

# Louisiana Cancer Facts & Figures, Colon and Rectal Cancer

Louisiana Tumor Registry

July, 2017

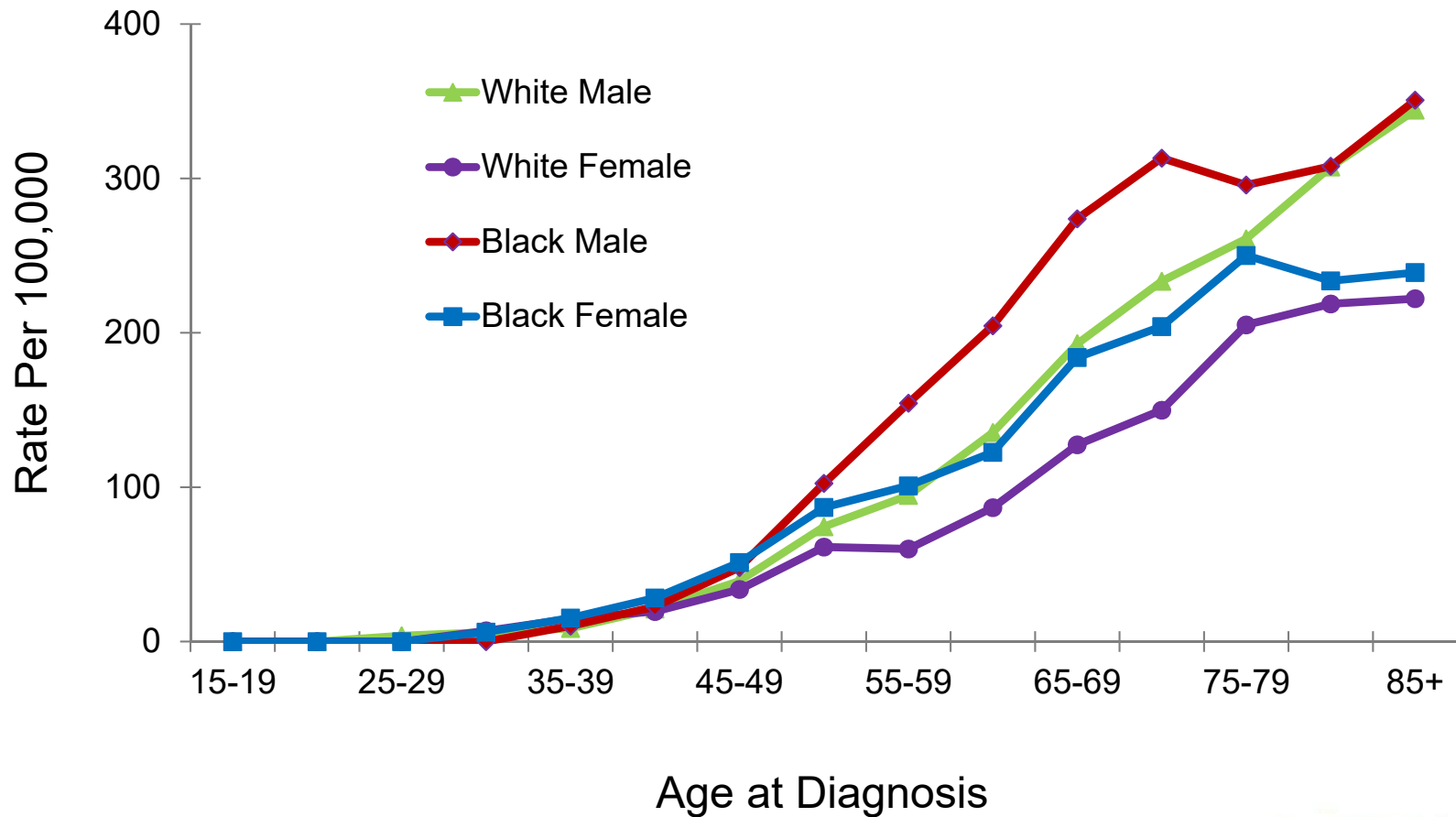
# Colon and Rectal Cancer

- Colon and rectal cancer was the 4th most common cancer and the 2nd leading cause of cancer death in Louisiana from 2010 to 2014.<sup>1</sup>
- Between 2010 and 2014, the average annual incidence rate of colon and rectal cancer in Louisiana was the 3rd highest and the mortality rate was the also 3rd highest in the U.S.<sup>1</sup>
- About 2,150 new colon and rectal cancers are expected to be diagnosed and about 830 patients are expected to die of colon and Rectal Cancer in Louisiana in 2017 <sup>2</sup>.

1. Data source: [NCI state cancer profile](#).

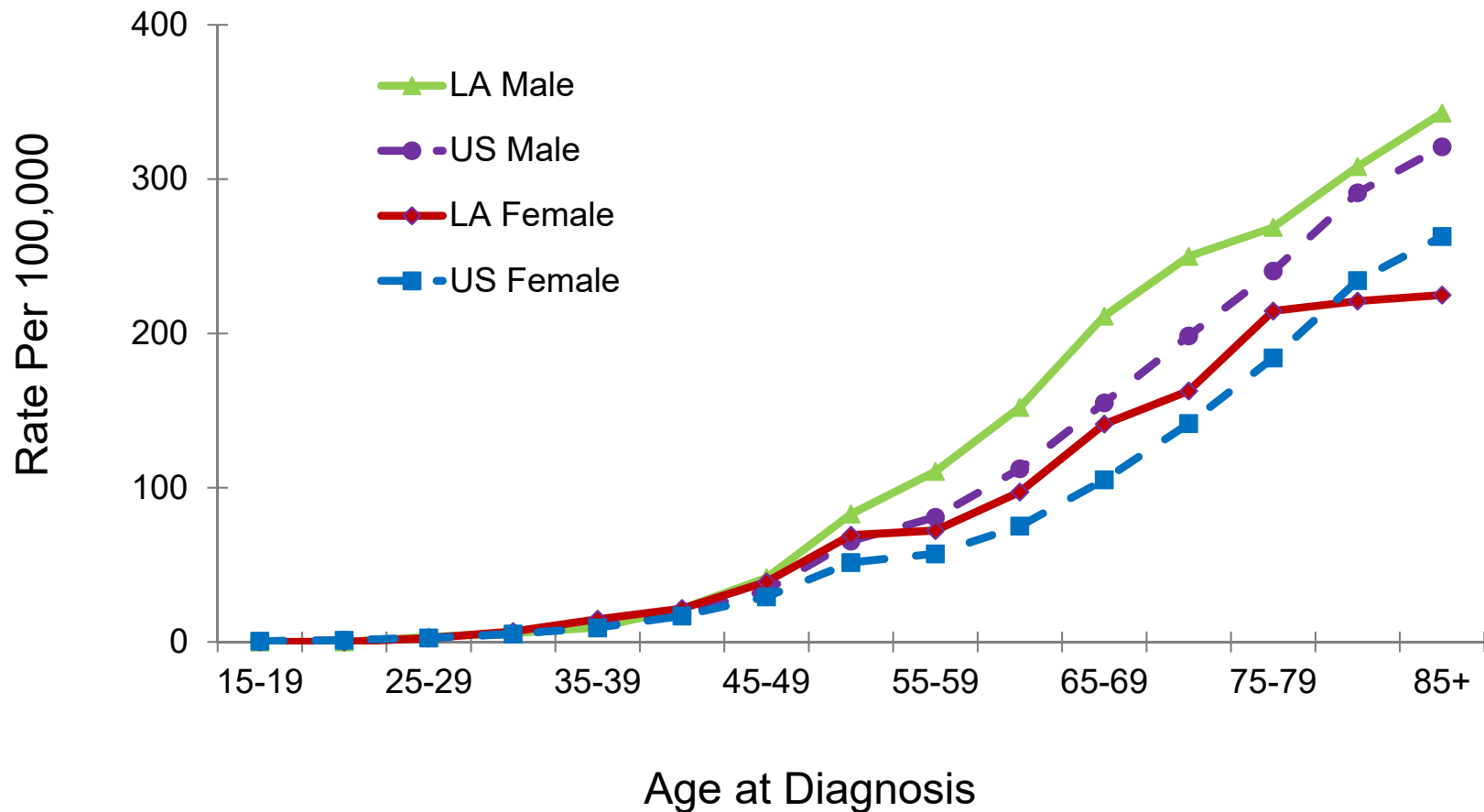
2. Data source: [American Cancer Society, Cancer Facts & Figures 2017](#).

# Colon and Rectal Cancer: Age-Specific Incidence Rates<sup>#</sup>, Louisiana, 2010-2014



<sup>#</sup>Invasive cases only.

