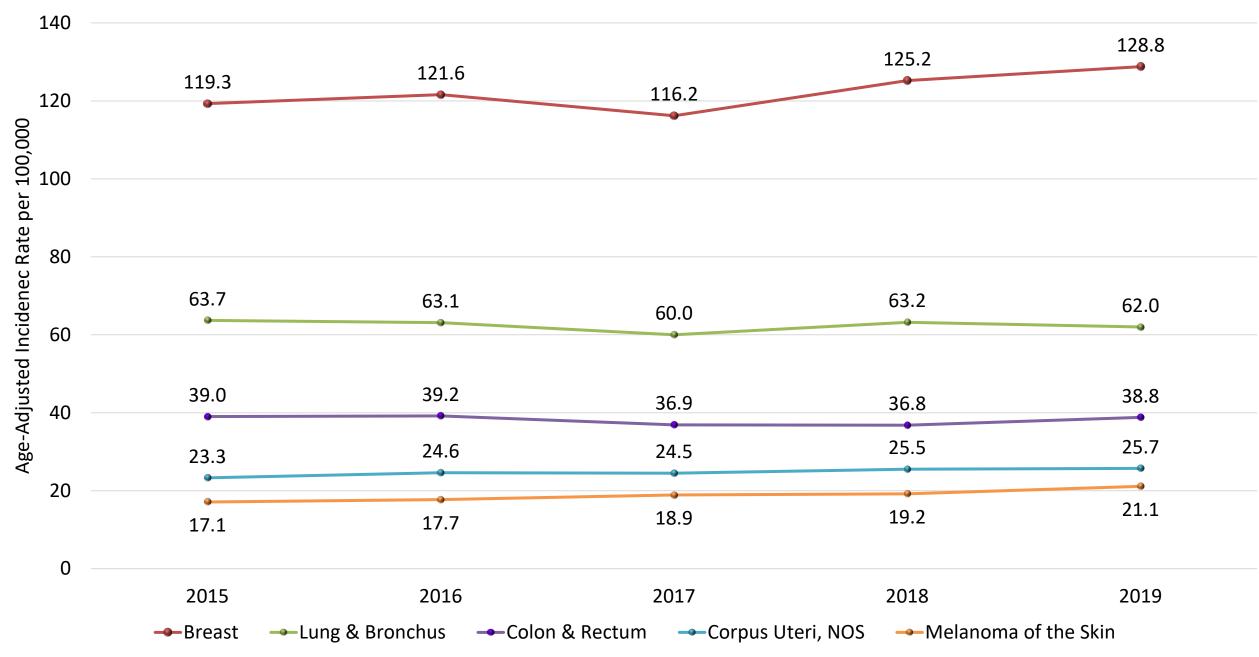


Age-adjusted incidence rate of top 5 cancers among females, Arkansas, 2015-2019 Combined

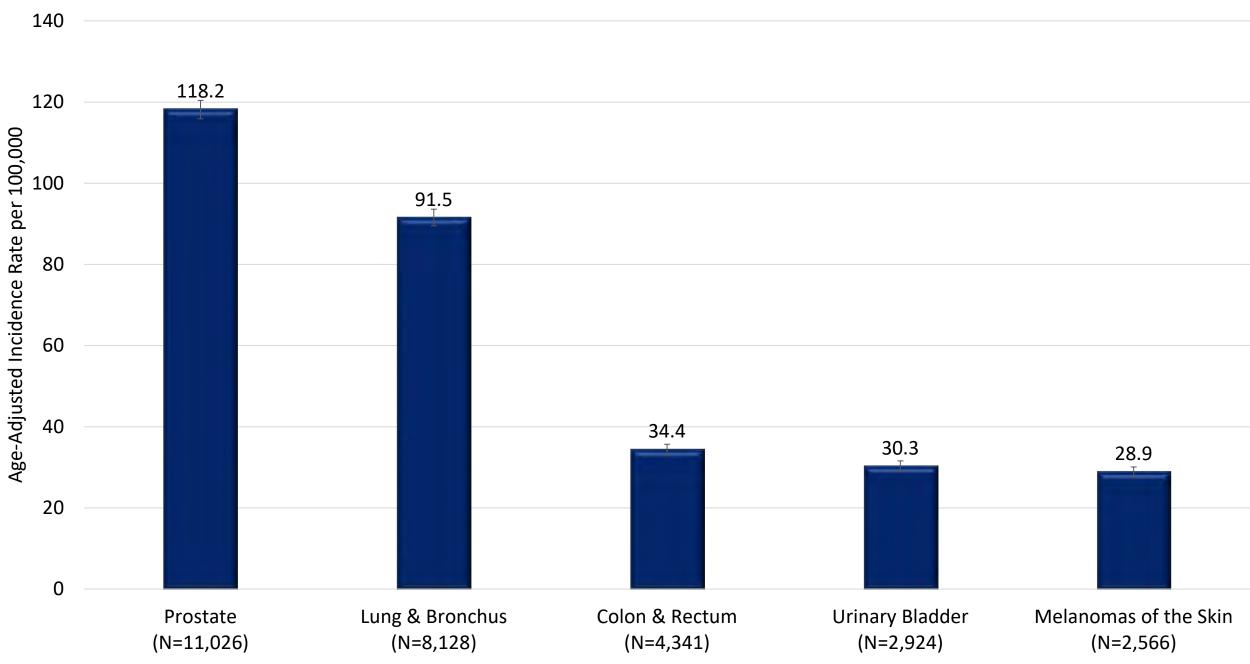


Source: AR Cancer Rates Query

Age-adjusted incidence rate of top 5 cancers among females by year, Arkansas, 2015 - 2019

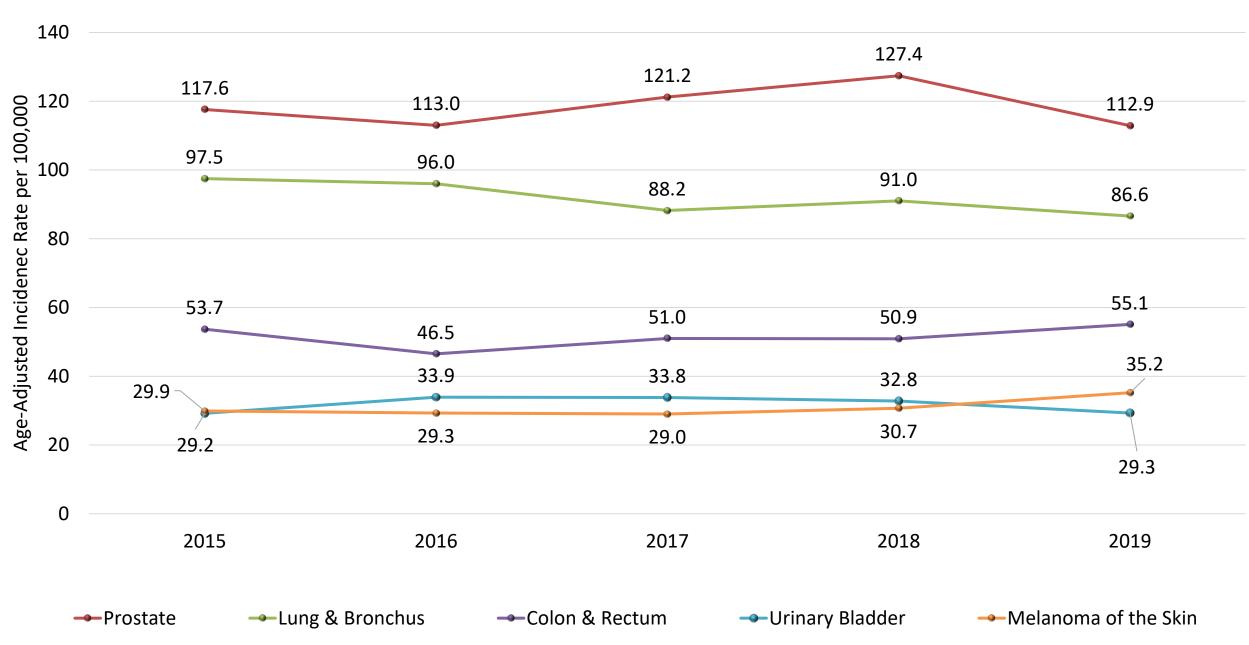


Age-adjusted incidence rate of top 5 cancers among males, Arkansas, 2015-2019 Combined



Source: USCS Data Visualization Tool

Age-adjusted incidence rate of top 5 cancers among males by year, Arkansas, 2015 - 2019