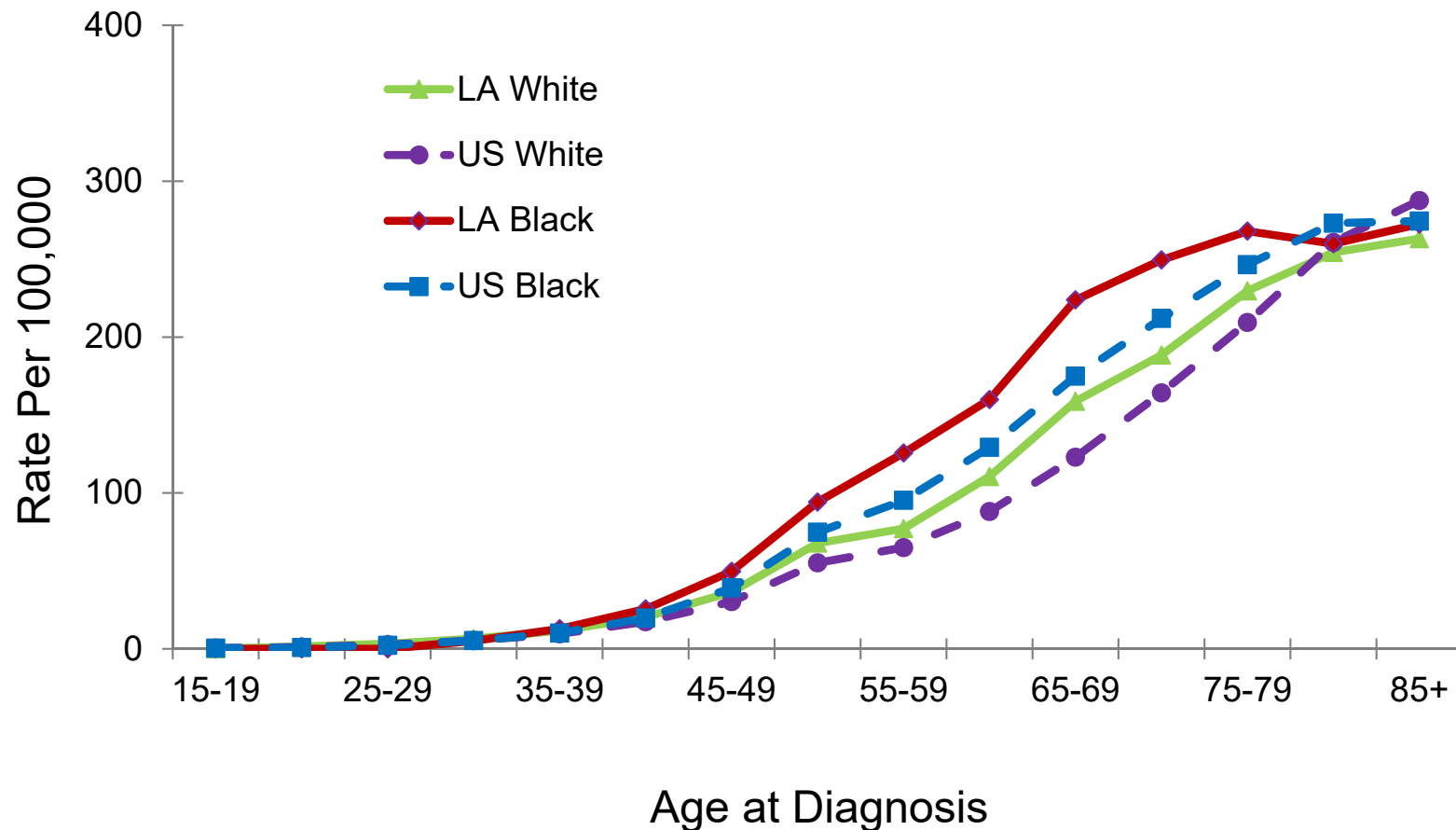
# Colon and Rectal Cancer: Age-Specific Incidence Rates<sup>#</sup> by Gender, 2010-2014



<sup>#</sup>Invasive cases only.

U.S. data source: 18 SEER registries.

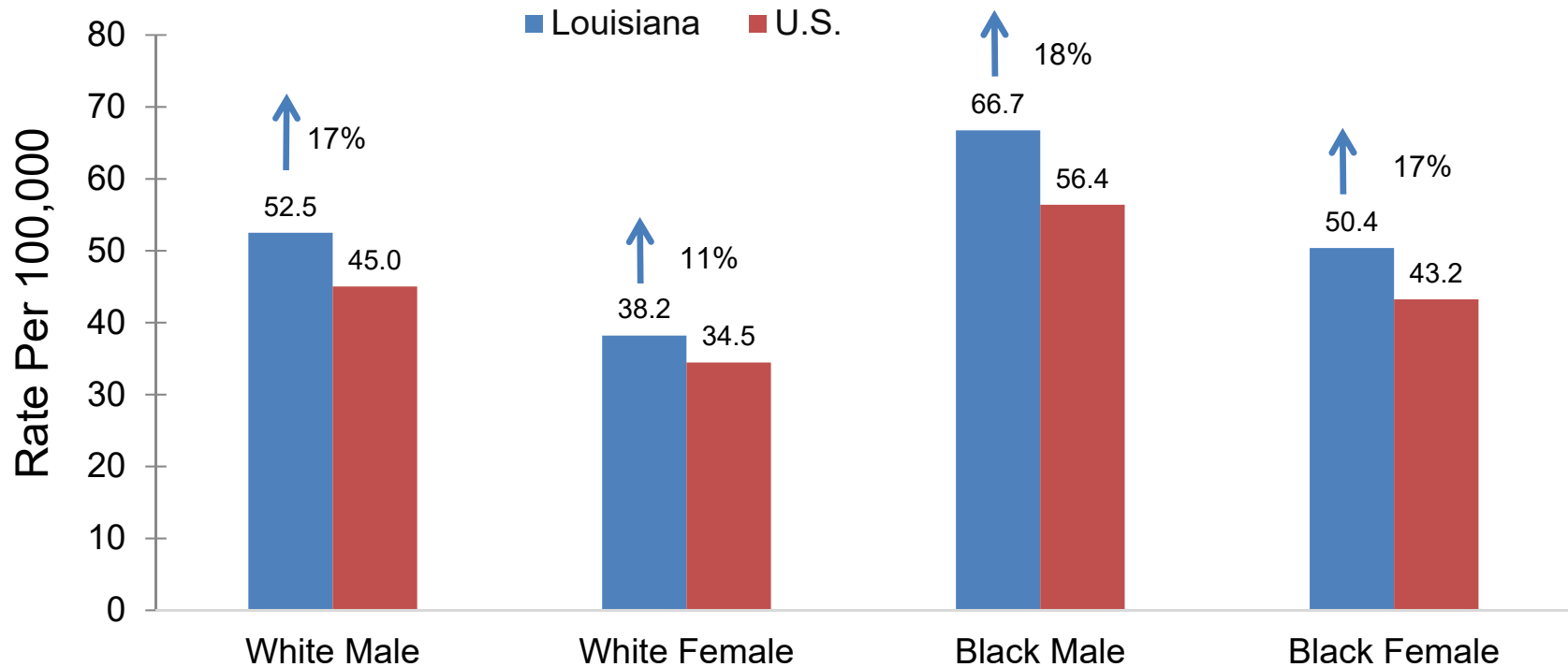
# Colon and Rectal Cancer: Age-Specific Incidence Rates<sup>#</sup> by Race, 2010-2014



<sup>#</sup>Invasive cases only.

U.S. data source: 18 SEER registries.

# Colon and Rectal Cancer: Incidence Rates<sup>#,1,2</sup>, 2010-2014



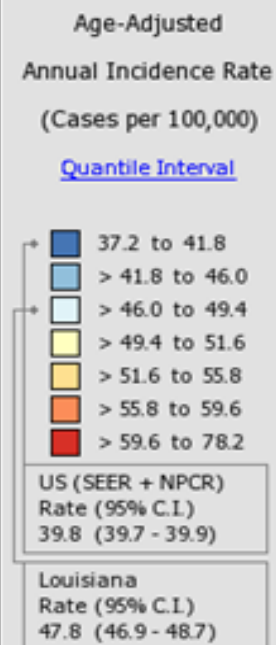
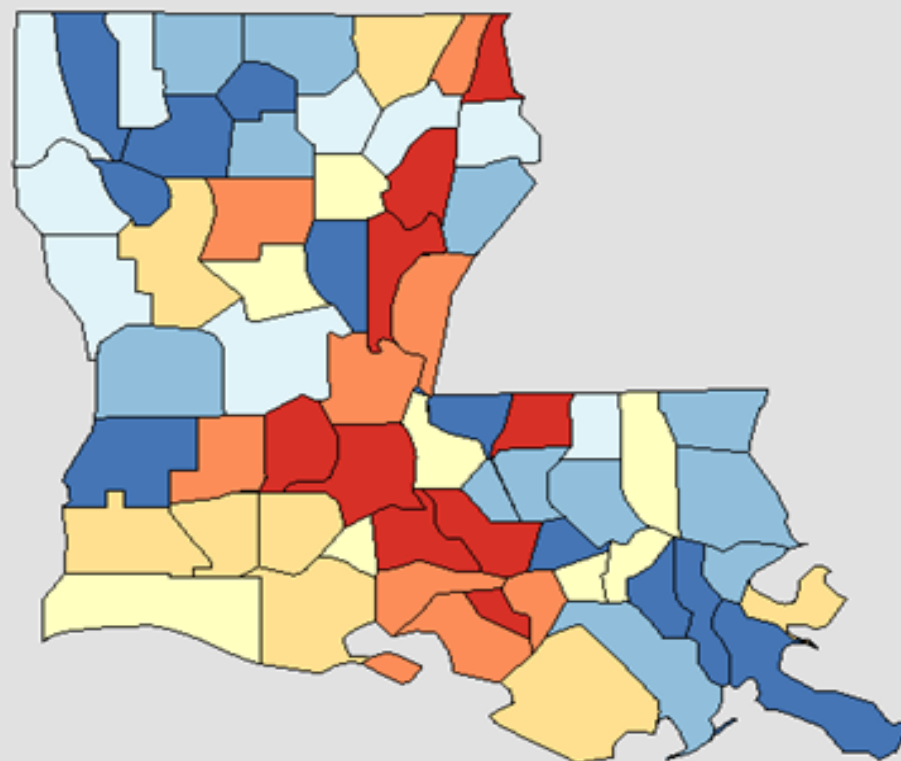
# Invasive cases only.

<sup>1</sup> Age-adjusted to the 2000 U.S. standard population.

<sup>2</sup> U.S. Incidence data source: 18 SEER registries.

↓↑ Rate of Louisiana is significantly different from that of the U.S.

# Incidence Rates<sup>#</sup> of Colon and Rectal Cancer in the U.S., All Races, Both Sexes, 2010-2014



# Only invasive cases.

**Notes:**

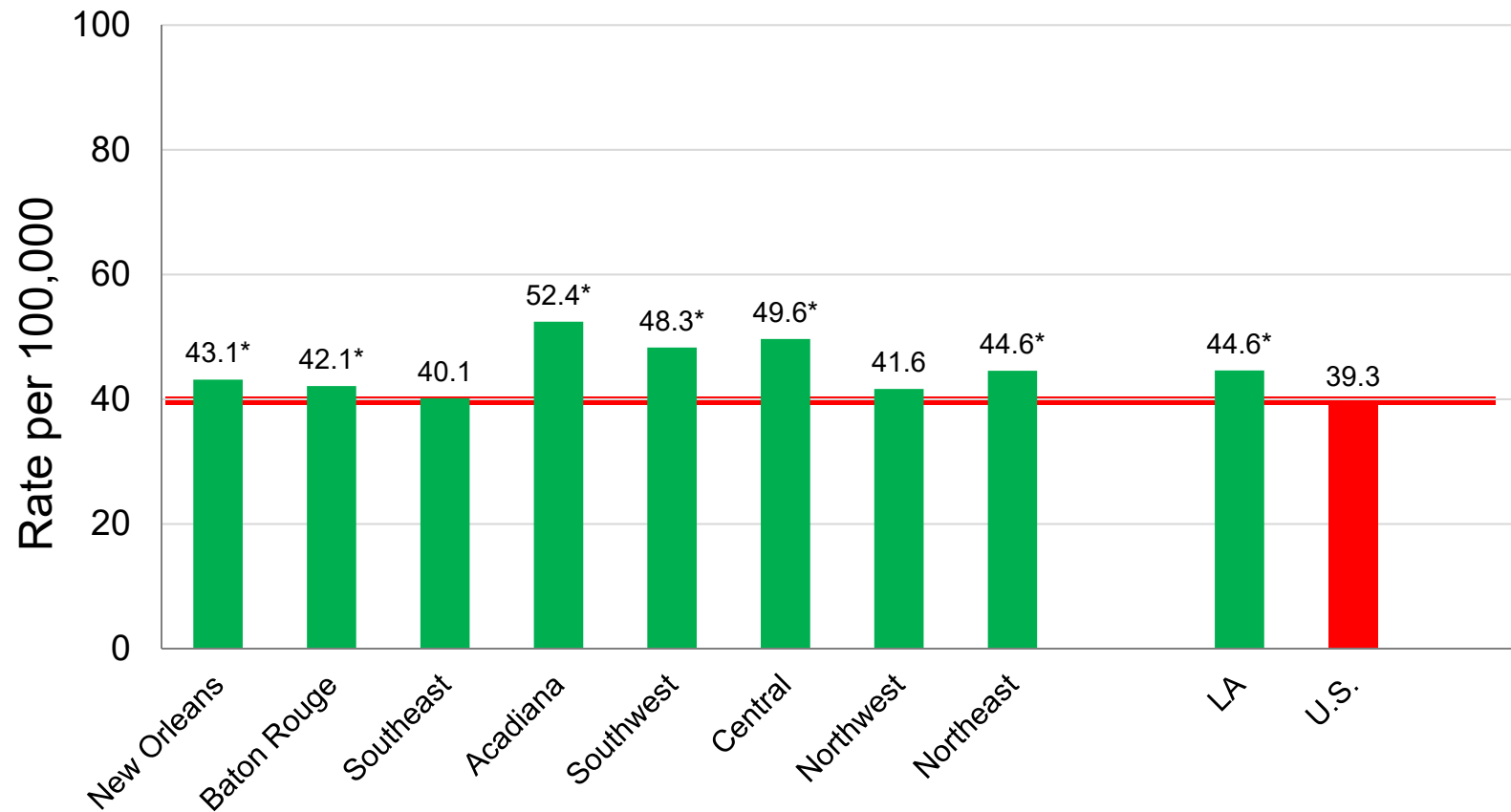
[State Cancer Registries](#) may provide more current or more local data.

Data presented on the State Cancer Profiles Web Site may differ from statistics reported by the State Cancer Registries ([for more information](#)).

<sup>†</sup> Incidence rates (cases per 100,000 population per year) are age-adjusted to the [2000 US standard population](#) (19 age groups: <1, 1-4, 5-9, ... , 80-84, 85+). Rates are for invasive cancer only (except for bladder which is invasive and in situ) or unless otherwise specified. Rates calculated using SEER\*Stat. Population counts for denominators are based on Census populations as modified by NCI. The [1969-2015 US Population Data](#) File is used for SEER and NPCR incidence rates.

Data for the United States does not include data from Puerto Rico

# Colon and Rectal Cancer Incidence<sup>#,1,2</sup>, by Region<sup>3</sup>: Louisiana, Whites, 2010-2014



# Invasive cases only.

<sup>1</sup> Age-adjusted to the 2000 U.S. standard population.

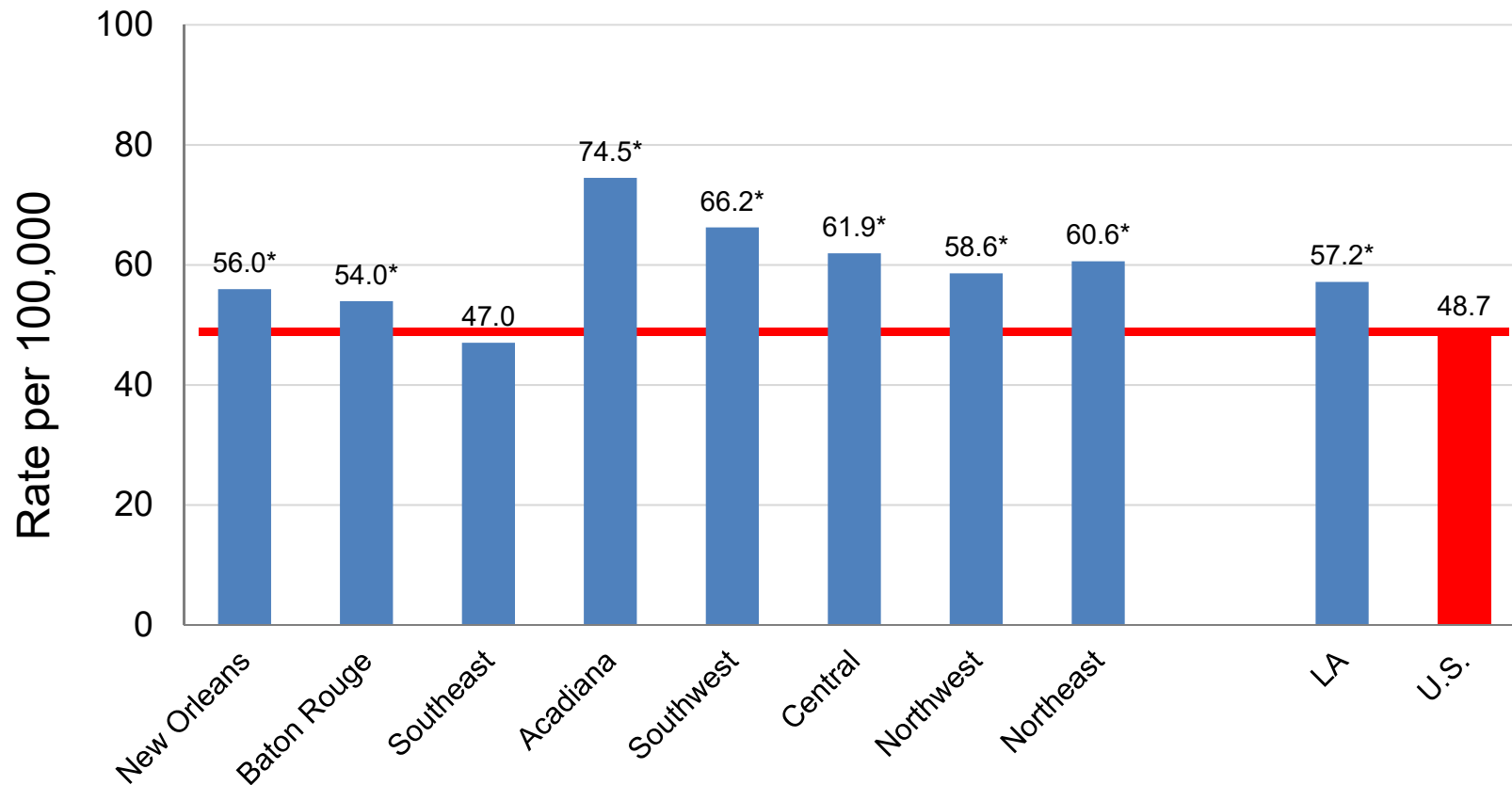
<sup>2</sup> Data source for U.S. was the 18 SEER registries.

<sup>3</sup> See Appendix A.

\* Incidence rate of regions/Louisiana is significantly different from that of U.S.



# Colon and Rectal Cancer Incidence<sup>#,1,2</sup>, by Region<sup>3</sup>: Louisiana, Blacks, 2010-2014



# Invasive cases only.

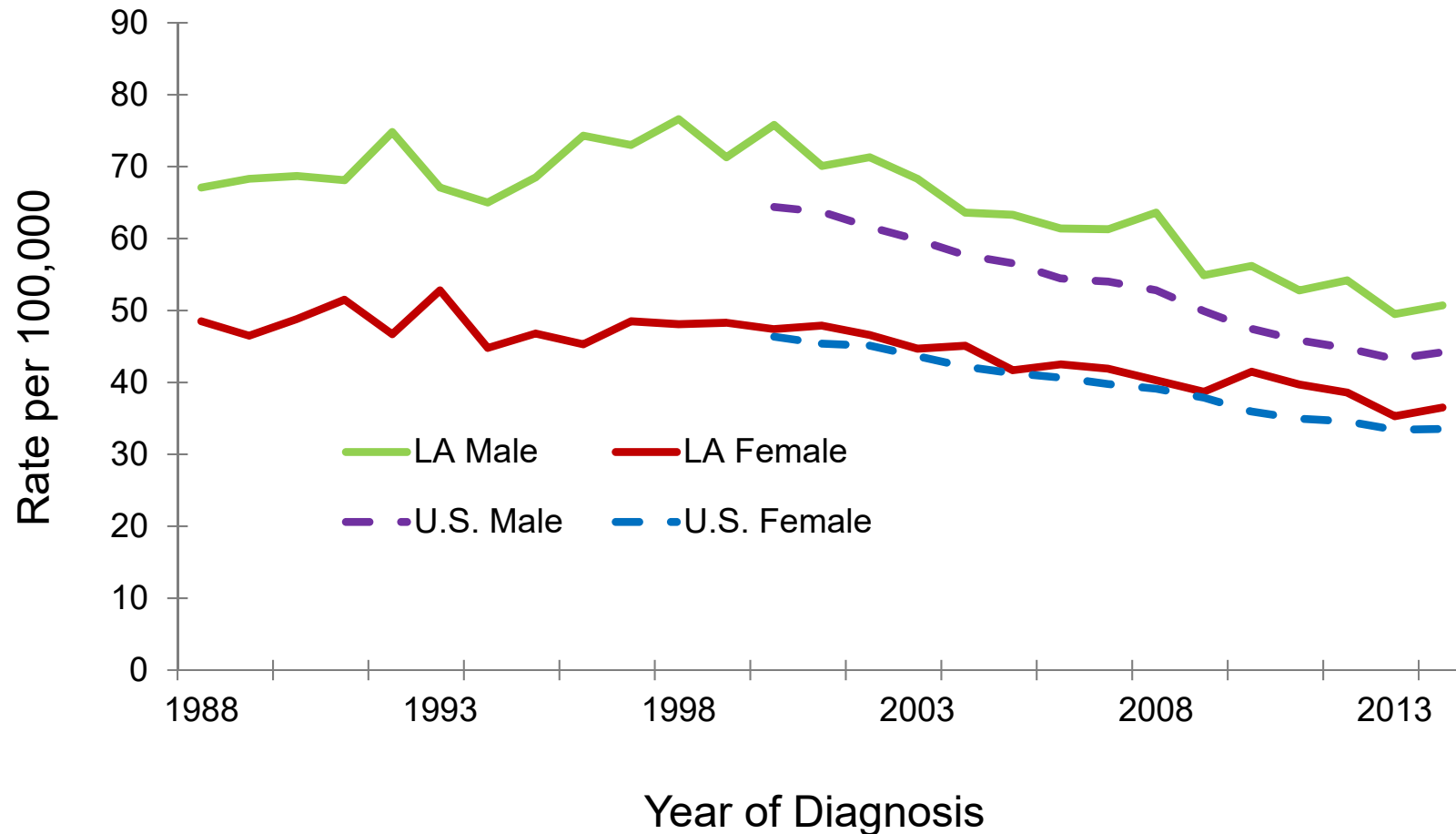
<sup>1</sup> Age-adjusted to the 2000 U.S. standard population.