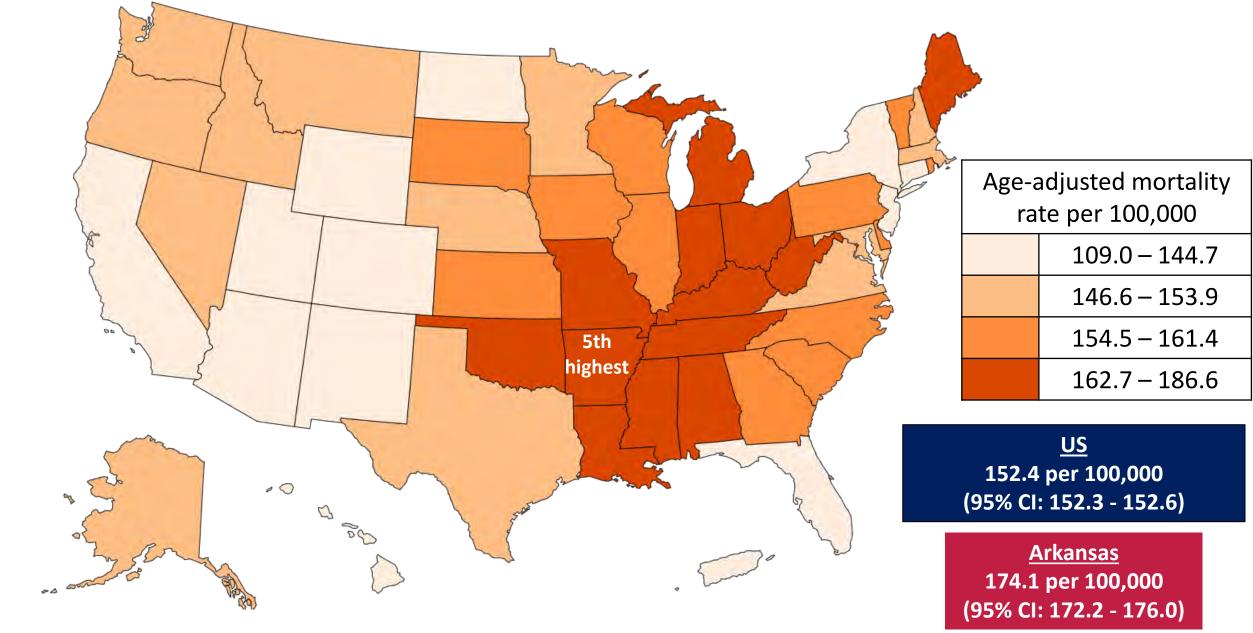


Source: CDC Wonder

# Invasive Cancers Age-Adjusted Mortality Rates in Arkansas

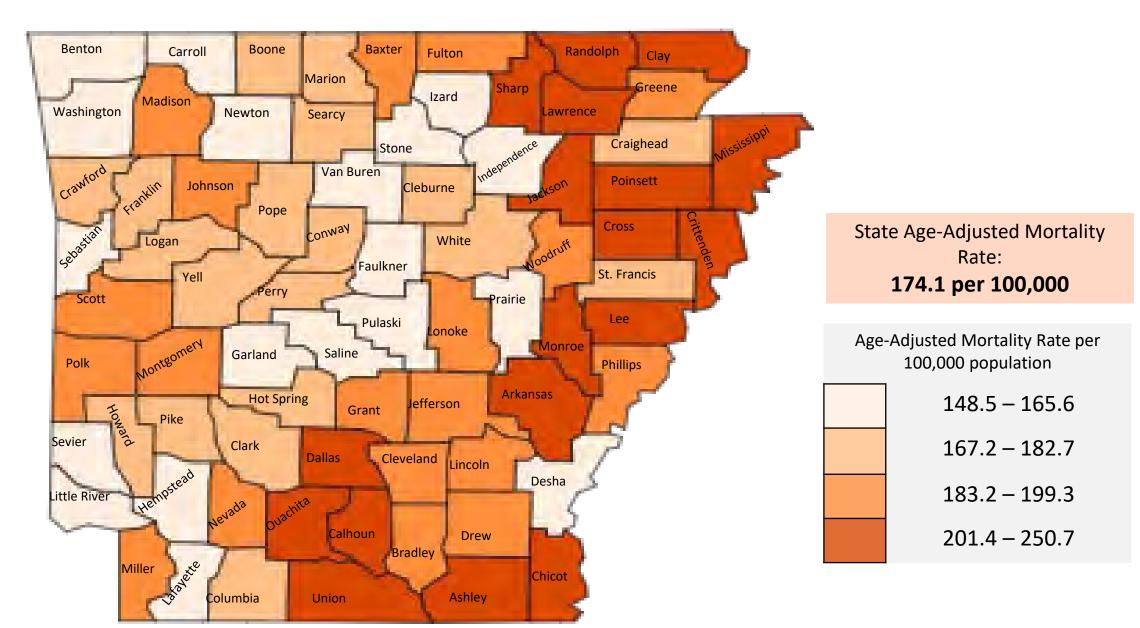


#### US Map of overall invasive and in-situ\* cancer age-adjusted mortality rate by state, 2015-2019



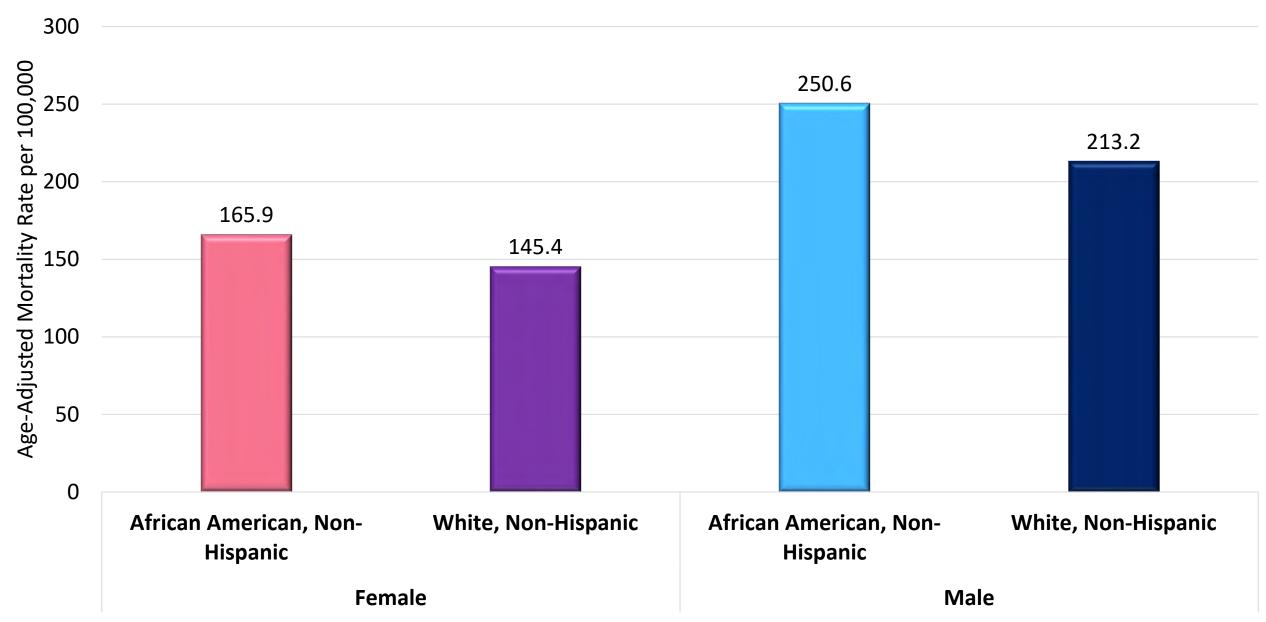
Source: USCS Data Visualizations Tool

#### Map of overall invasive and in-situ\* cancer age-adjusted mortality rate by county, Arkansas, 2015-2019

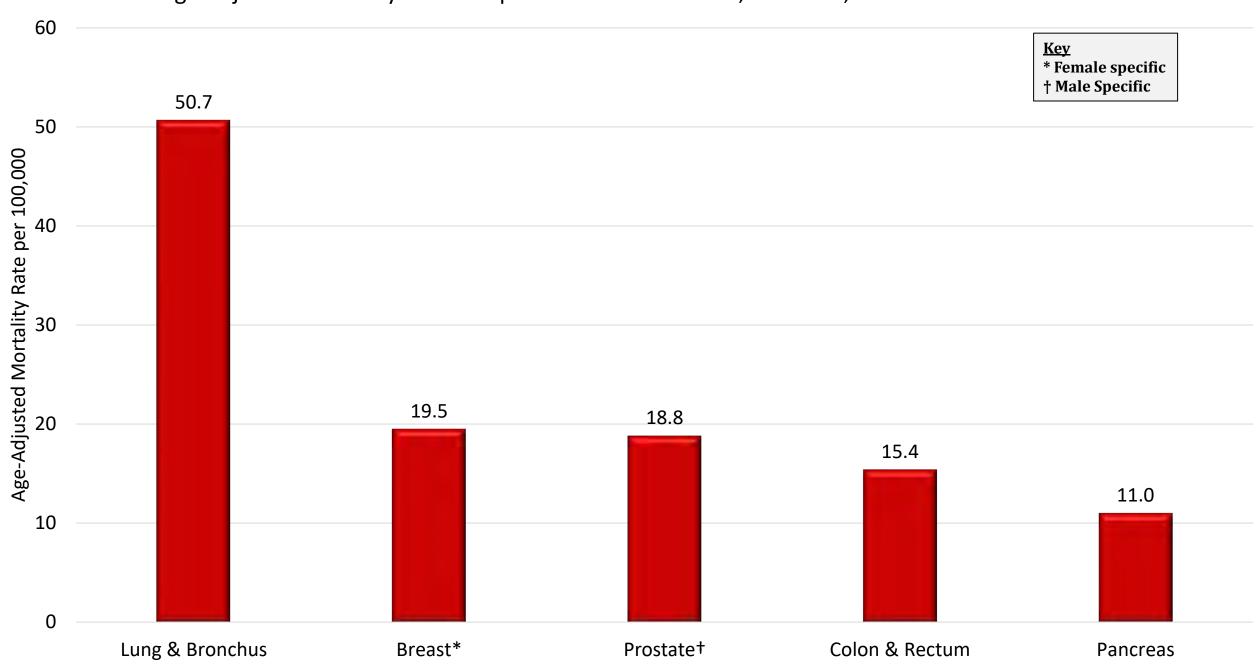


Source: USCS Data Visualizations Tool

Age-adjusted mortality rate of invasive and in-situ cancers by race/ethnicity and sex, Arkansas, 2015-2019 Combined

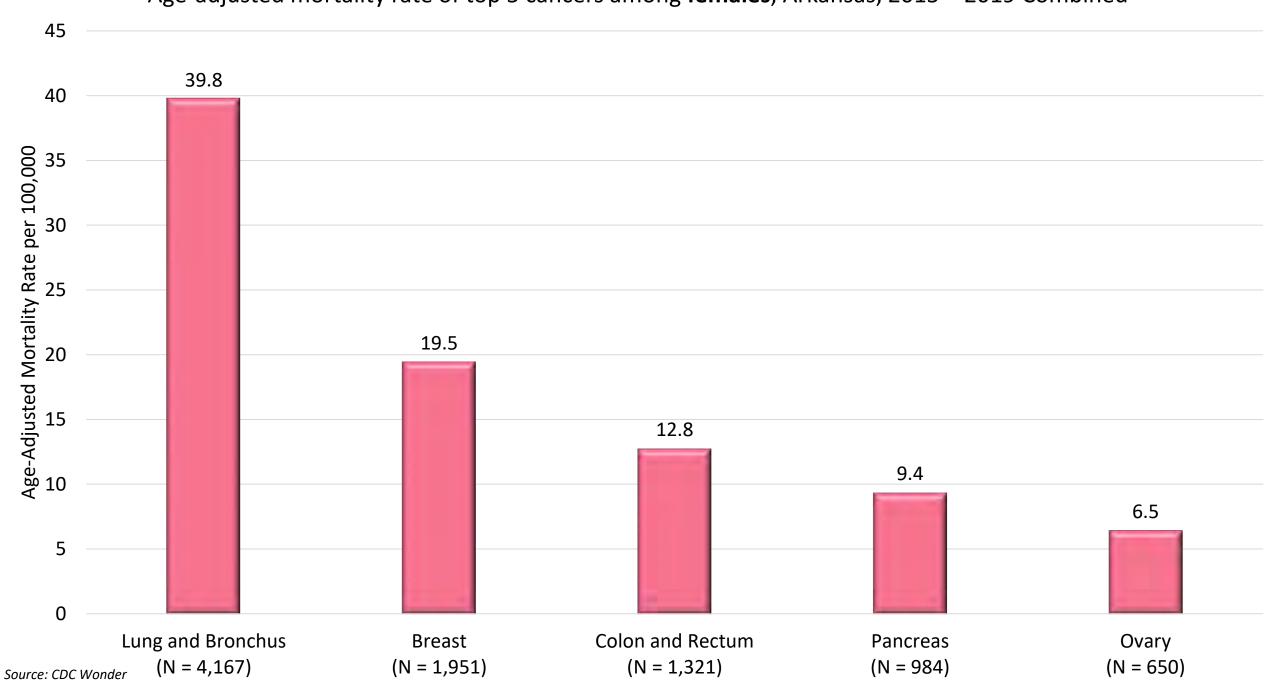


Age-adjusted mortality rate of top 5 cancers in the state, Arkansas, 2015 – 2019 Combined

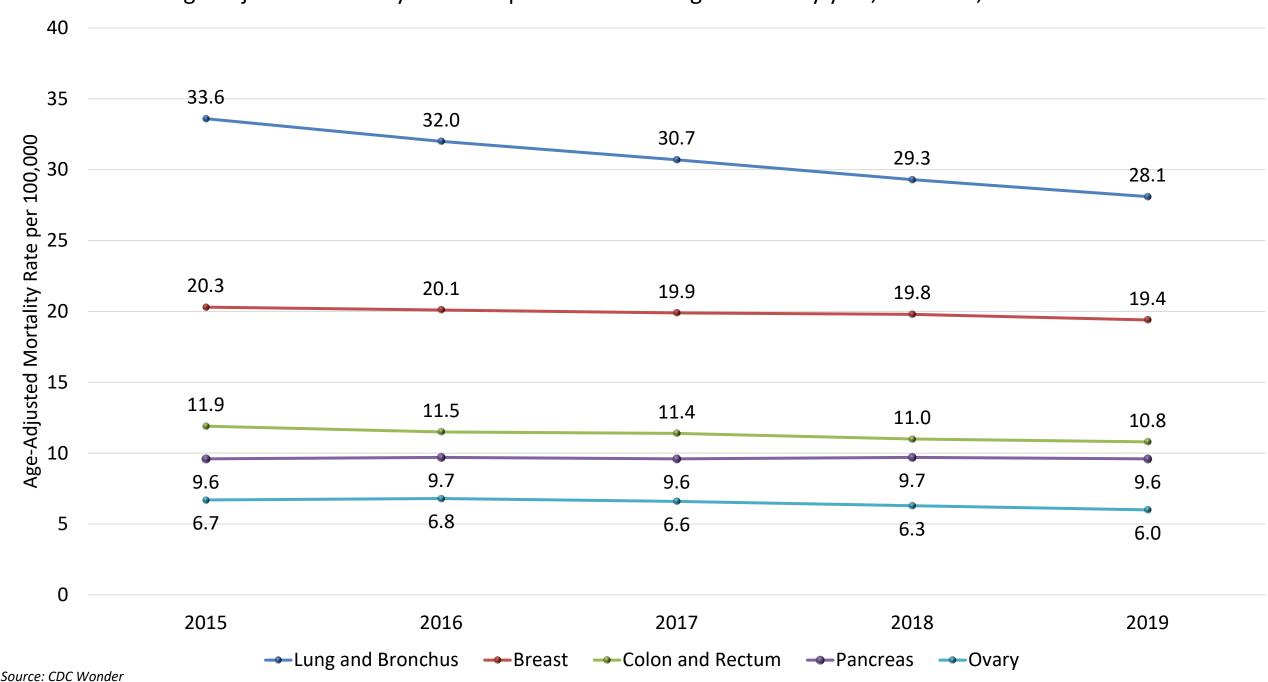


Source: CDC Wonder

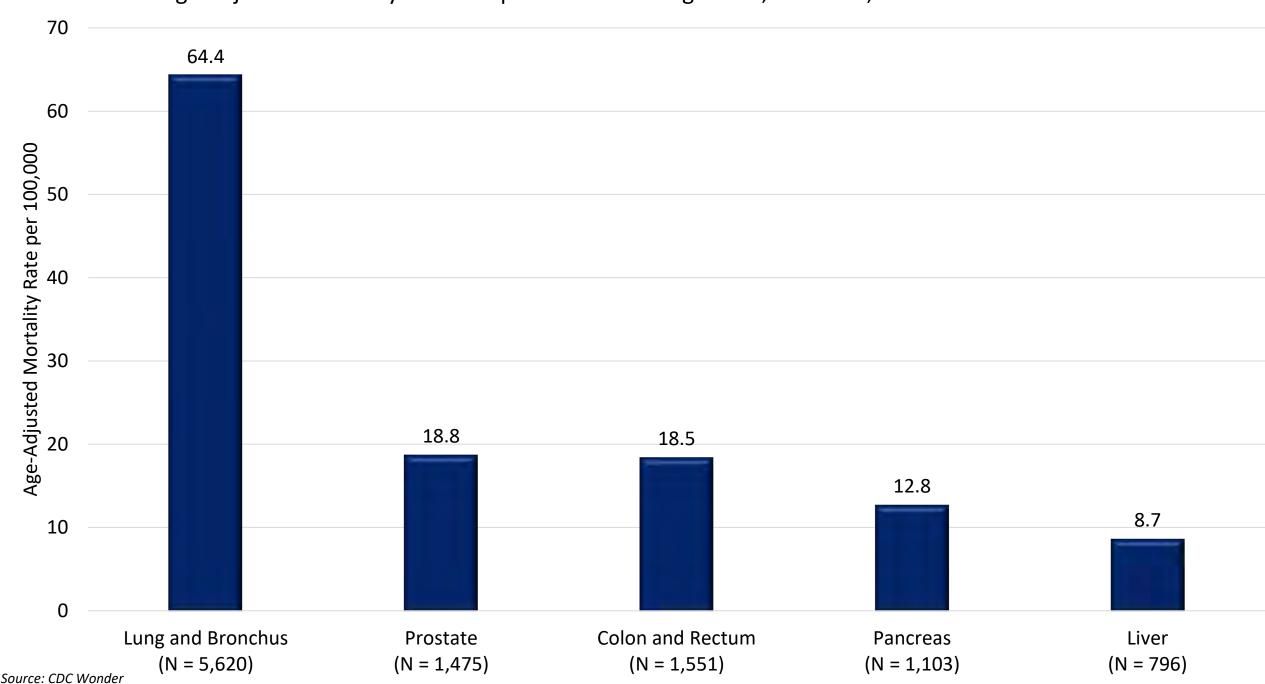
Age-adjusted mortality rate of top 5 cancers among females, Arkansas, 2015 – 2019 Combined

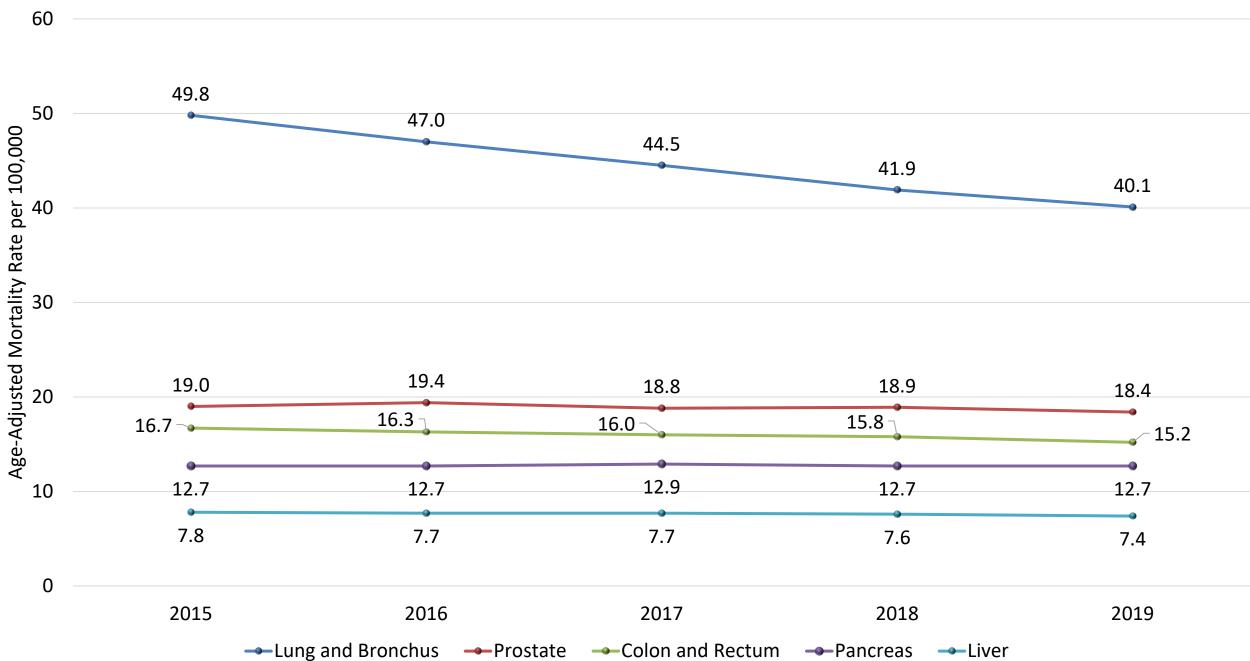


Age-adjusted mortality rate of top 5 cancers among females by year, Arkansas, 2015 - 2019