<sup>2</sup> Data source for U.S. was the 18 SEER registries.

<sup>3</sup> See Appendix A.

\* Incidence rate of regions/Louisiana is significantly different from that of U.S.

# Colon and Rectal Cancer: Trends of Incidence Rates<sup>#,1,2</sup>, Whites, 1988-2014

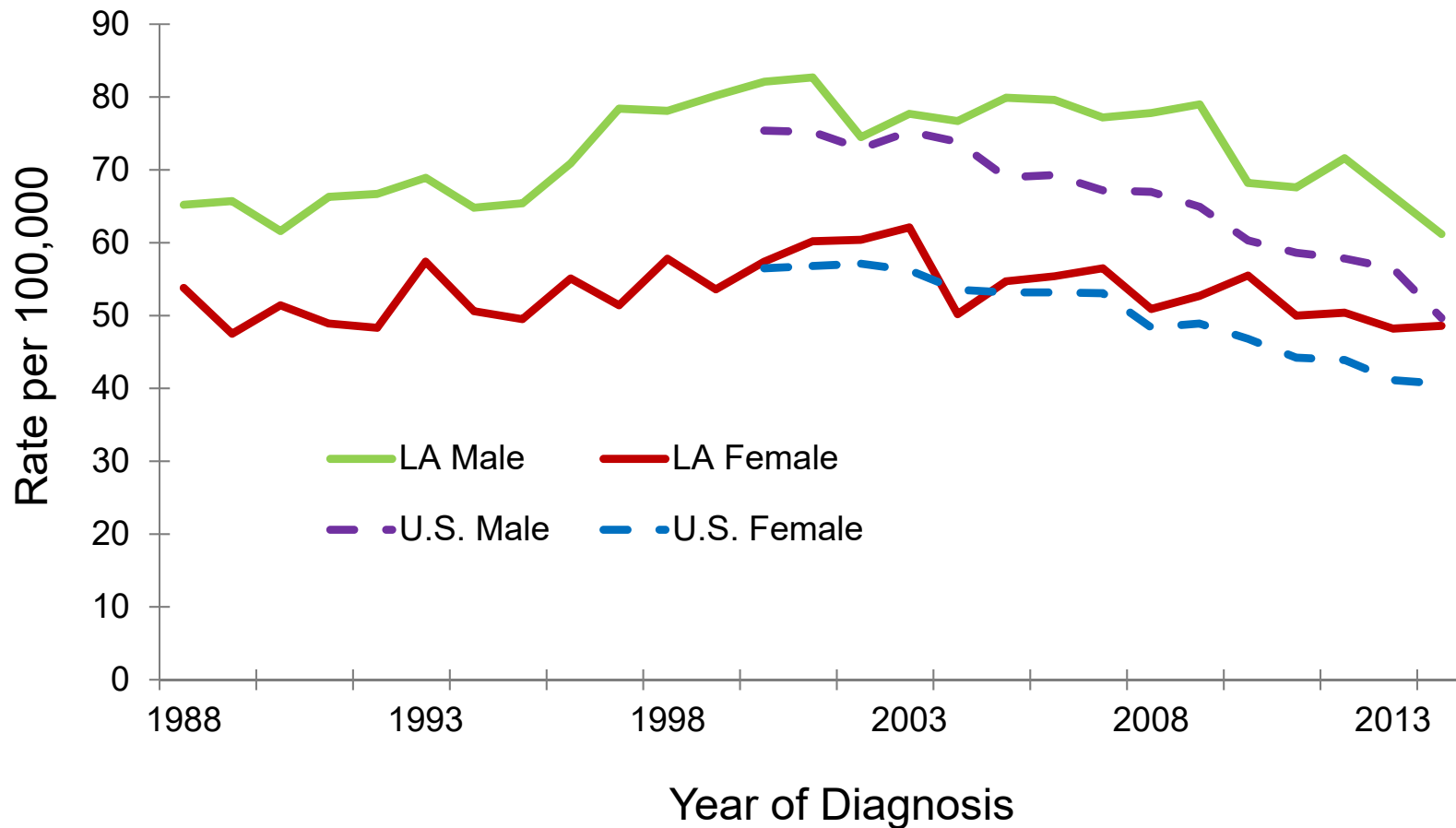


# Invasive cases only.

<sup>1</sup> Age-adjusted to the 2000 U.S. standard population.

<sup>2</sup> U.S. data source: 18 SEER registries.

# Colon and Rectal Cancer: Trend of Incidence Rates<sup>#,1,2</sup>, Blacks 1988-2014

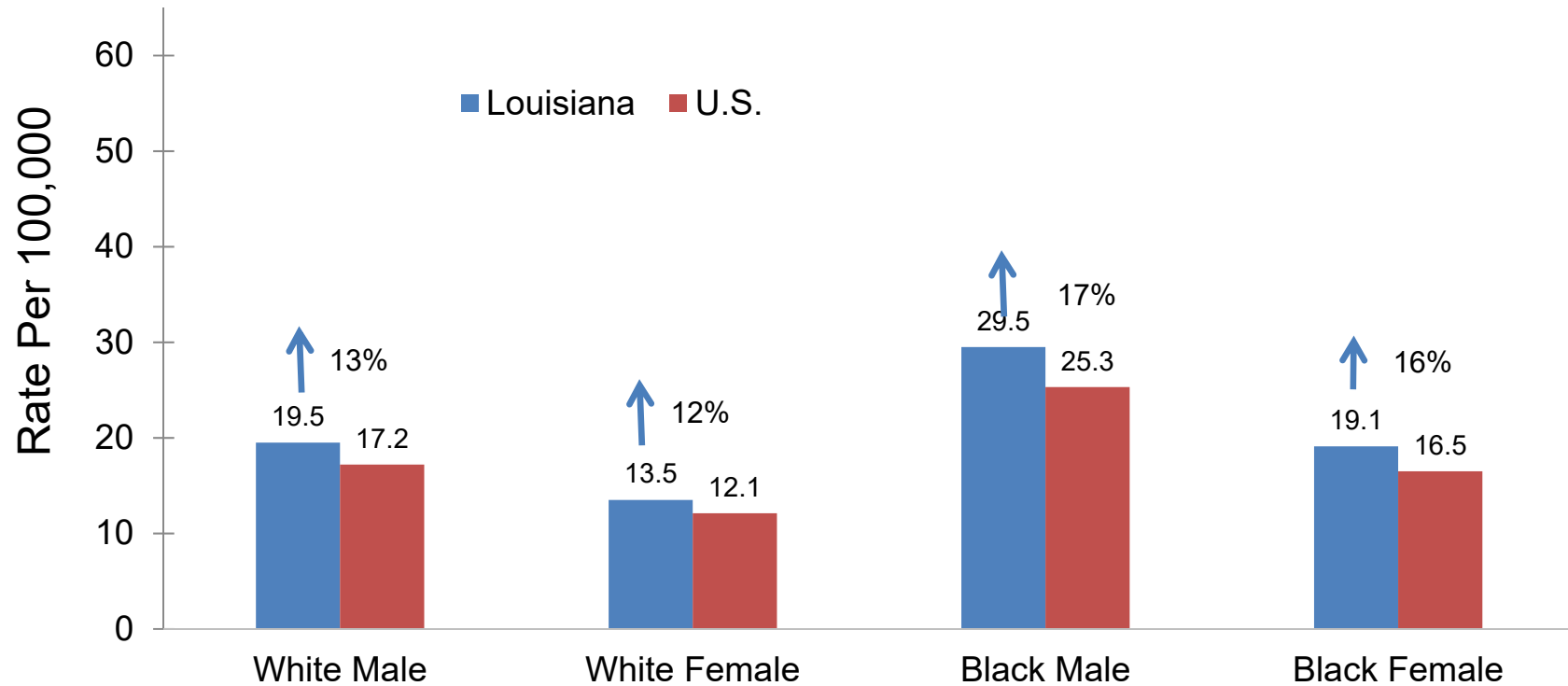


# Invasive cases only.

<sup>1</sup> Age-adjusted to the 2000 U.S. standard population.

<sup>2</sup> U.S. data source: 18 SEER registries.