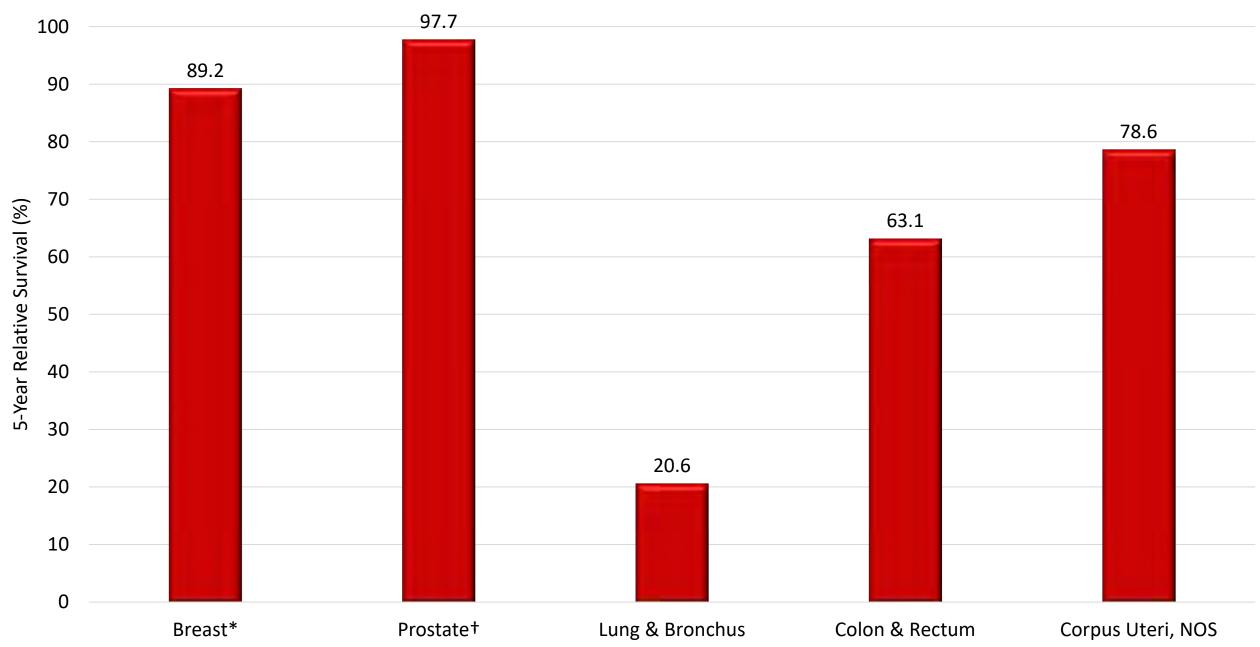
Age-adjusted mortality rate of top 5 cancers among males, Arkansas, 2015 – 2019 Combined





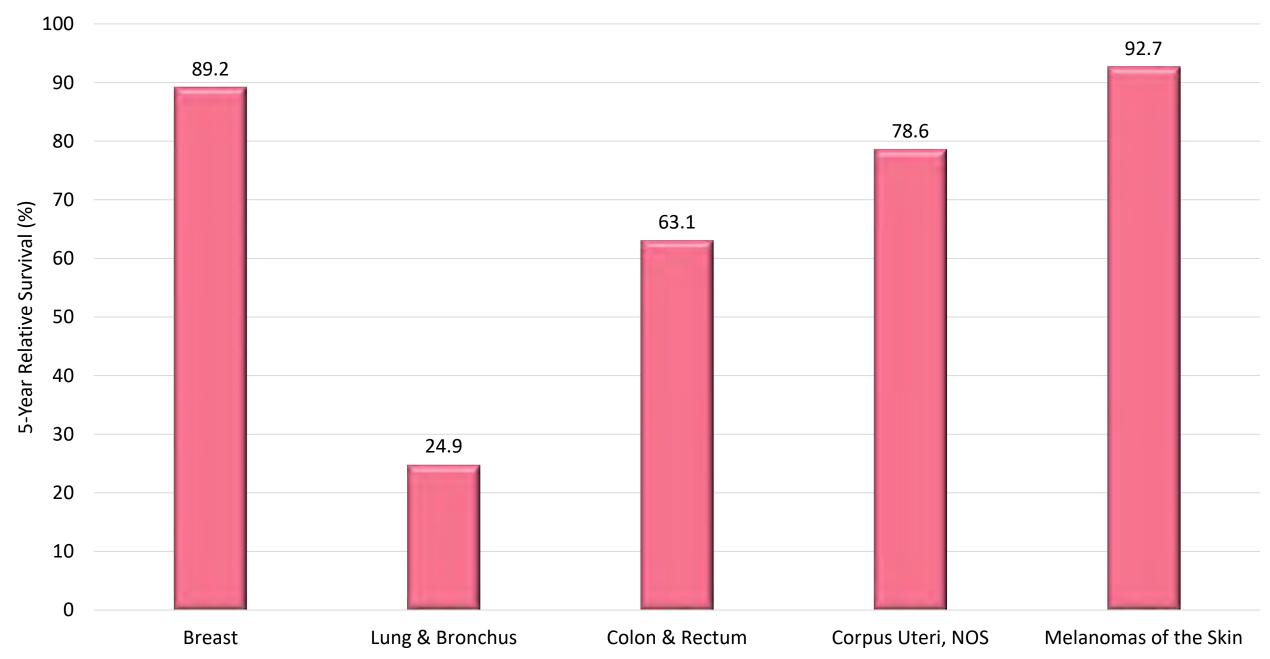
Source: CDC Wonder

5-year relative survival percent of top 5 incidence cancers in the state, Arkansas, 2012-2018

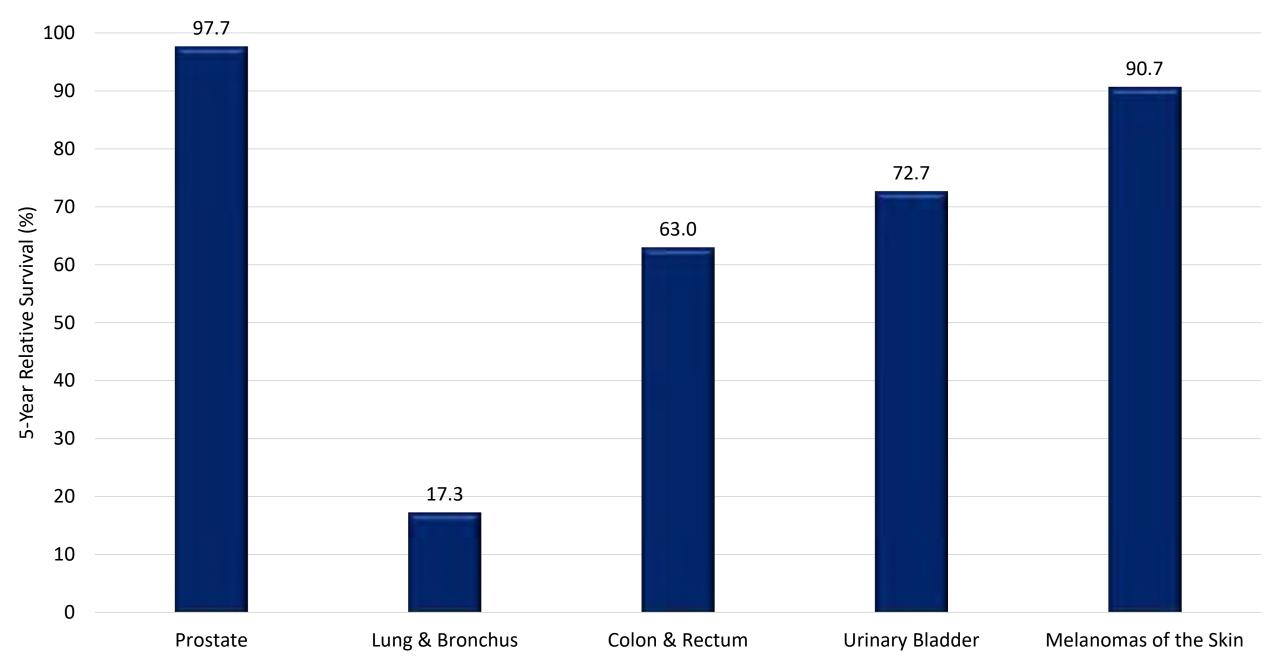


Source: USCS Data Visualizations Tool

5-year relative survival percent of top 5 incidence cancers among females, Arkansas, 2012-2018



5-year relative survival percent of top 5 incidence cancers among males, Arkansas, 2012-2018



## Selected Cancers

Breast
Prostate
Colon & Rectum
Lung & Bronchus



### **Breast Cancer**

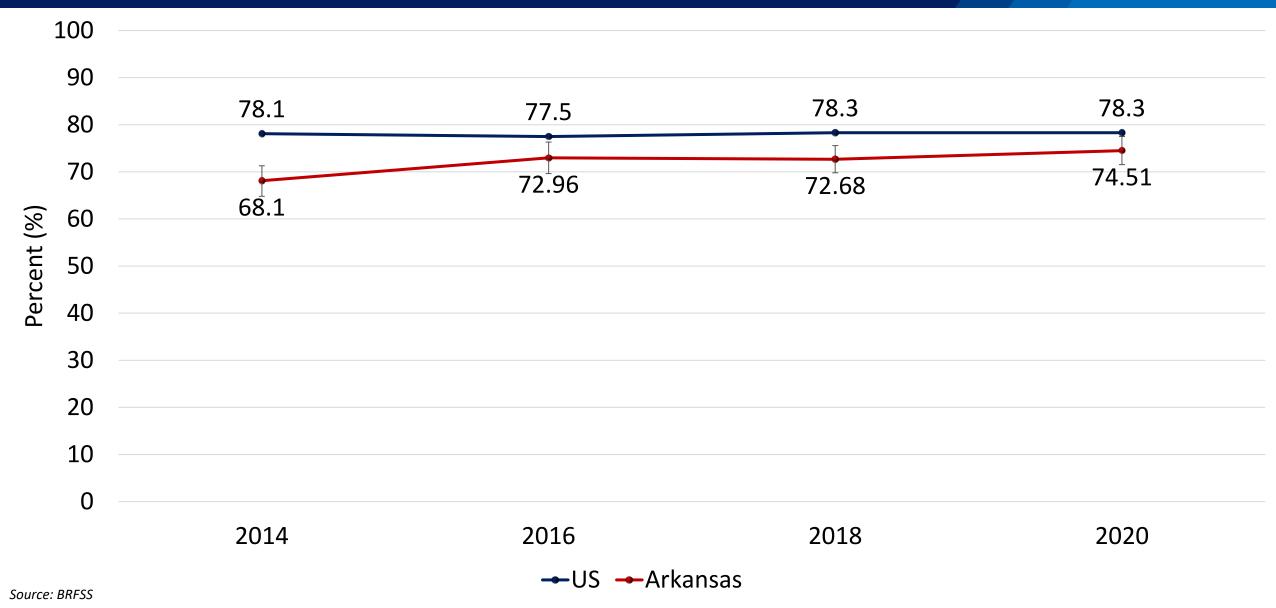
Arkansas

2015-2019



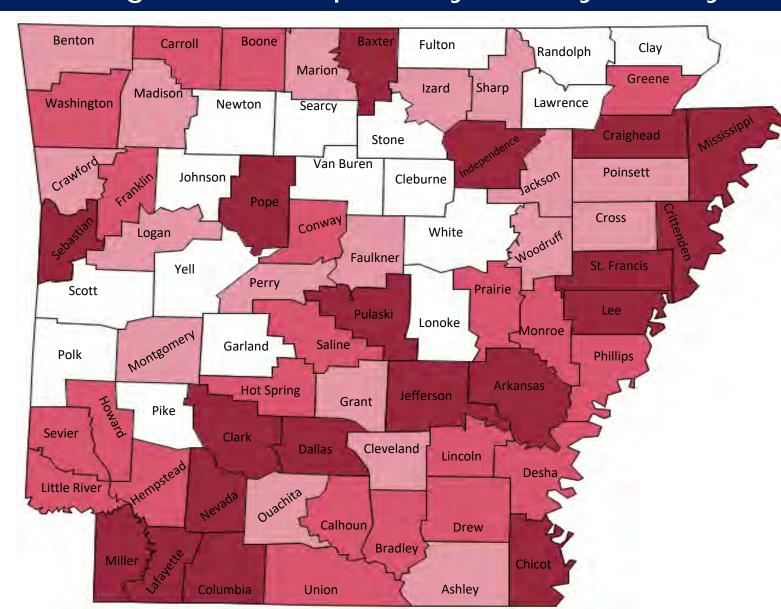
## Percent of females aged 50-74 who have had a mammogram within the past two years in US and Arkansas, 2014-2020





## Percent of females aged 50–74 years who reported a mammogram in the past 2 years by county, Arkansas, 2020



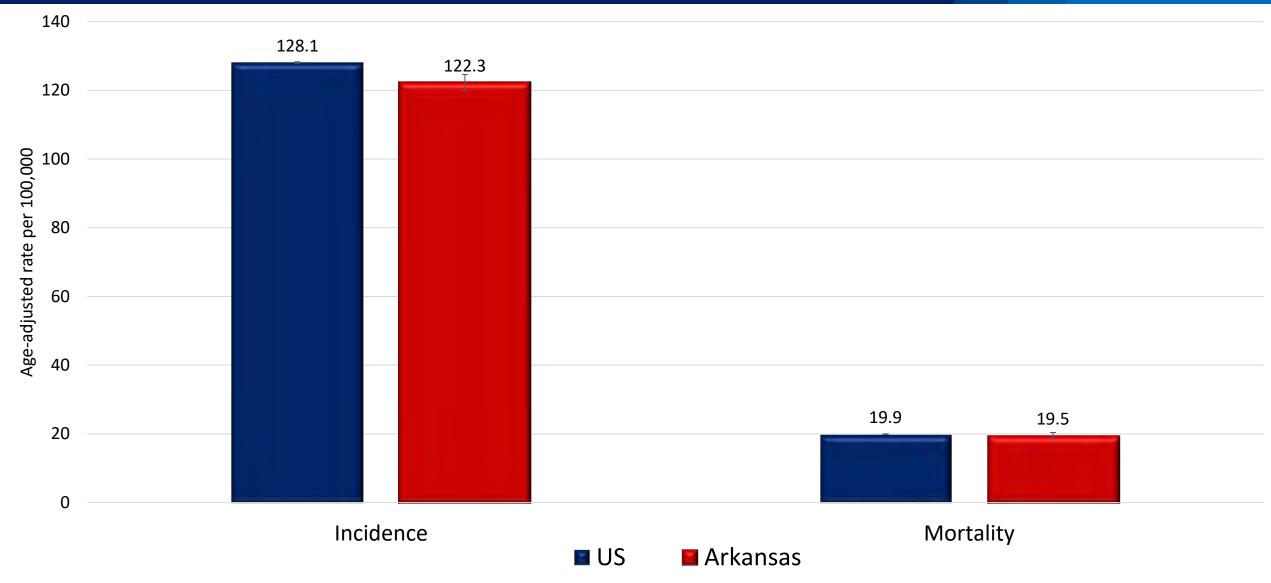


Age-adjusted prevalence (%) of mammography use	
	64.5 - 66.9
	67.0 - 68.5
	68.6 - 69.9
	70.0 - 74.9

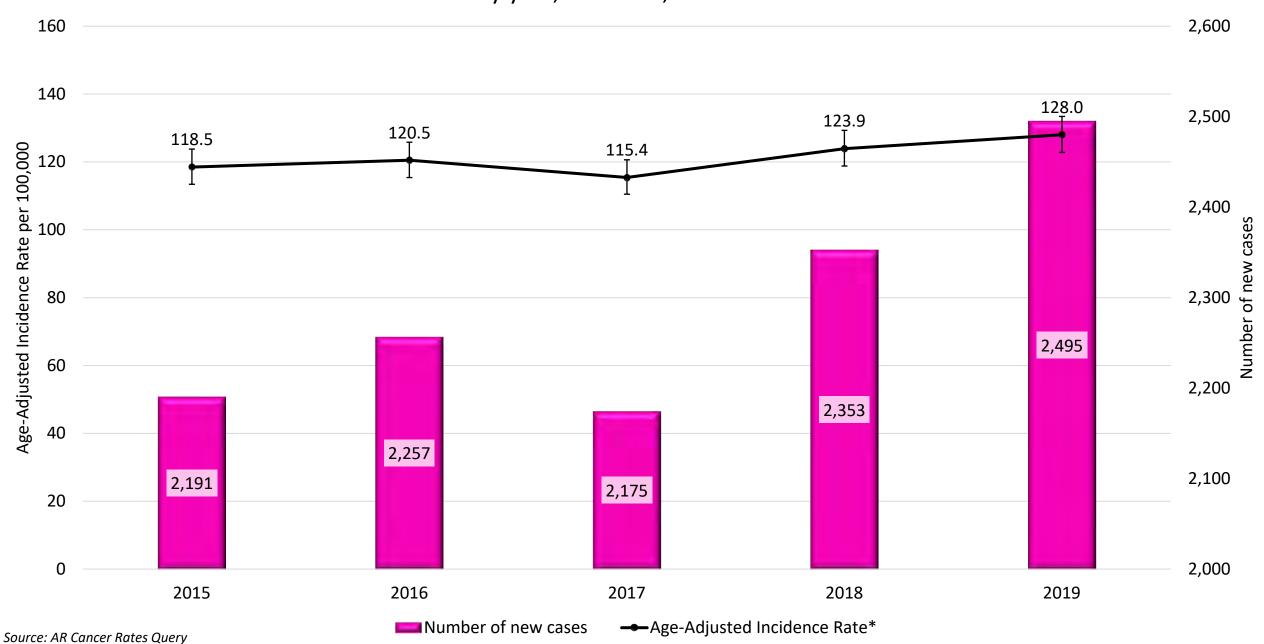
Source: BRFSS

# Overall age-adjusted incidence and mortality rate of breast cancer among females, US and Arkansas, 2015-2019

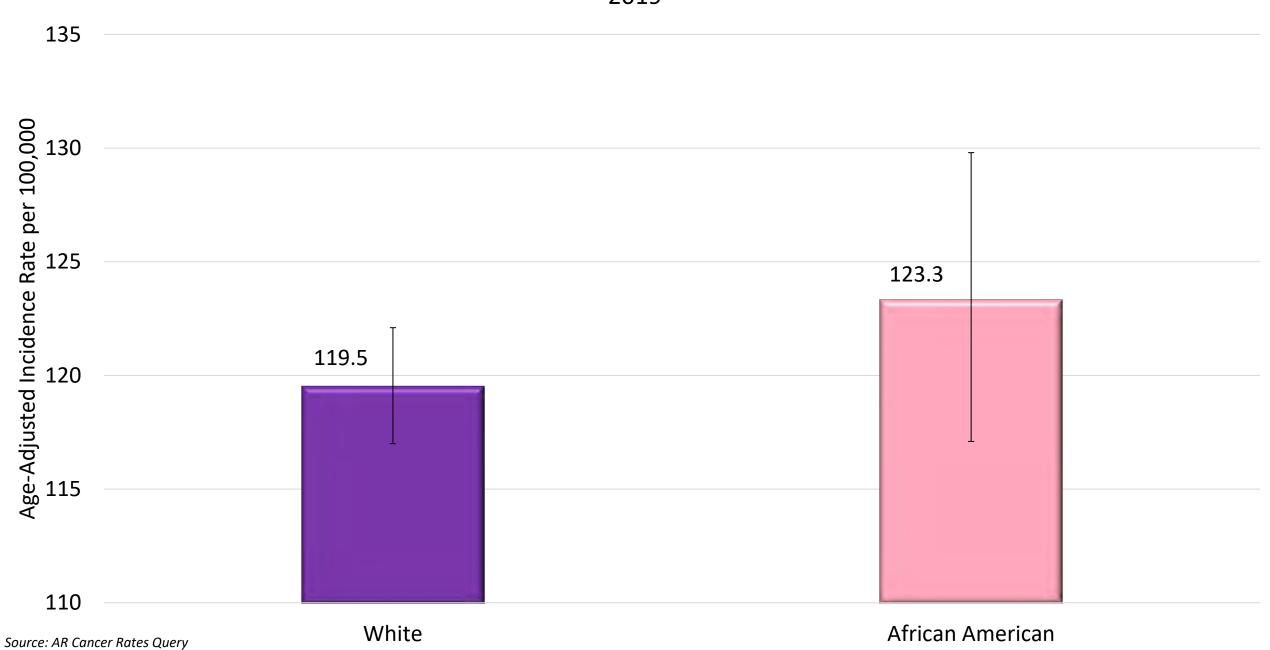




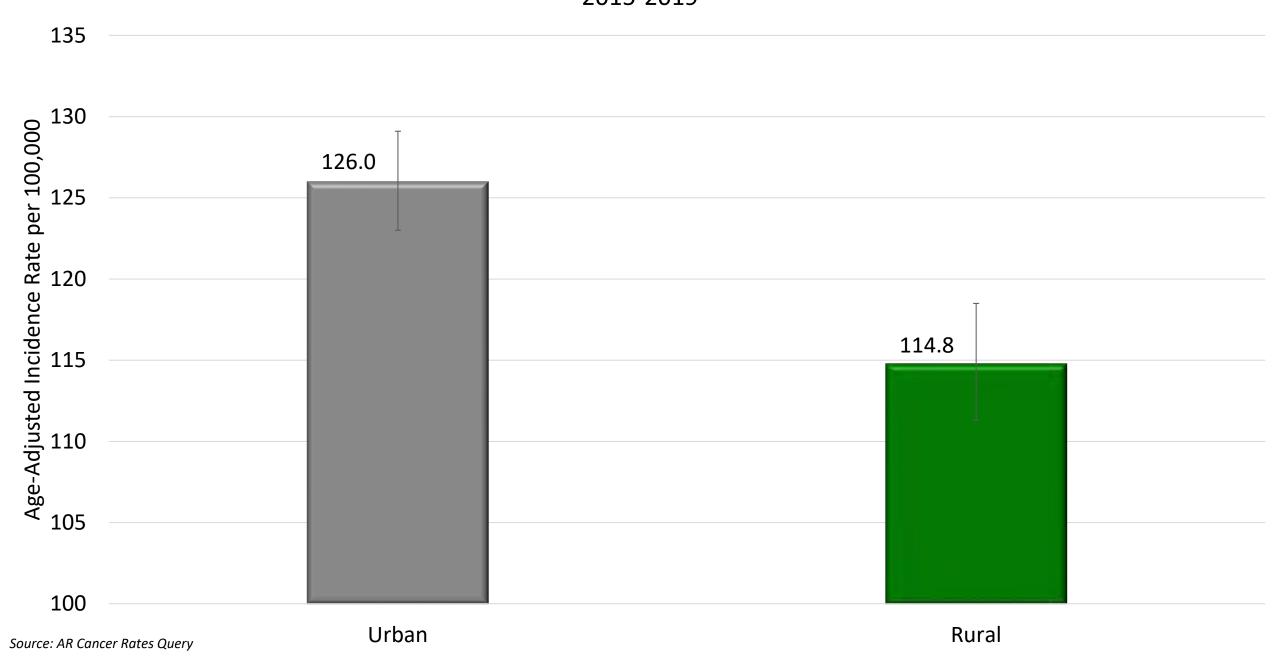
#### Overall breast cancer age-adjusted incidence rate and number of new cases among females by year, Arkansas, 2015-2019



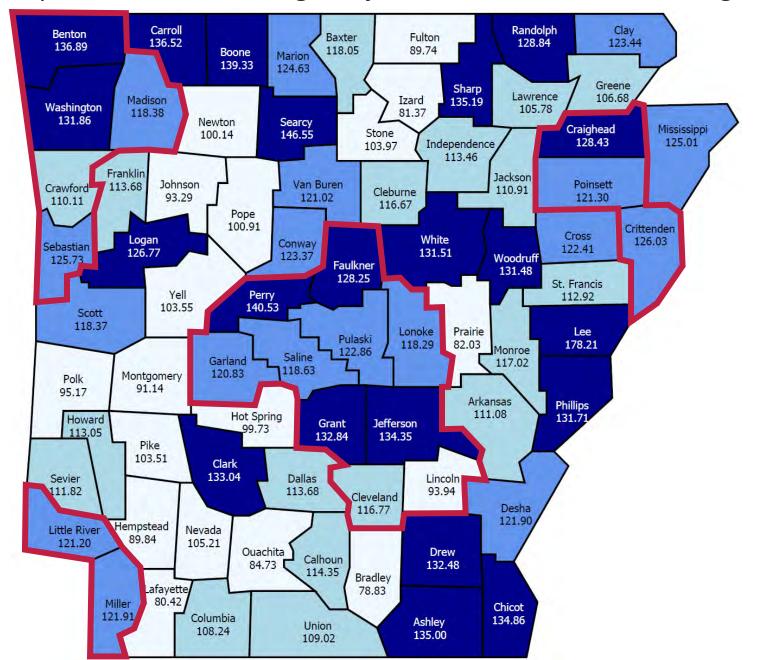
Overall breast cancer age-adjusted incidence rate among females by race, Arkansas, 2015-2019



Breast cancer age-adjusted incidence rate among females by urban/rural counties, Arkansas, 2015-2019



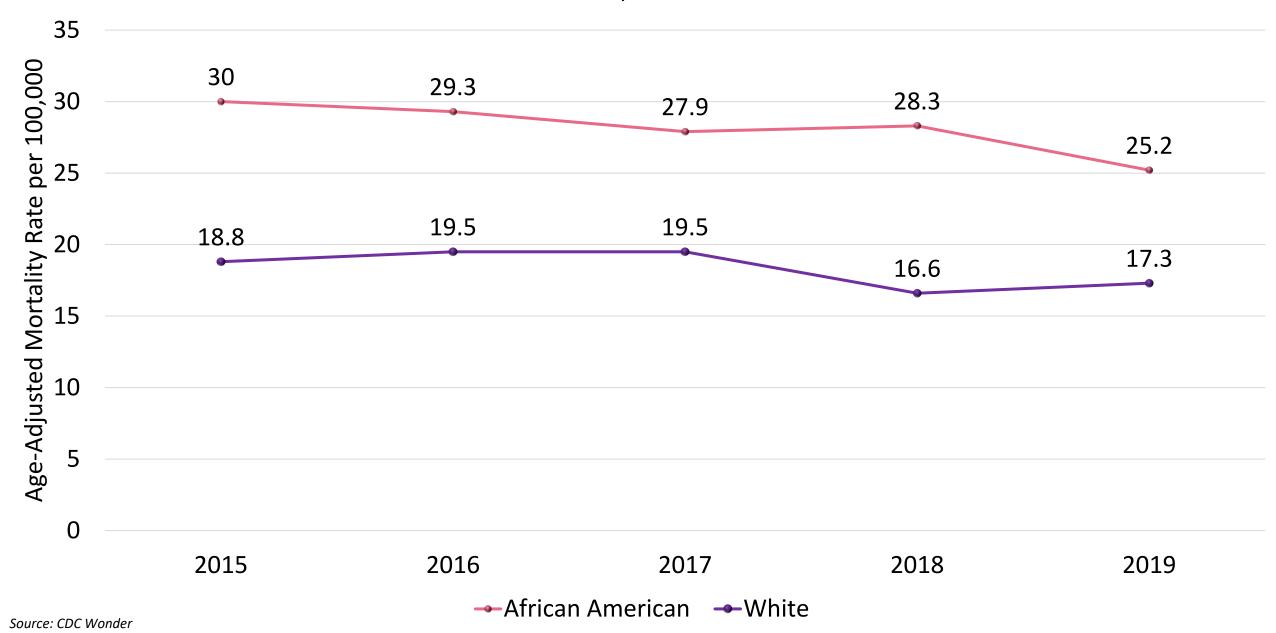
#### Map of breast cancer age-adjusted incidence rate among females by county, Arkansas, 2015-2019



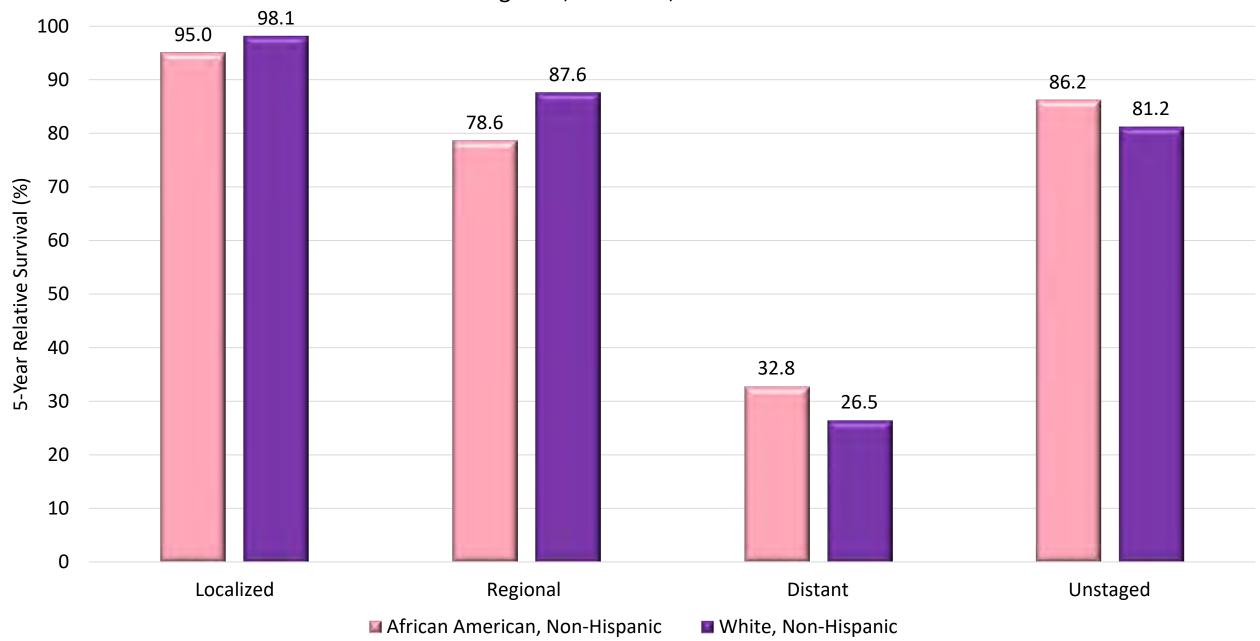
### State age-adjusted incidence rate: 121.32 per 100,000 population

Age-adjusted incidence rate per 100,000 population	
	78.83 – 105.77
	105.78 – 118.28
	118.29 – 126.76
	126.77 – 178.21

### Breast cancer age-adjusted mortality rate among females by race Arkansas, 2015-2019



5-year relative survival percent of breast cancer among females by race/ethnicity and stage at diagnosis, Arkansas, 2012-2018