# Colon and Rectal Cancer: Mortality Rates<sup>1</sup> Louisiana vs. U.S.<sup>2</sup>, 2010-2014

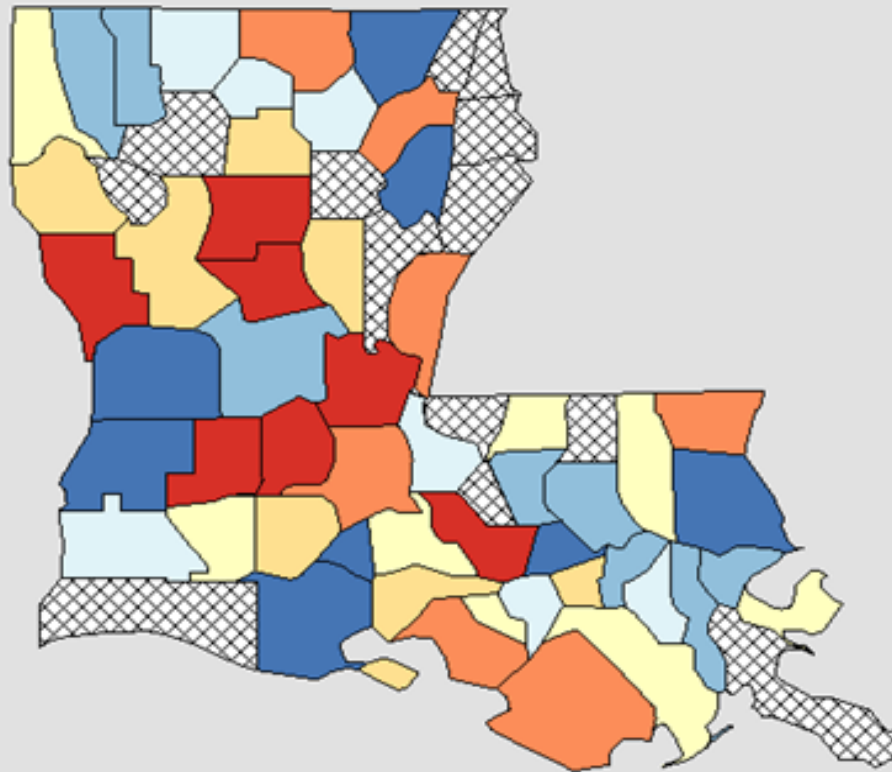


<sup>1</sup> Age-adjusted to the 2000 U.S. standard population.

<sup>2</sup> Mortality data source was National Center of Health Statistics (NCHS).

↓↑Rate of Louisiana is significantly different from that of the U.S.

# Mortality Rates of Colon and Rectal Cancer in the U.S., All Races, Both Sexes, 2010-2014



Age-Adjusted  
Annual Death Rate  
(Deaths per 100,000)

[Quantile Interval](#)

- 12.1 to 15.3
- > 15.3 to 17.0
- > 17.0 to 18.7
- > 18.7 to 19.8
- > 19.8 to 21.9
- > 21.9 to 23.0
- > 23.0 to 32.4

Suppressed\*

United States  
Rate (95% C.I.)  
14.8 (14.7 - 14.8)

Louisiana  
Rate (95% C.I.)  
17.9 (17.3 - 18.4)

Healthy People 2020  
Goal C-5  
14.5

**Notes:**

[State Cancer Registries](#) may provide more current or more local data.

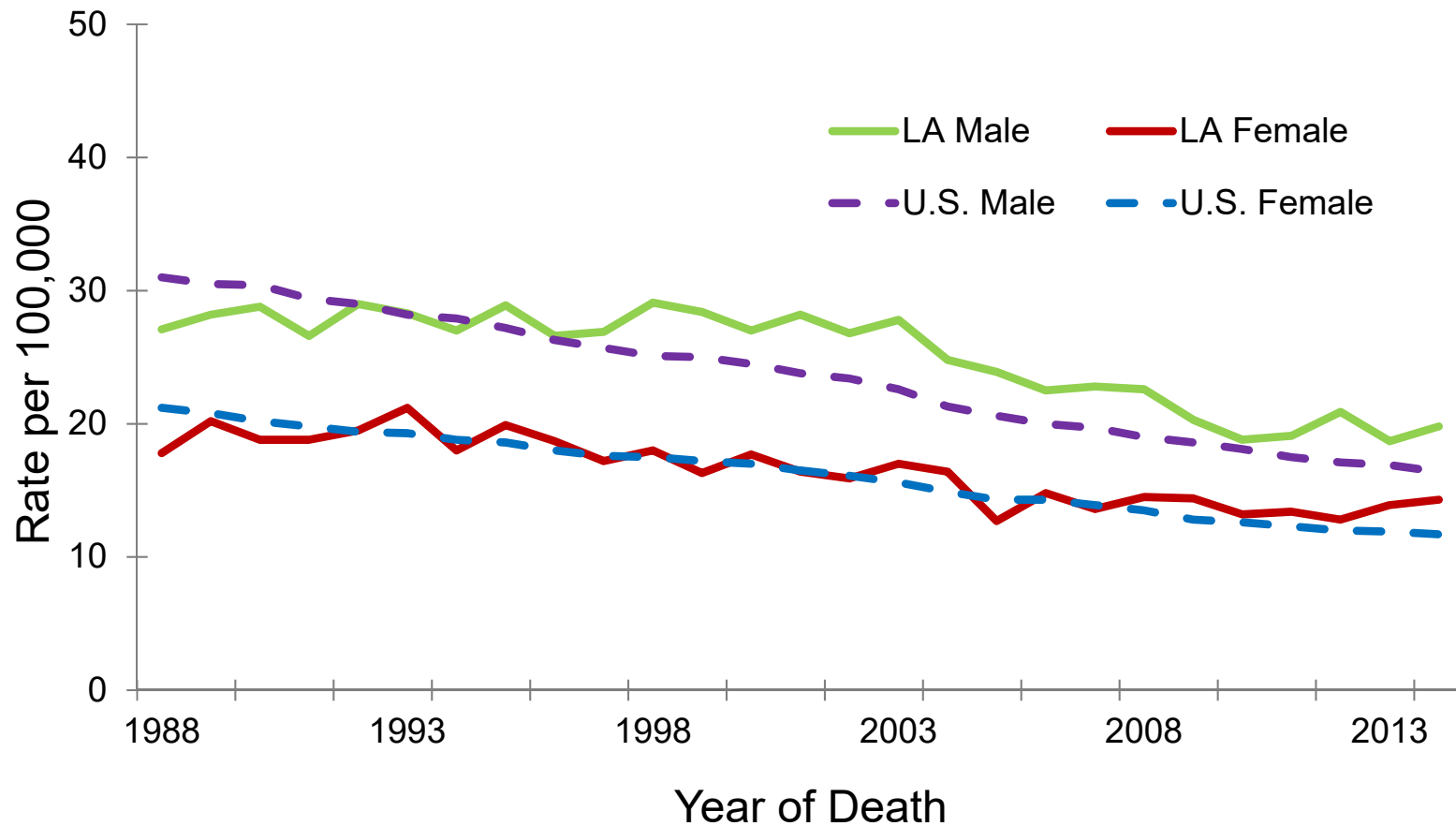
Data presented on the State Cancer Profiles Web Site may differ from statistics reported by the State Cancer Registries ([for more information](#)).

Source: Death data provided by the [National Vital Statistics System](#) public use data file. Death rates calculated by the National Cancer Institute using [SEER\\*Stat](#). Death rates (deaths per 100,000 population per year) are age-adjusted to the [2000 US standard population](#) (19 age groups: <1, 1-4, 5-9, ... , 80-84, 85+). The Healthy People 2020 goals are based on rates adjusted using different methods but the differences should be minimal.

Population counts for denominators are based on the Census [1969-2015 US Population Data](#) File as modified by NCI.

\* Data have been [suppressed](#) to ensure confidentiality and stability of rate estimates. Data is currently being suppressed if there are fewer than 16

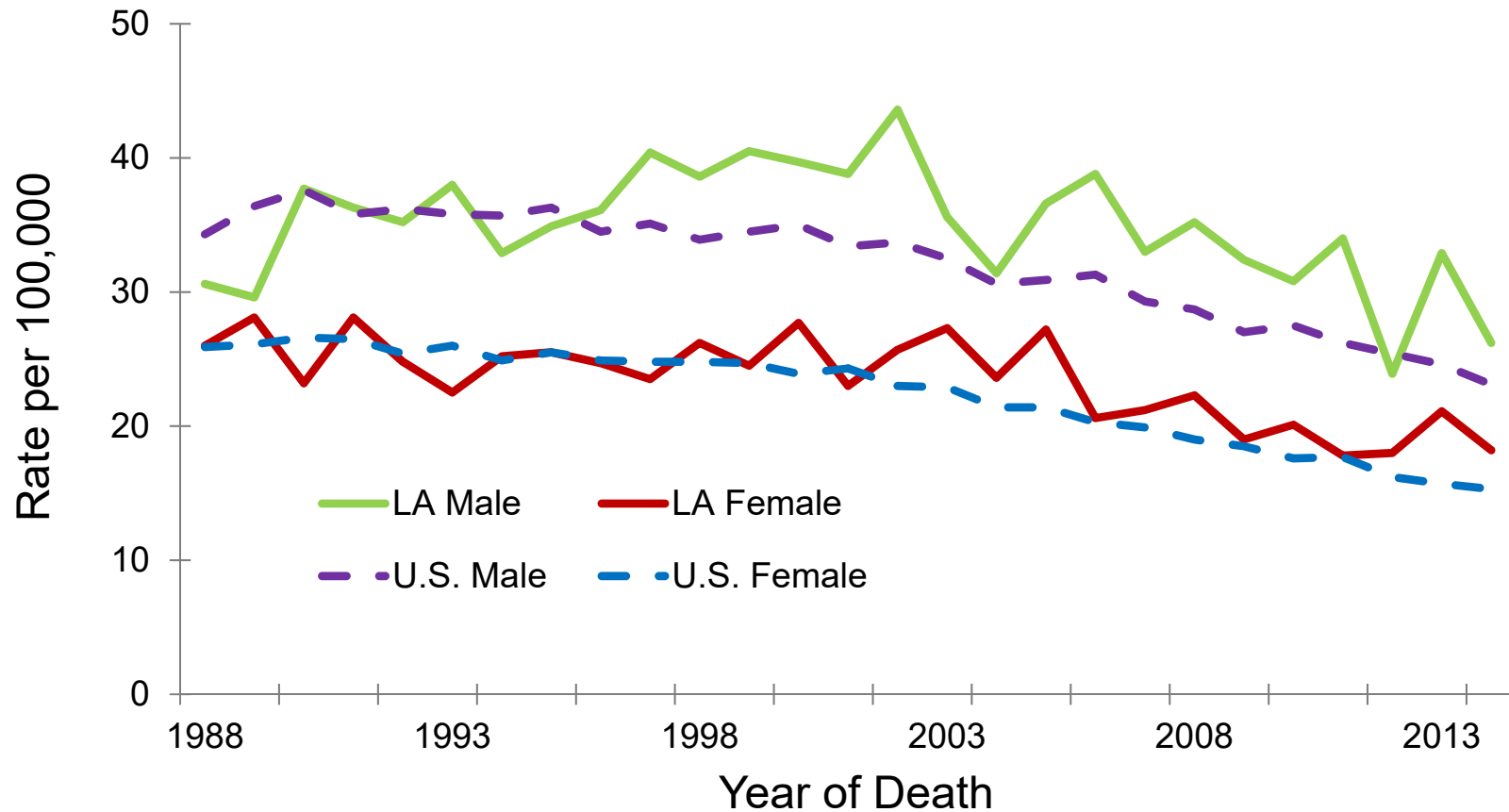
# Colon and Rectal Cancer: Trends of Mortality Rates<sup>1,2</sup>, Whites, 1988-2014



<sup>1</sup> Age-adjusted to the 2000 U.S. standard population.