Source: USCS Data Visualizations Tool

### Prostate Cancer

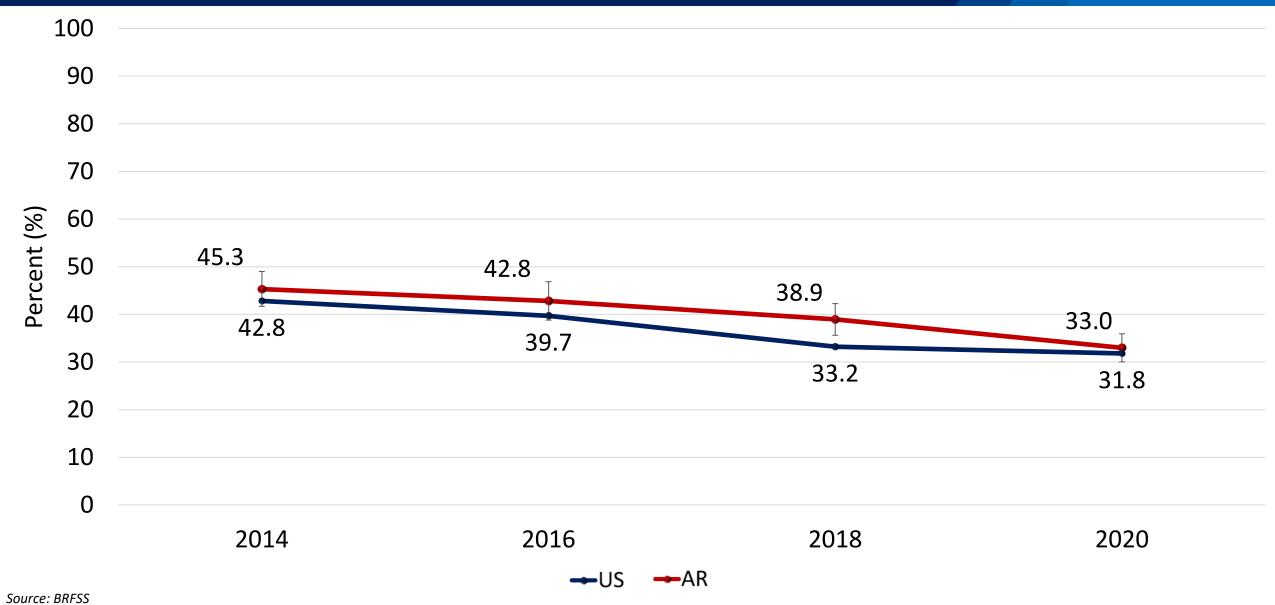
Arkansas

2015-2019



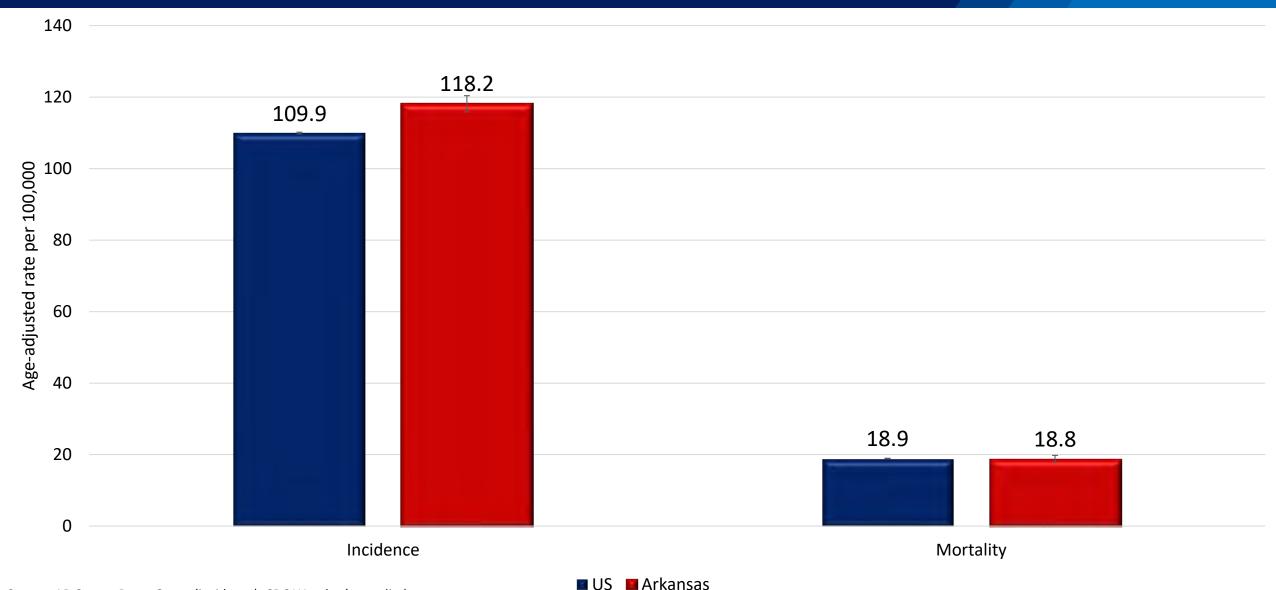
# Percent of males aged 40+ who have had a PSA test within the past 2 years, US and Arkansas, 2014-2020



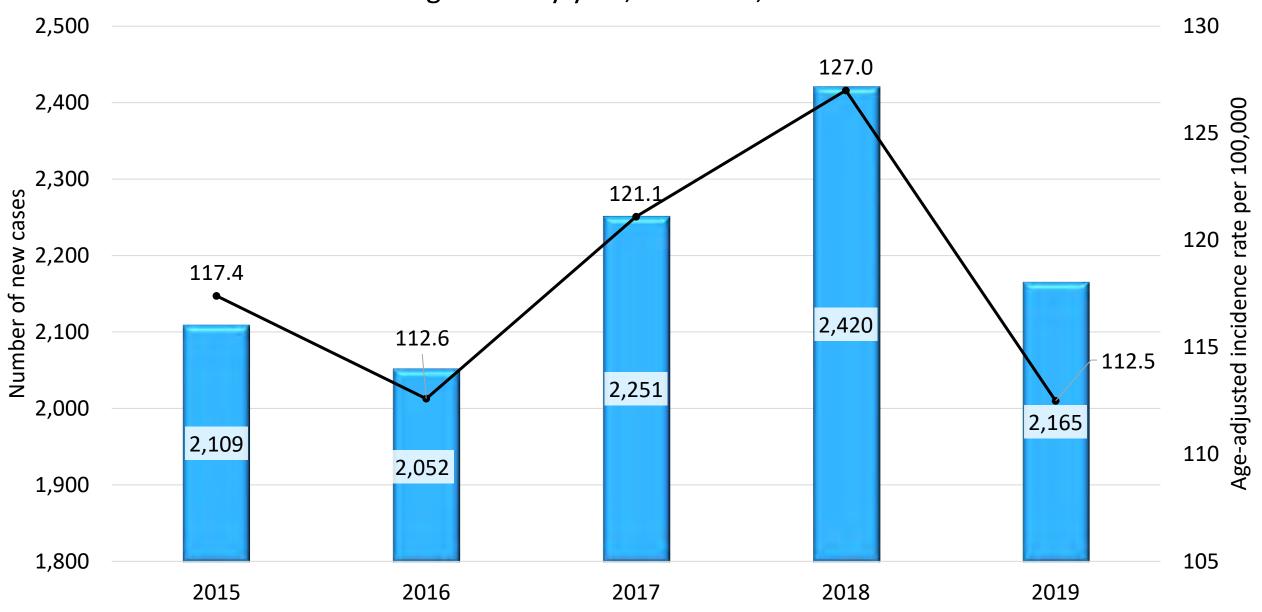


# Overall age-adjusted incidence and mortality rate of prostate cancer among males, US and Arkansas, 2015-2019

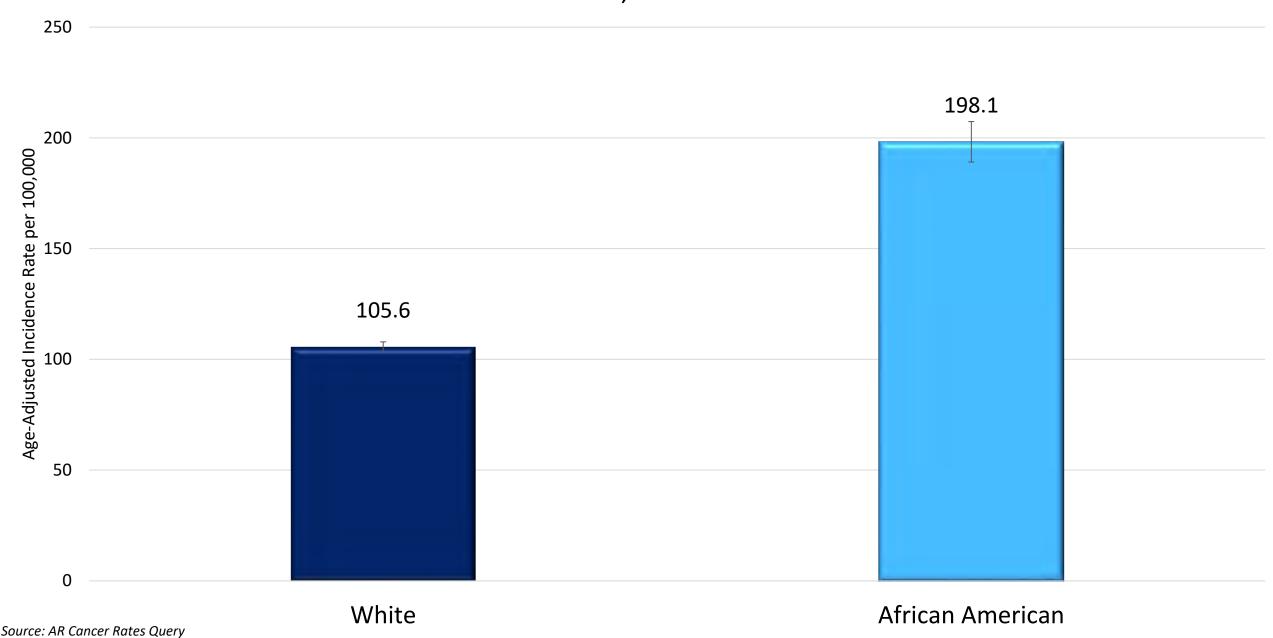




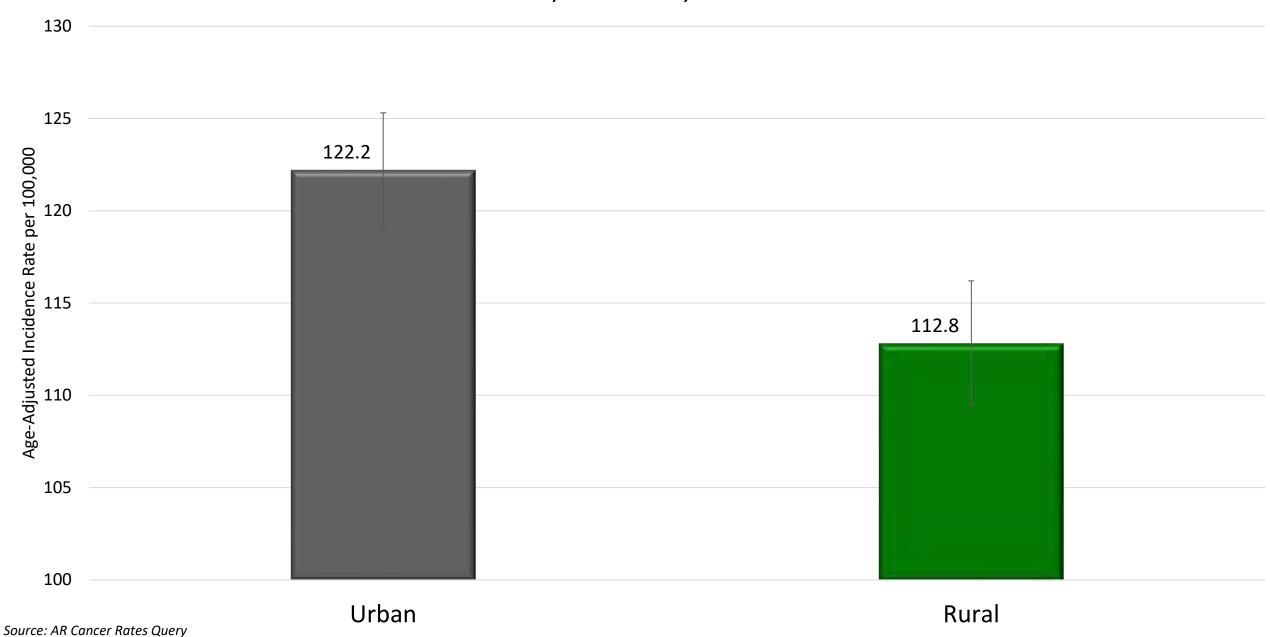
Prostate cancer number of new cases and age-adjusted incidence rate trend among males by year, Arkansas, 2015-2019



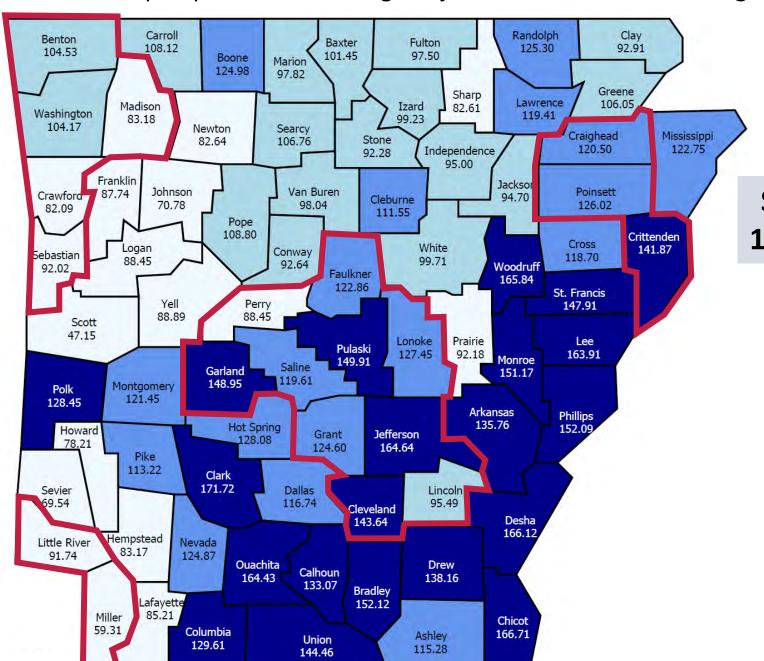
### Prostate cancer age-adjusted incidence rate among males by race, Arkansas, 2015-2019



## Prostate cancer age-adjusted incidence rate among males by urban/rural counties, Arkansas, 2015-2019



#### Map of prostate cancer age-adjusted incidence rate among males by county, Arkansas, 2015-2019



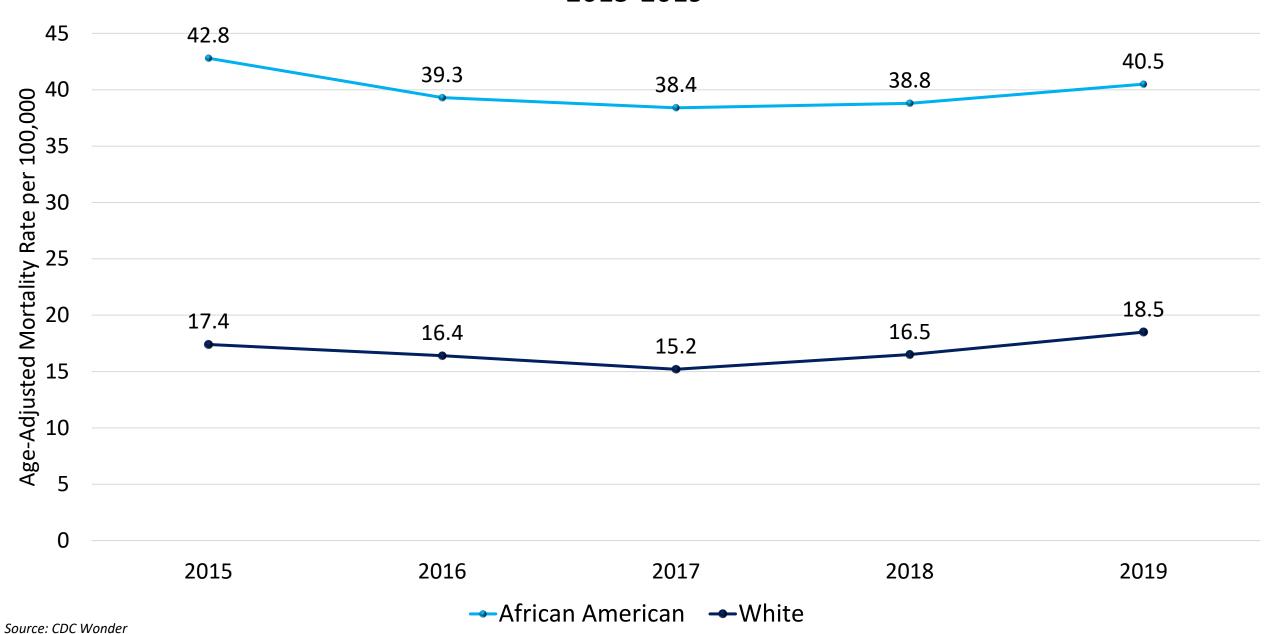
State age-adjusted incidence rate:

**118.17** per 100,000 male population

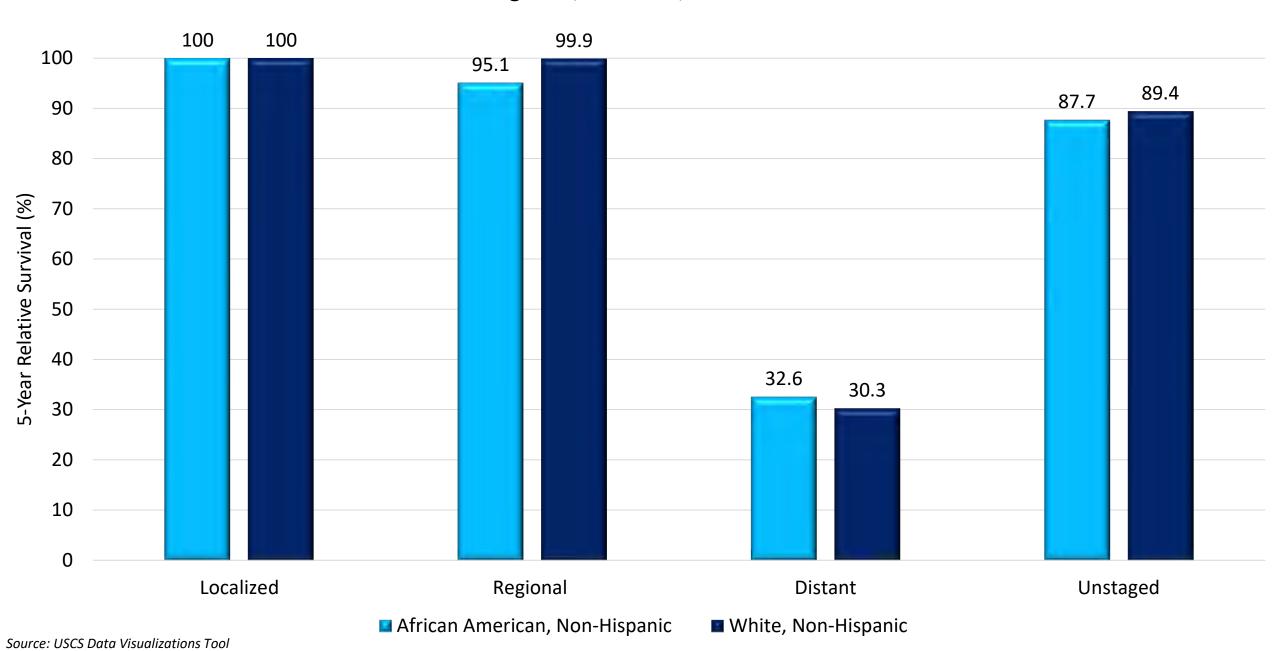
Age-adjusted incidence rate per 100,000 male population		
	47.15 – 92.27	
	92.28 – 111.54	
	111.55 – 128.44	
	128.45 – 171.22	

Source: AR Cancer Rates Query

### Prostate cancer age-adjusted mortality rate among males by race, Arkansas, 2015-2019



5-year relative survival percent of prostate cancer among males by race/ethnicity and stage at diagnosis, Arkansas, 2012-2018



## Lung & Bronchus Cancer

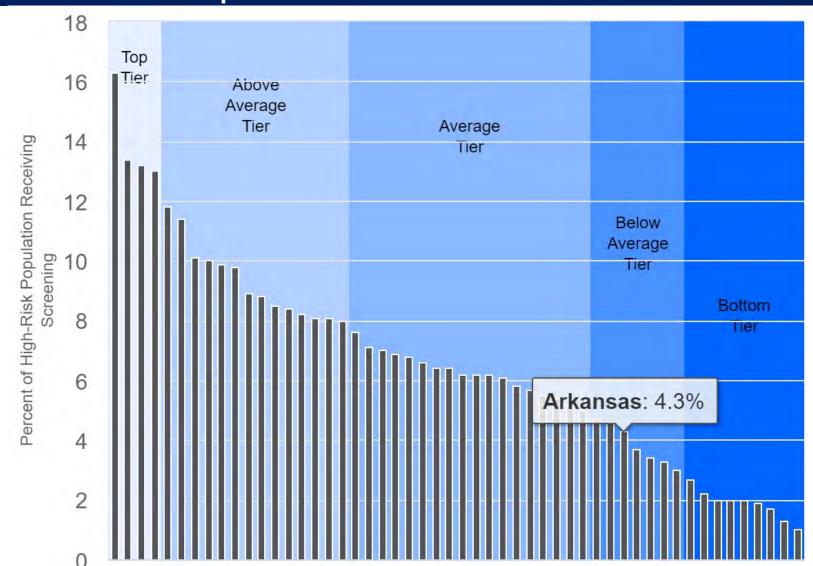
Arkansas

2015-2019



# High-risk lung & bronchus cancer screening rate US comparison, Arkansas, 2021

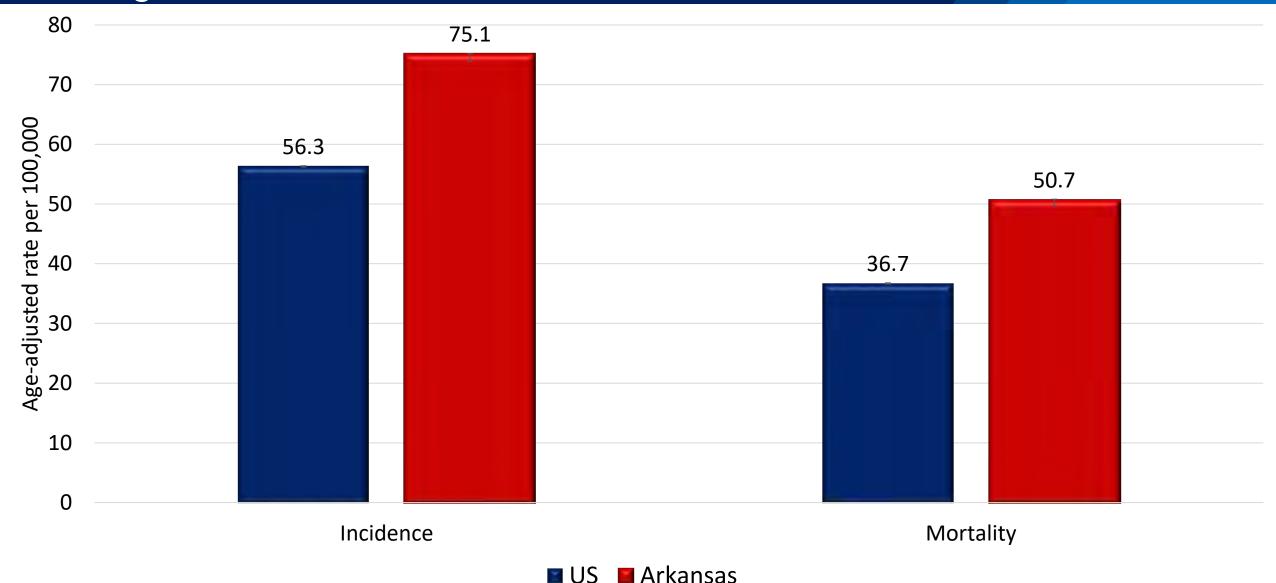




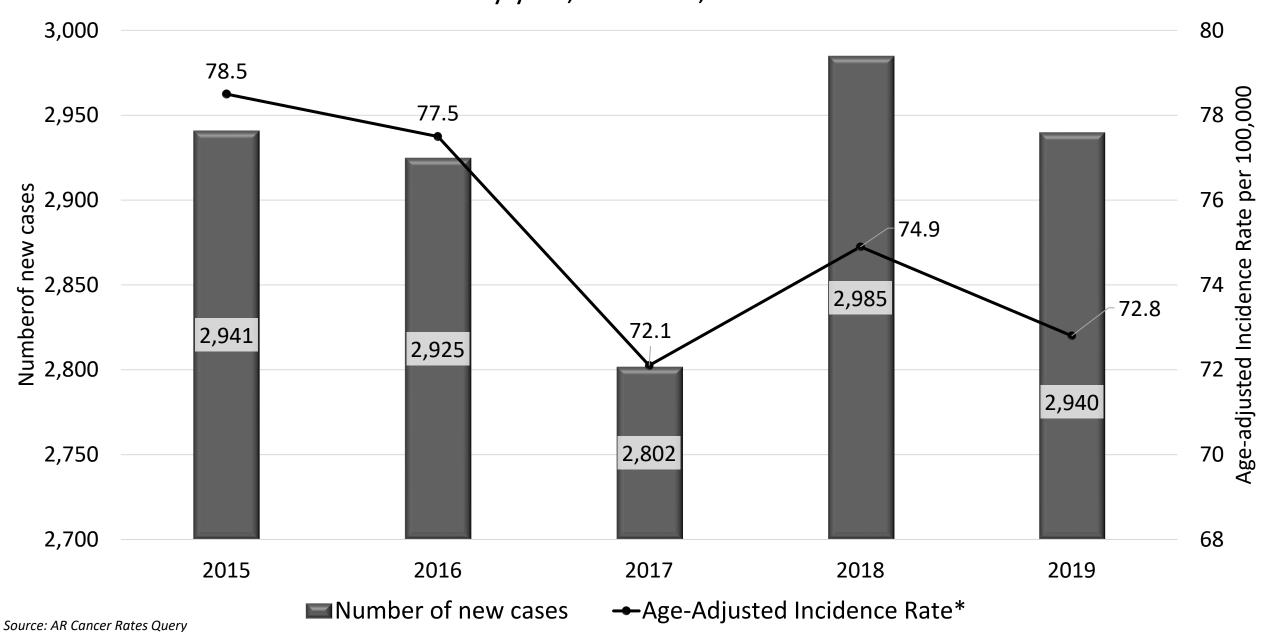
- Arkansas: 4% of those at high risk were screened
   (Significantly lower than the national rate of 6%)
- Arkansas ranks **38th** among all states, placing it in the **below average tier**.

# Overall age-adjusted incidence and mortality rate of lung & bronchus cancer, US and Arkansas, 2015-2019

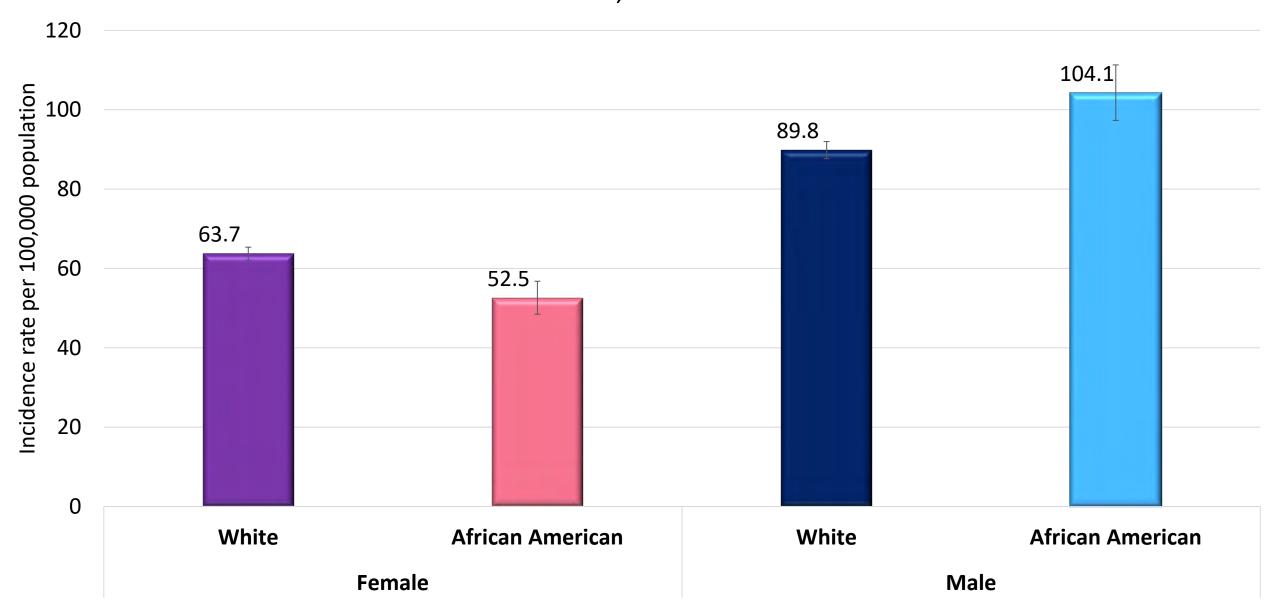




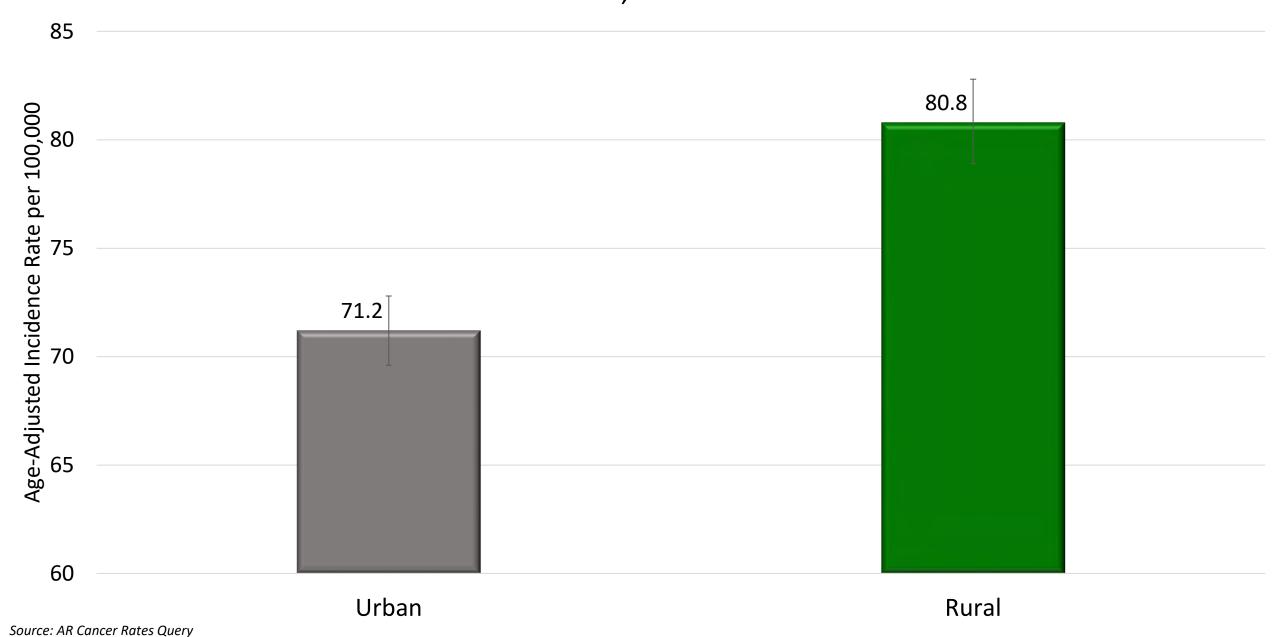
Lung & bronchus cancer number of new cases and age-adjusted incidence rate by year, Arkansas, 2015-2019