<sup>2</sup> Data source: National Center of Health Statistics (NCHS).

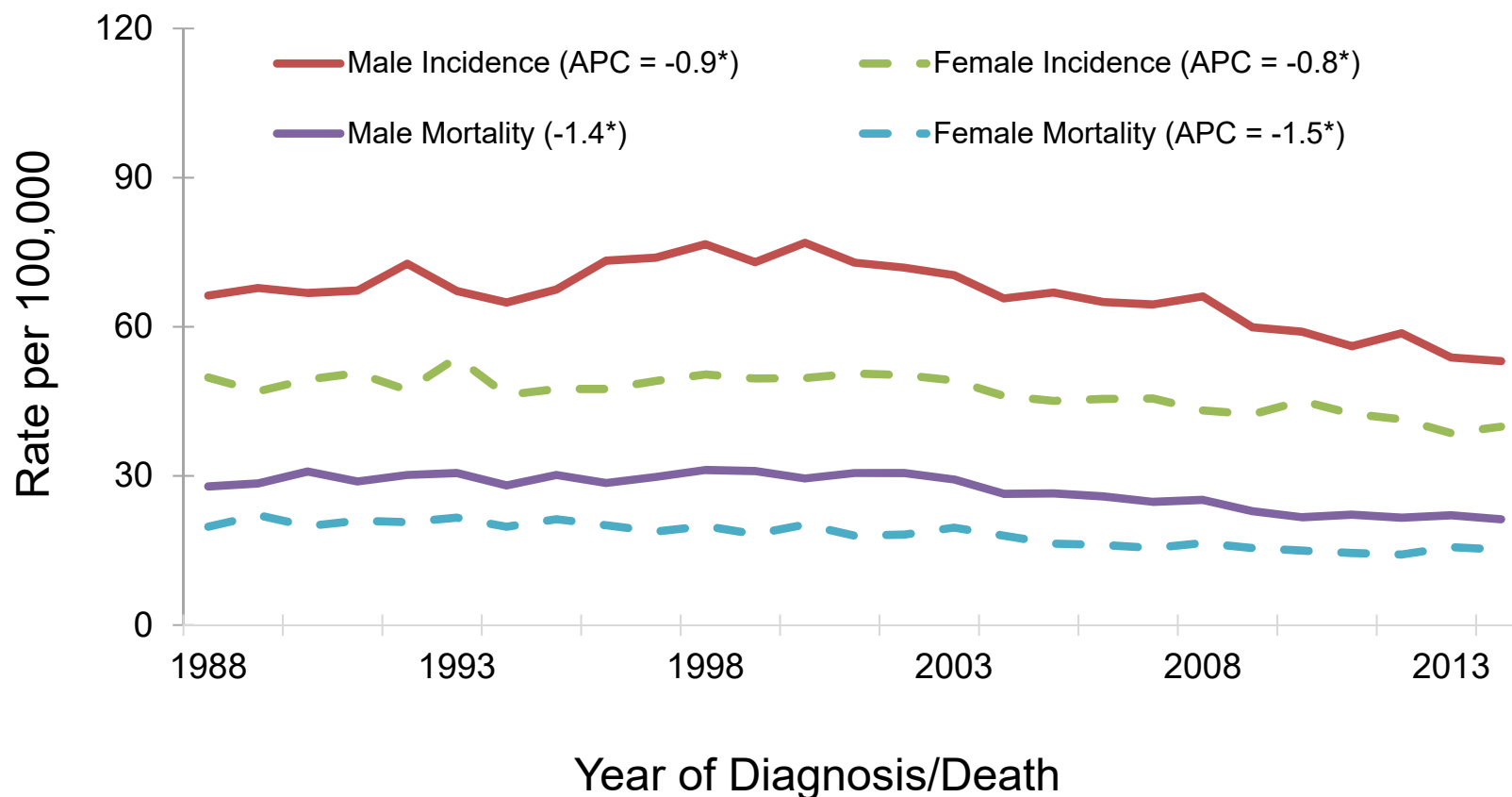
# Colon and Rectal Cancer: Trends of Mortality Rates<sup>1,2</sup>, Blacks, 1988-2014



<sup>1</sup> Age-adjusted to the 2000 U.S. standard population.

<sup>2</sup> Data source: National Center of Health Statistics (NCHS).

# Colon and Rectal Cancer: Louisiana 1988-2014: Trends of Incidence<sup>#</sup> and Mortality Rates by Gender



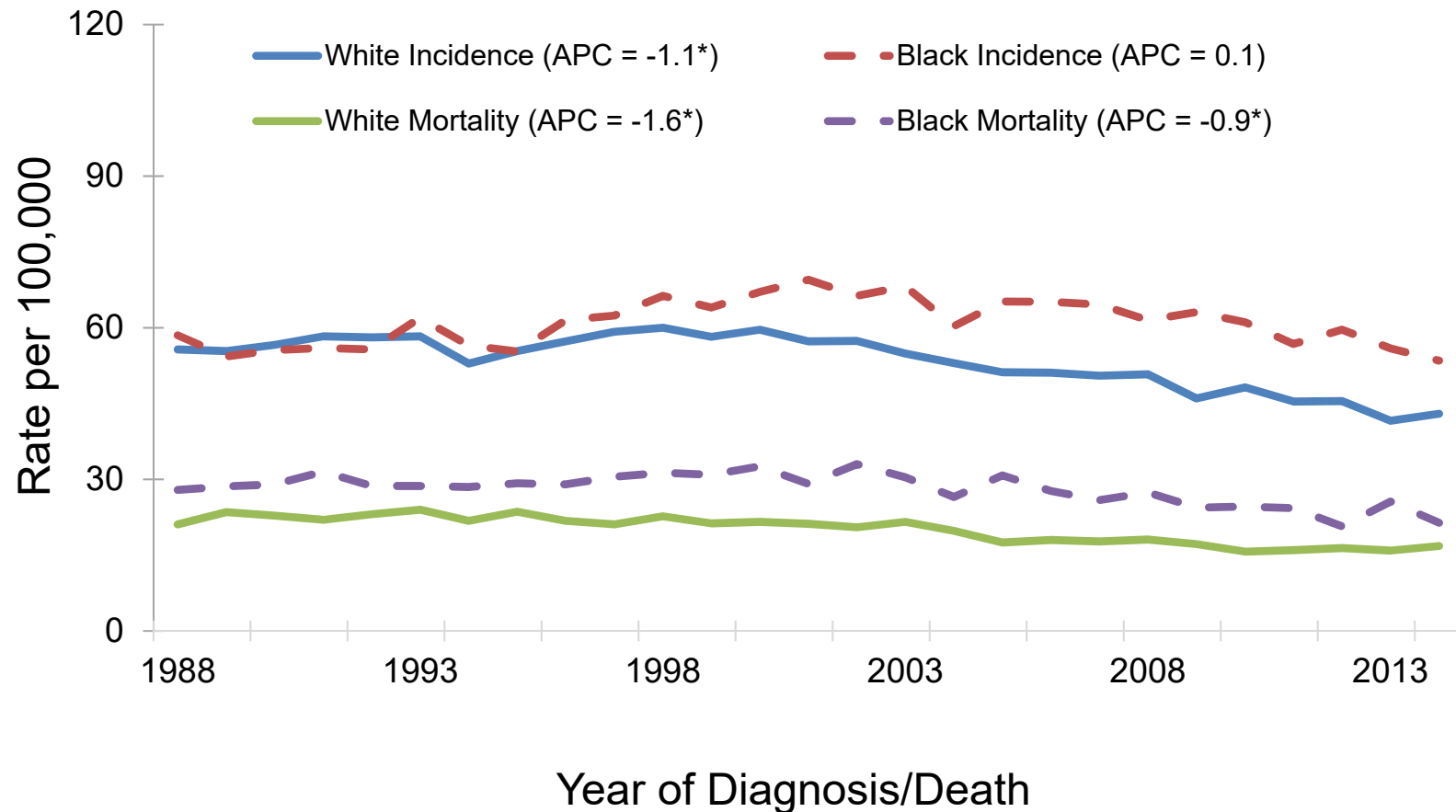
Annual average percent change (APC) were calculated using weighted least squares method.

\* APC significantly different from zero.

<sup>#</sup>Invasive cases only.