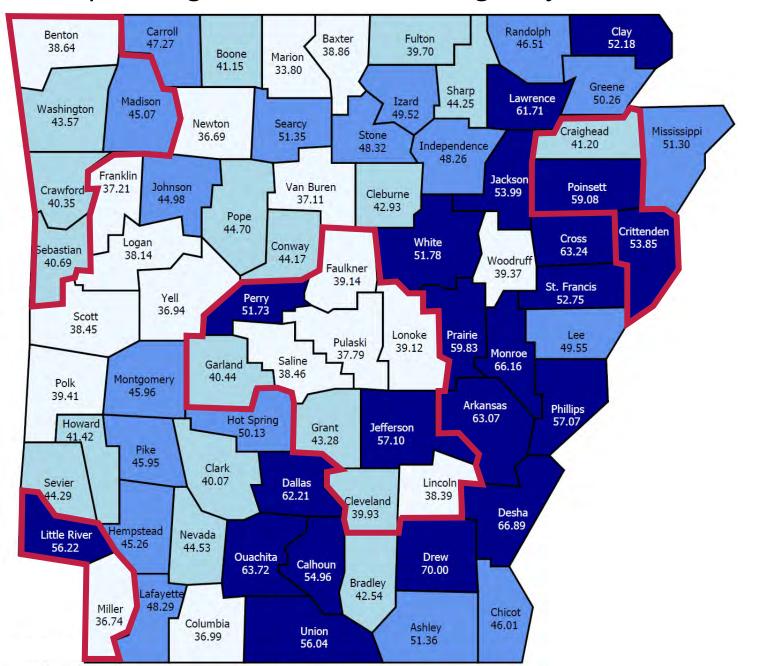
Lung & bronchus cancer age-adjusted incidence rate by sex and race,
Arkansas, 2015-2019



Lung & bronchus cancer age-adjusted incidence rate by urban/rural counties, Arkansas, 2015-2019



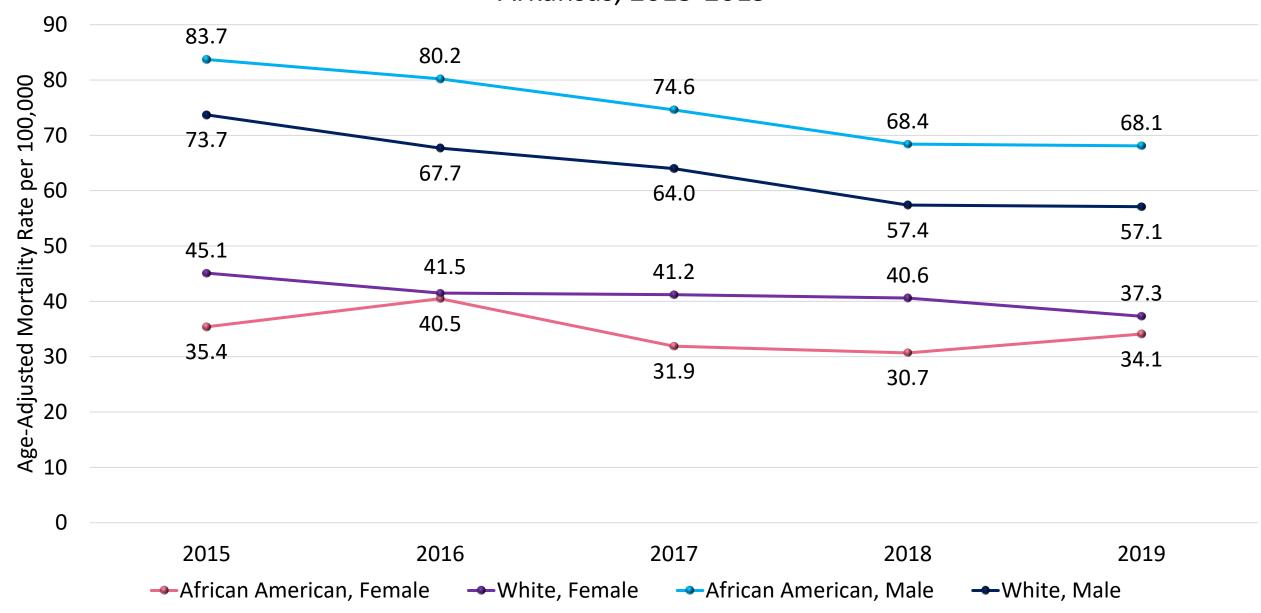
#### Map of lung & bronchus cancer age-adjusted incidence rate by county, Arkansas, 2015-2019



### **State age-adjusted incidence rate: 43.96** per 100,000 population

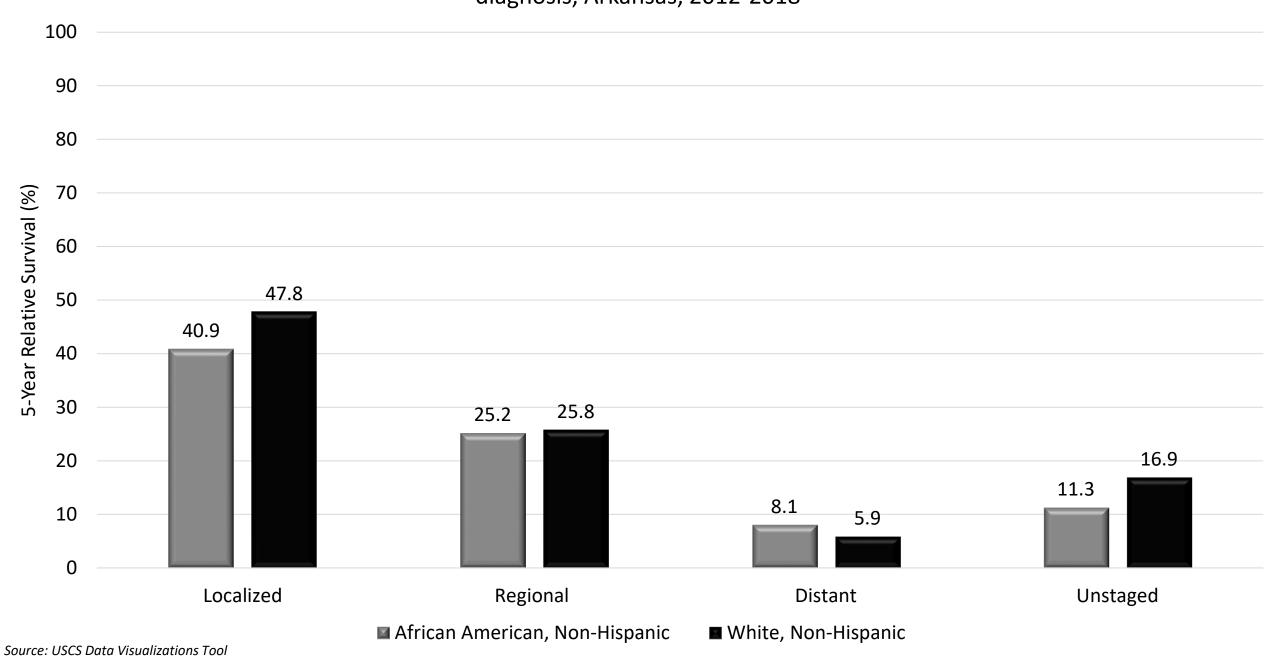
Age-adjusted incidence rate per 100,000 population	
	33.80 – 39.69
	39.70 – 44.97
	44.98 – 51.72
	51.73 – 70.00

Lung & bronchus cancer age-adjusted mortality rate among by sex and race,
Arkansas, 2015-2019



Source: CDC Wonder

5-year relative survival percent of lung & bronchus cancer by race/ethnicity and stage at diagnosis, Arkansas, 2012-2018



#### Colon & Rectum Cancer

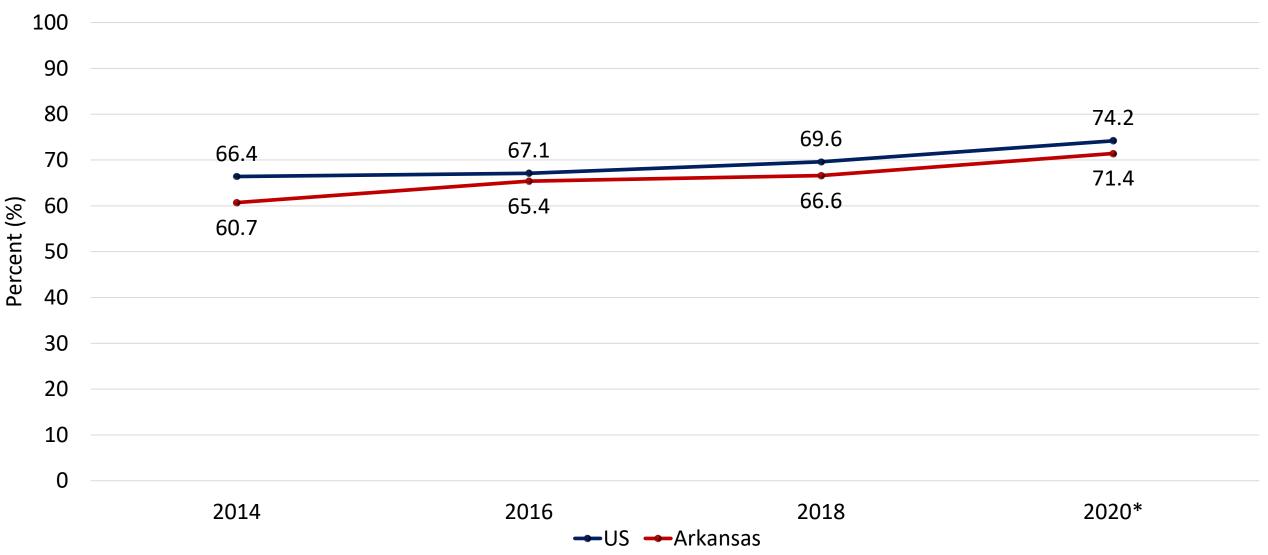
Arkansas

2015-2019



## Percent of individuals who received one or more of the recommended CRC tests within the recommended time interval, US and Arkansas, 2014-2020\*

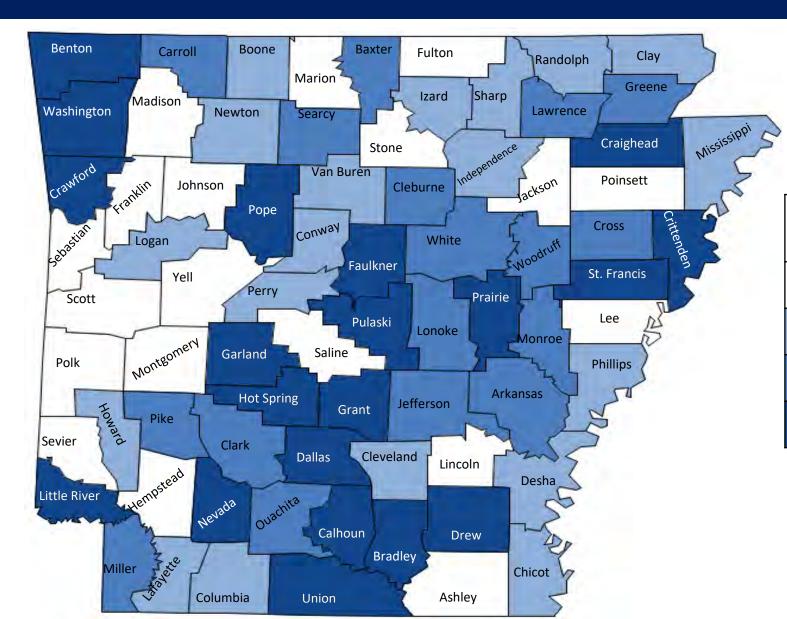




<sup>\*</sup>BRFSS colon & rectum cancer screening for this question changed in 2020 to reflect response of "received one or more of the recommended CRC tests within the recommended time interval" Source: BRFSS

# Percent of adults aged 50–75 years who reported having had a fecal occult blood test, sigmoidoscopy, or colonoscopy by county, Arkansas, 2020



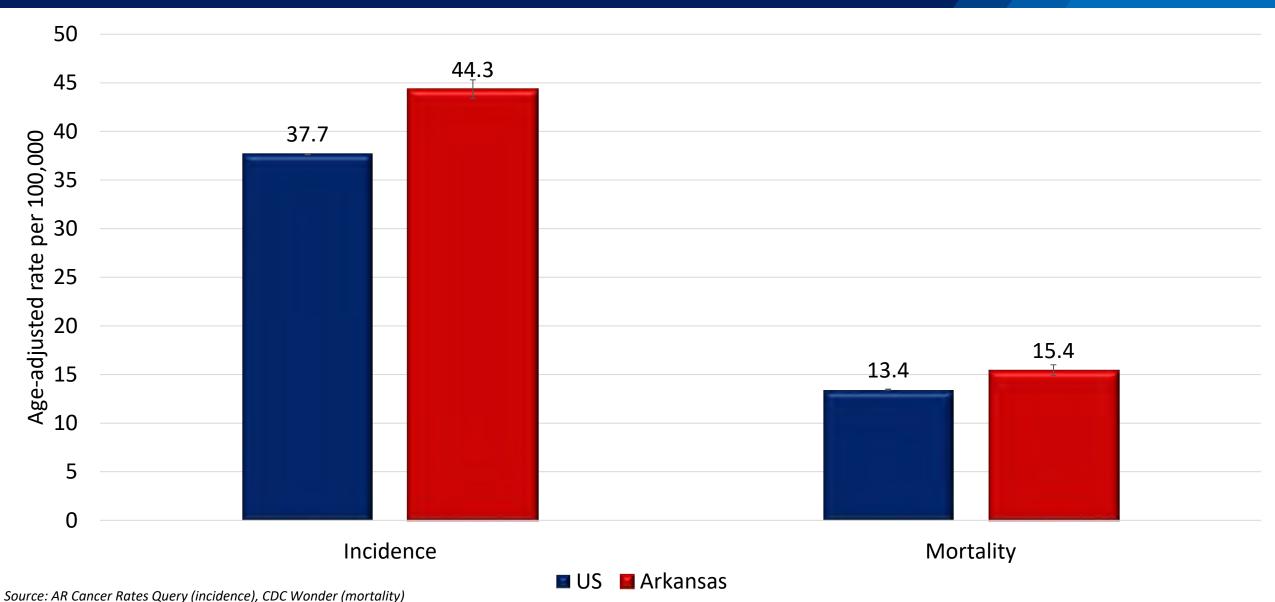


Age-adjusted prevalence (%) of CRC screening		
	62.8 – 65.0	
	65.1 – 66.2	
	66.3 – 67.7	
	67.8 – 74.8	