# Colon and Rectal Cancer: Louisiana 1988-2014 Trends of Incidence<sup>#</sup> and Mortality Rates by Race

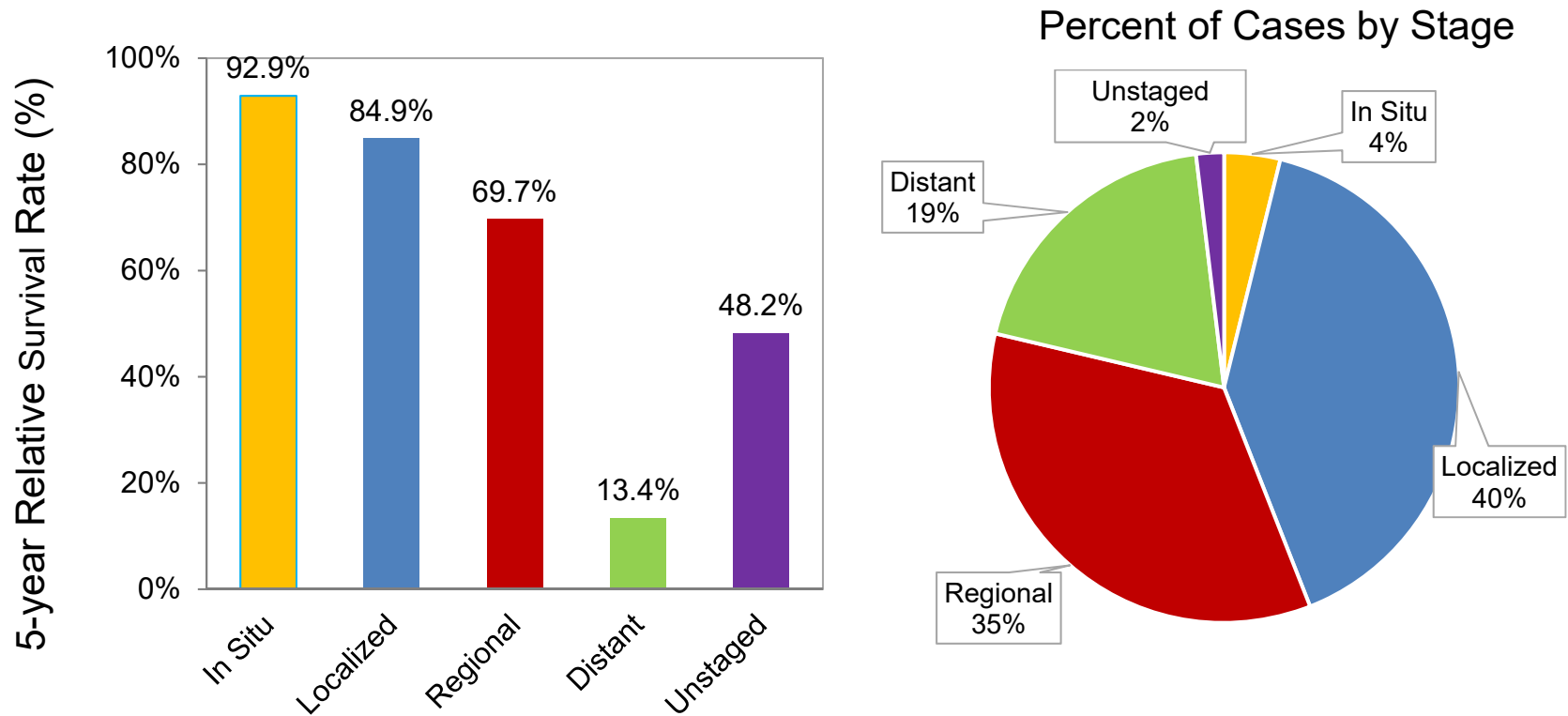


Annual average percent change (APC) were calculated using weighted least squares method.

\* APC significantly different from zero.

<sup>#</sup> Invasive cases only.

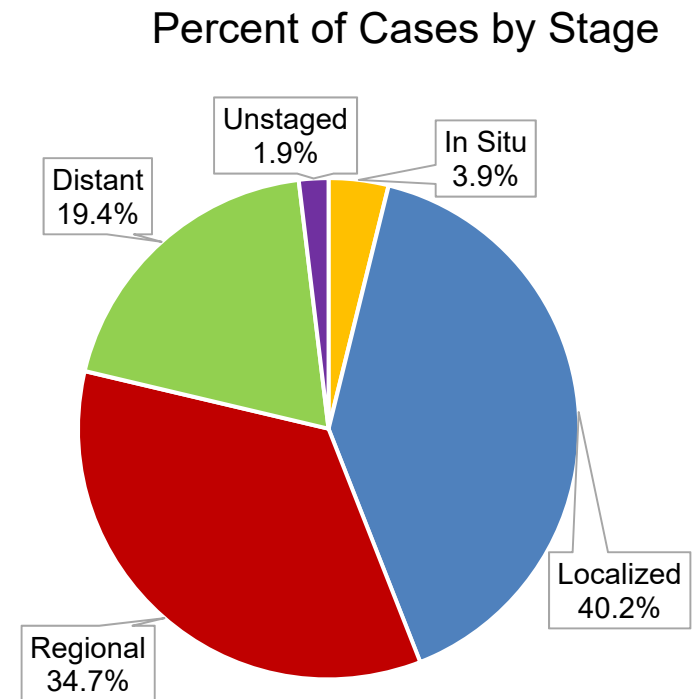
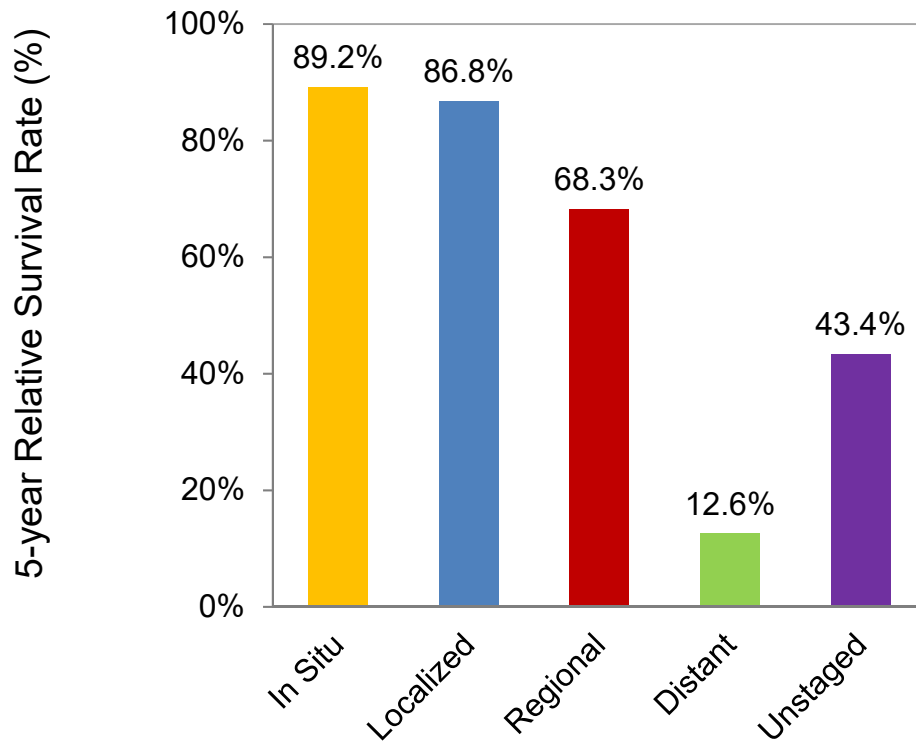
# Colon and Rectal Cancer#: Louisiana 5-Year Relative Survival by Stage<sup>1</sup>, White Males, 2007-2013



#Only invasive cases.

<sup>1</sup> The stage distribution is based on Summary Stage 2000.

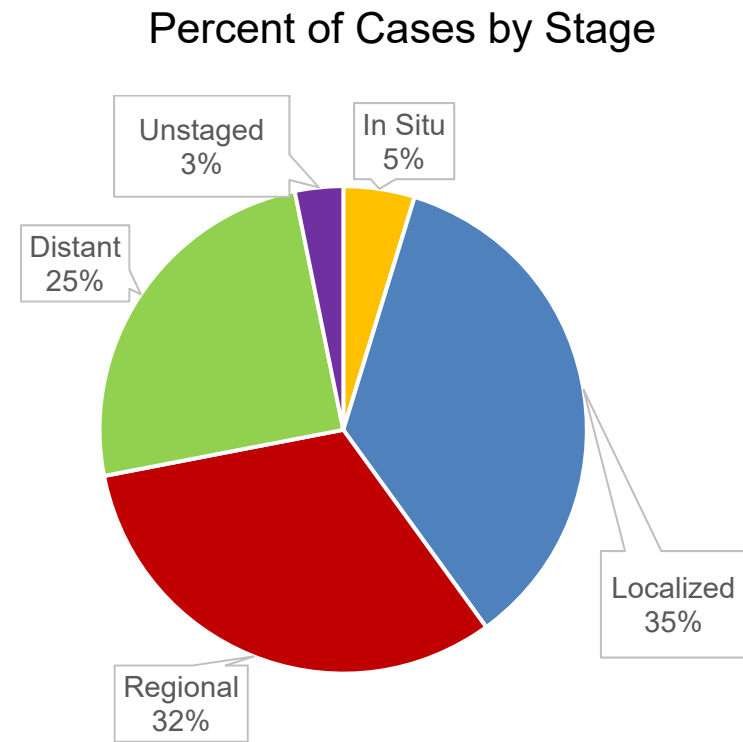
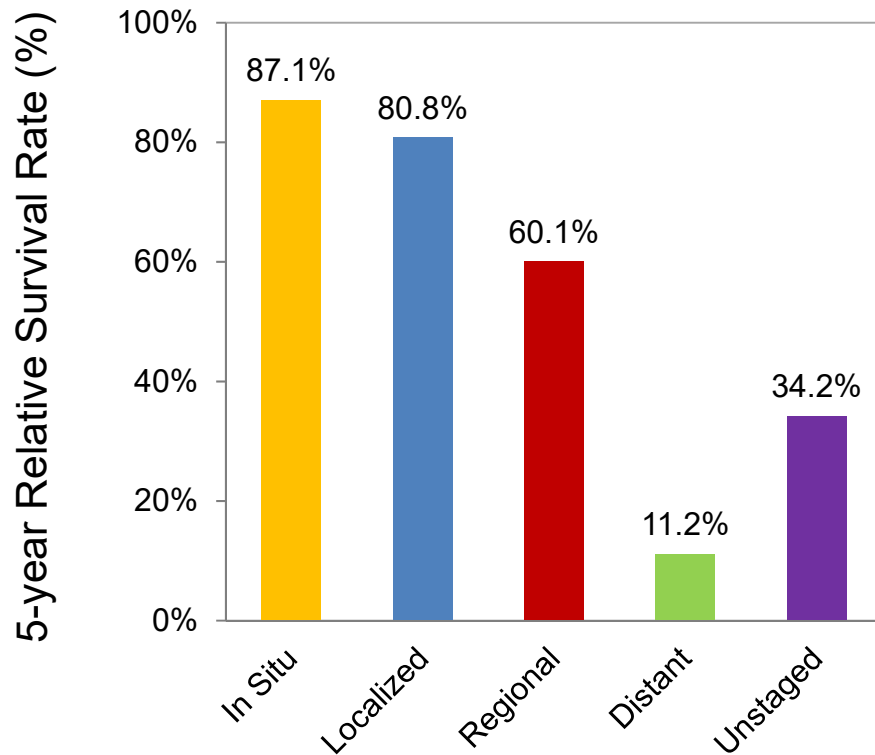
# Colon and Rectal Cancer#: Louisiana 5-Year Relative Survival by Stage<sup>1</sup>, White Females, 2007-2013



#Only invasive cases.

<sup>1</sup> The stage distribution is based on Summary Stage 2000.

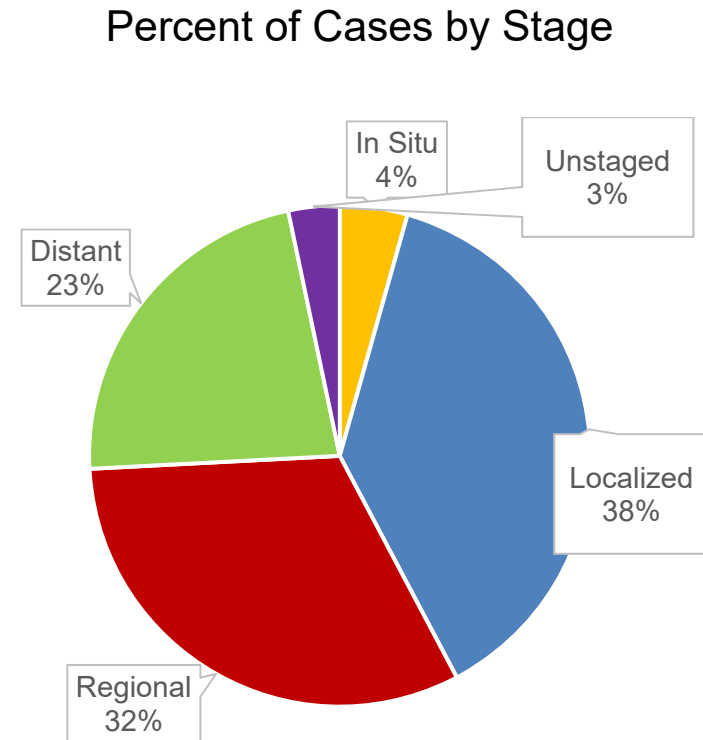
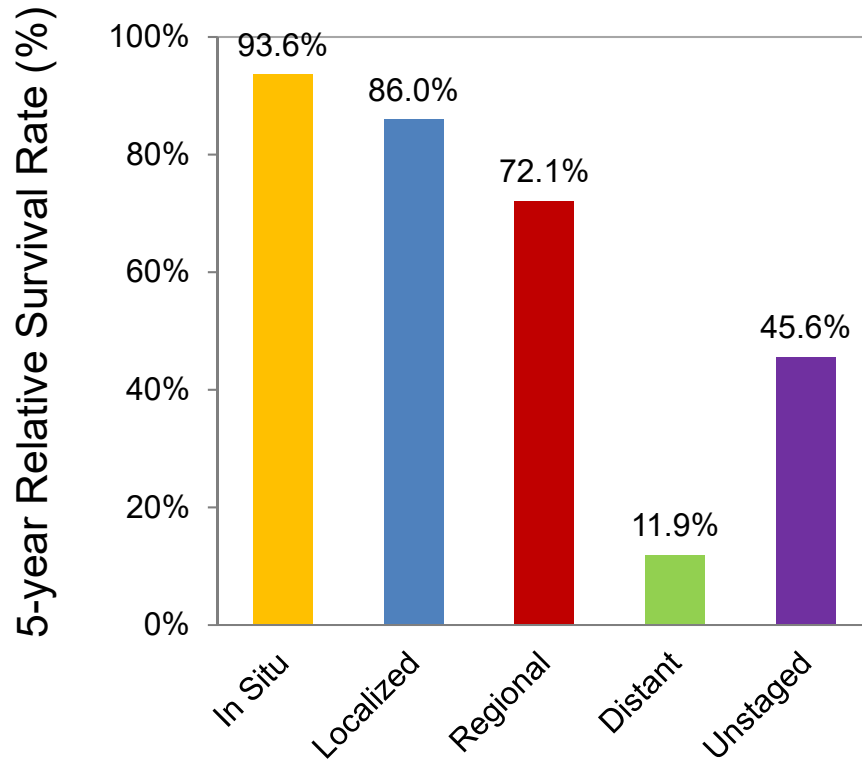
# Colon and Rectal Cancer#: Louisiana 5-Year Relative Survival by Stage<sup>1</sup>, Black Males, 2007-2013



#Only invasive cases.

<sup>1</sup> The stage distribution is based on Summary Stage 2000.

# Colon and Rectal Cancer#: Louisiana 5-Year Relative Survival by Stage<sup>1</sup>, Black Females, 2007-2013



#Only invasive cases.

<sup>1</sup> The stage distribution is based on Summary Stage 2000.

# Appendix A. Regions of the Louisiana Tumor Registry

Regional Registry	Beginning Date of the Registry	Average Annual Population, 2010-2014	Parishes Covered
<b>Region 1 – New Orleans</b>	1974	21,864	Jefferson, Orleans, St. Bernard
<b>Region 2 – Baton Rouge</b>	1983	23,410	Ascension, Assumption, East Baton Rouge, East Feliciana, Iberville, Livingston, Pointe Coupée, St. Helena, Tangipahoa, West Baton Rouge, West Feliciana
<b>Region 3 – Southeast Louisiana</b>	1983	17,036	Lafourche, Plaquemines, St. Charles, St. James, St. John, St. Tammany, Terrebonne, Washington
<b>Region 4 – Acadiana</b>	1983	17,032	Acadia, Evangeline, Iberia, Lafayette, St. Landry, St. Martin, St. Mary, Vermilion
<b>Region 5 – Southwest Louisiana</b>	1983	7,698	Allen, Beauregard, Calcasieu, Cameron, Jefferson Davis
<b>Region 6 – Central Louisiana</b>	1988	8,283	Avoyelles, Catahoula, Concordia, Grant, La Salle, Rapides, Vernon, Winn
<b>Region 7 – Northwest Louisiana</b>	1988	14,817	Bienville, Bossier, Caddo, Claiborne, De Soto, Natchitoches, Red River, Sabine, Webster
<b>Region 8 – Northeast Louisiana</b>	1988	9,061	Caldwell, East Carroll, Franklin, Jackson, Lincoln, Madison, Morehouse, Ouachita, Richland, Tensas, Union, West Carroll
<b>Entire State</b>	1988	119,201	

Source: U.S. Bureau of Census and National Cancer Institute, April 2017.

# Data Sources

**Surveillance, Epidemiology, and End Results (SEER) Program** ([www.seer.cancer.gov](http://www.seer.cancer.gov)) SEER\*Stat Databases, National Cancer Institute, DCCPS, Surveillance Research Program, Surveillance Systems Branch, released April 2017, based on the November 2016 submission.

## **For Incidence:**

- Incidence - SEER 18 Regs Research Data + Hurricane Katrina Impacted Louisiana Cases, Nov 2016 Sub (2000-2014) <Katrina/Rita Population Adjustment>

## **For Mortality:**

- mortality – All COD, Aggregated With State, Total U.S. (1969-2014) <Katrina/Rita Population Adjustment>>

## **For Survival:**

- Incidence - SEER 18 Regs Research Data + Hurricane Katrina Impacted Louisiana Cases, Nov 2015 Sub (1973-2013 varying)

# Data Sources

- USCS:
  - U.S. Cancer Statistics Working Group. United States Cancer Statistics: 1999-2014 Incidence and Mortality Web-based Report. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention and National Cancer Institute; 2017. Available at: [www.cdc.gov/uscs](http://www.cdc.gov/uscs).
- Cancer Facts & Figures:
  - American Cancer Society. *Cancer Facts & Figures 2017*. Atlanta: American Cancer Society; 2017.



# Data Sources

## NCI State profiles

- Incidence Data Sources:
  - Incidence data are provided by the National Program of Cancer Registries External Web Site Policy Cancer Surveillance System (NPCR-CSS), Centers for Disease Control and Prevention and by the National Cancer Institute's Surveillance, Epidemiology, and End Results (SEER) Program External Web Site Policy.
  - Population counts for denominators are based on Census populations as modified by NCI.
  - Rates are calculated using SEER\*Stat External Web Site Policy.
- Mortality Data Sources:
  - Mortality data are provided by the National Vital Statistics System External Web Site Policy at the National Center for Health Statistics of the Centers for Disease Control and Prevention.
  - Population counts for denominators are based on Census populations as modified by NCI..
  - Rates are calculated using SEER\*Stat External Web Site Policy.
  - Trends are determined by using Joinpoint External Web Site Policy analysis of available historical data and reporting the last segment as the most recent trend.

# Acknowledgements

- **Hospital cancer registries** (<http://louisianatumorregistry.lsuhs.edu/>)
- **Louisiana Cancer Registrars' Association** (<http://www.lcra-usa.org/>)
- **Physicians and staff members in:**
  - Medical records offices
  - Pathology laboratories
  - Physician offices and clinics
  - Hospice programs and nursing homes
- **Regional and central offices of the Louisiana Tumor Registry**  
(<http://louisianatumorregistry.lsuhs.edu/regionalregistries.html>)
- **School of Public Health, LSU Health Sciences Center–New Orleans**
- **Louisiana Cancer and Lung Trust Fund Board**
- **Coroners' offices**

# Sources of LTR Funding

- National Cancer Institute, SEER Program
- Centers for Disease Control and Prevention (CDC), National Program of Cancer Registries (NPCR) Program
- Louisiana Health Care Services Division

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