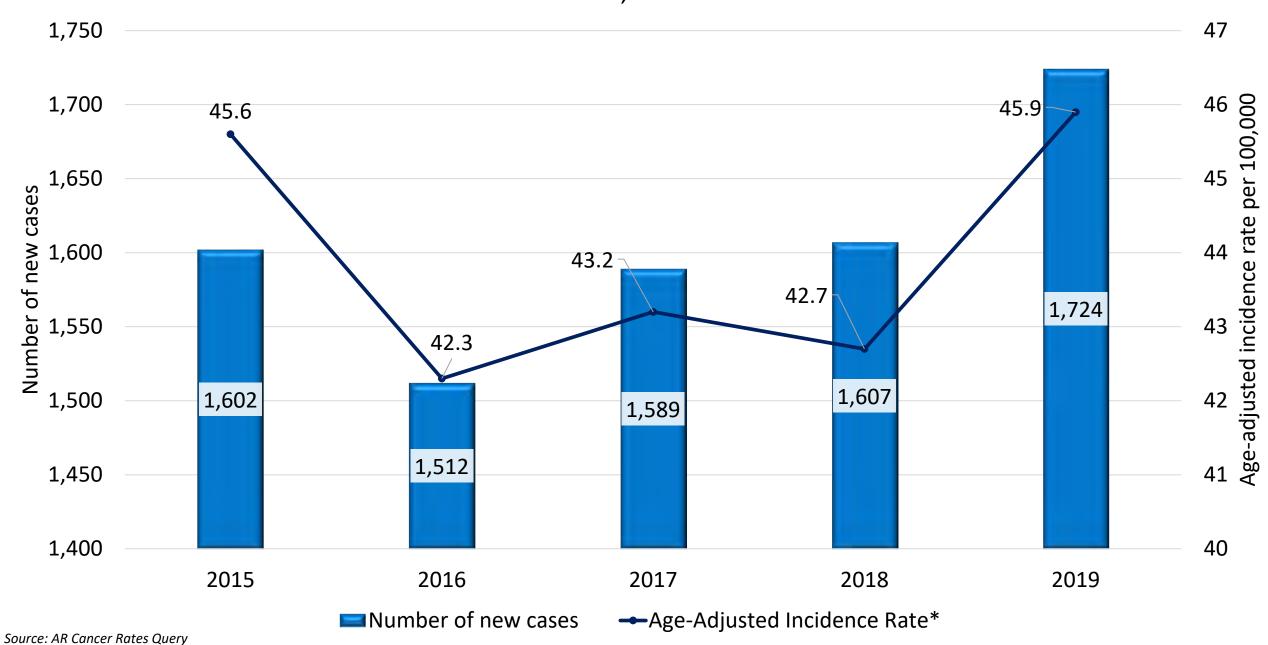
Source: BRFSS

# Overall age-adjusted incidence and mortality rate of colon & rectum cancer, US and Arkansas, 2015-2019

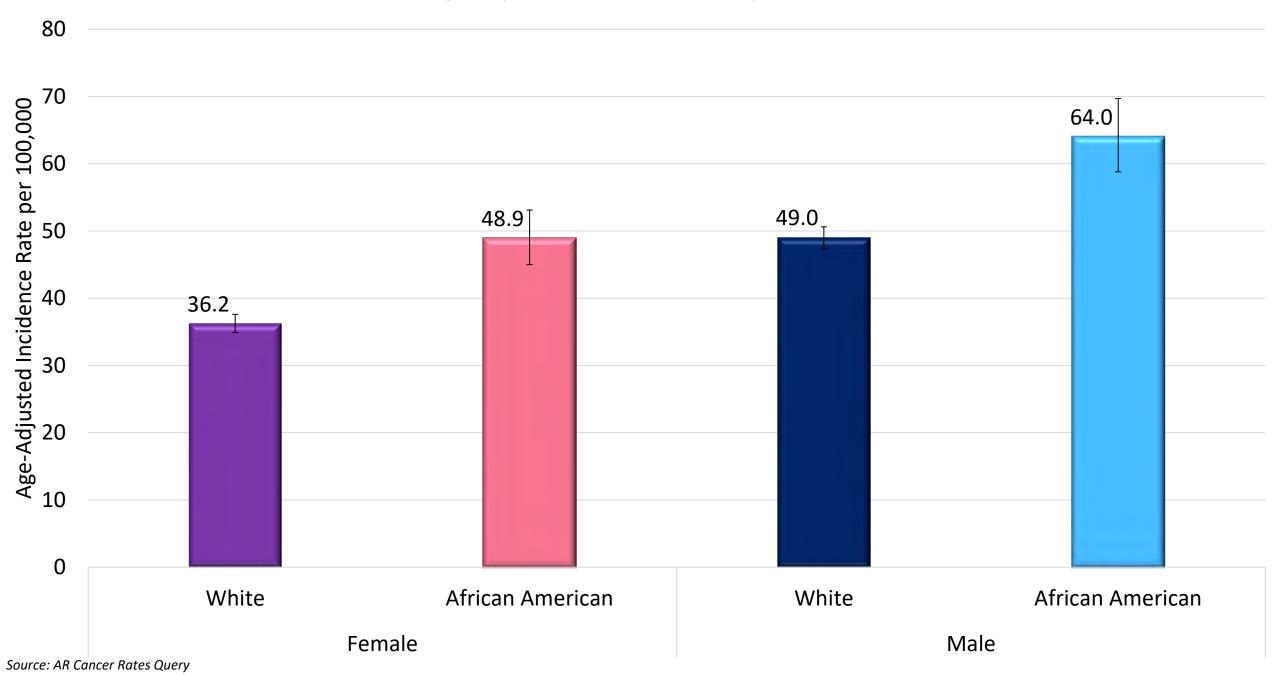




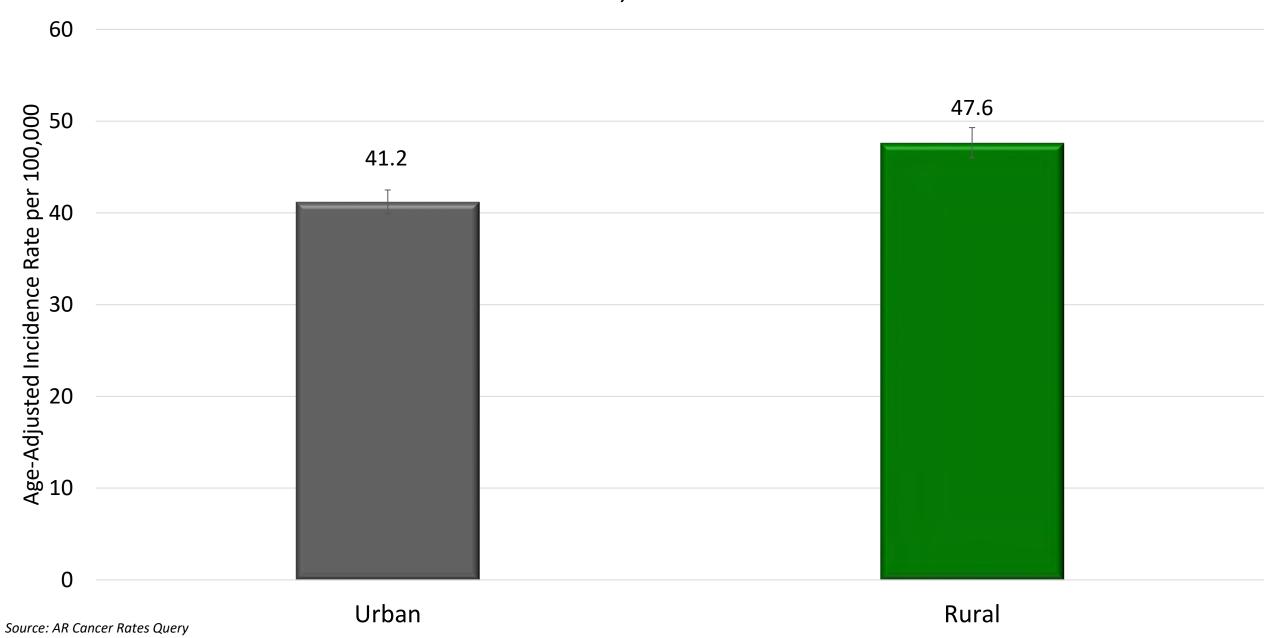
Colon & rectum cancer number of new cases and age-adjusted incidence rate by year,
Arkansas, 2015-2019



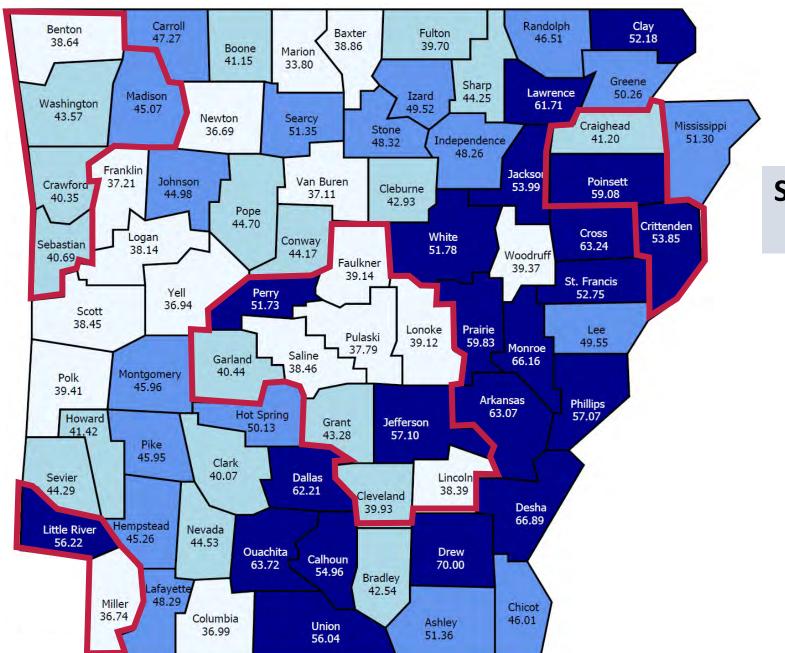
Colon & rectum cancer age-adjusted incidence rate by sex and race, Arkansas, 2015-2019



## Colon & rectum cancer age-adjusted incidence rate by urban/rural counties, Arkansas, 2015-2019



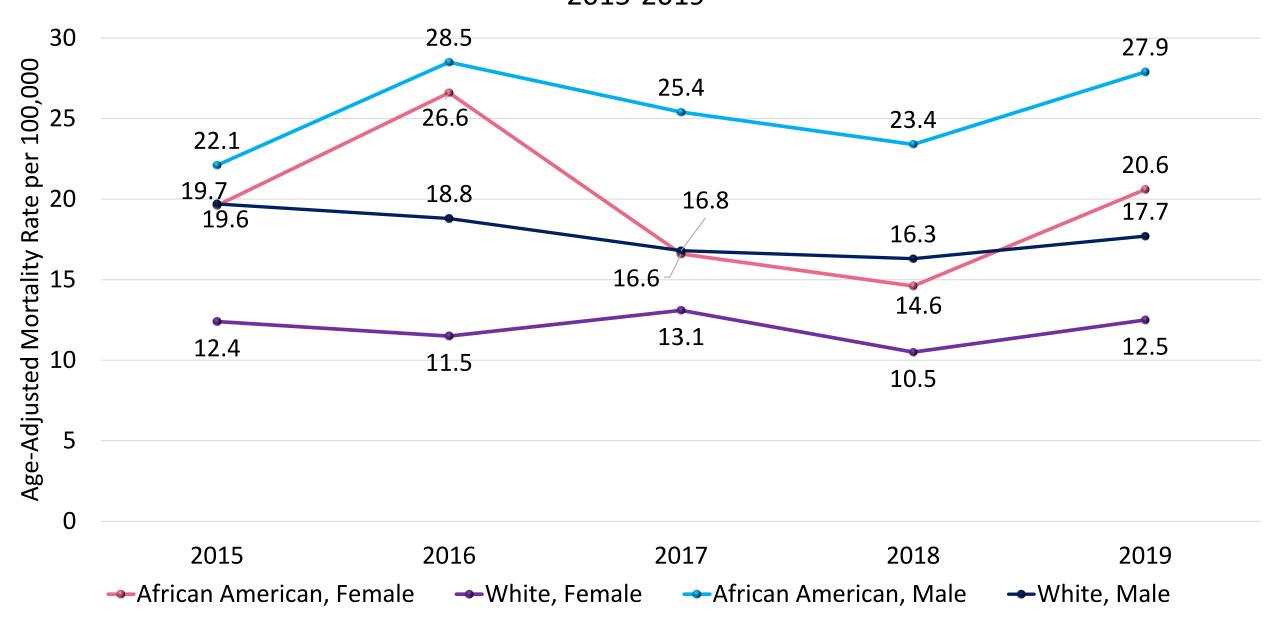
#### Map of colon & rectum cancer age-adjusted incidence rate by county, Arkansas, 2015-2019



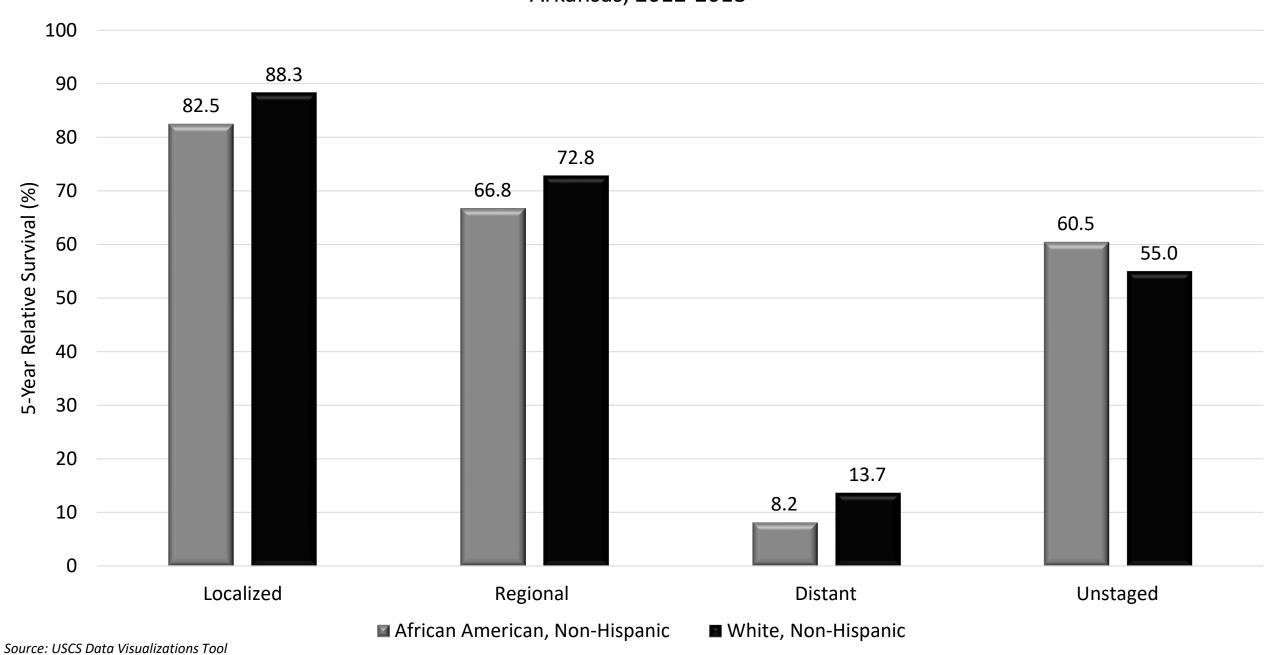
### **State age-adjusted incidence rate: 43.96** per 100,000 population

Age-adjusted incidence rate per 100,000 population	
	33.80 – 39.69
	39.70 – 44.97
	44.98 – 51.72
	51.73 – 70.00

Colon & rectum cancer age-adjusted mortality rate by sex and race, Arkansas, 2015-2019



5-year relative survival percent of colon & rectum cancer by race/ethnicity and stage at diagnosis, Arkansas, 2012-2018



# Thank you!

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