

# **Louisiana Cancer Facts & Figures, Thyroid Cancer**

Louisiana Tumor Registry

September, 2017

# Thyroid Cancer\*

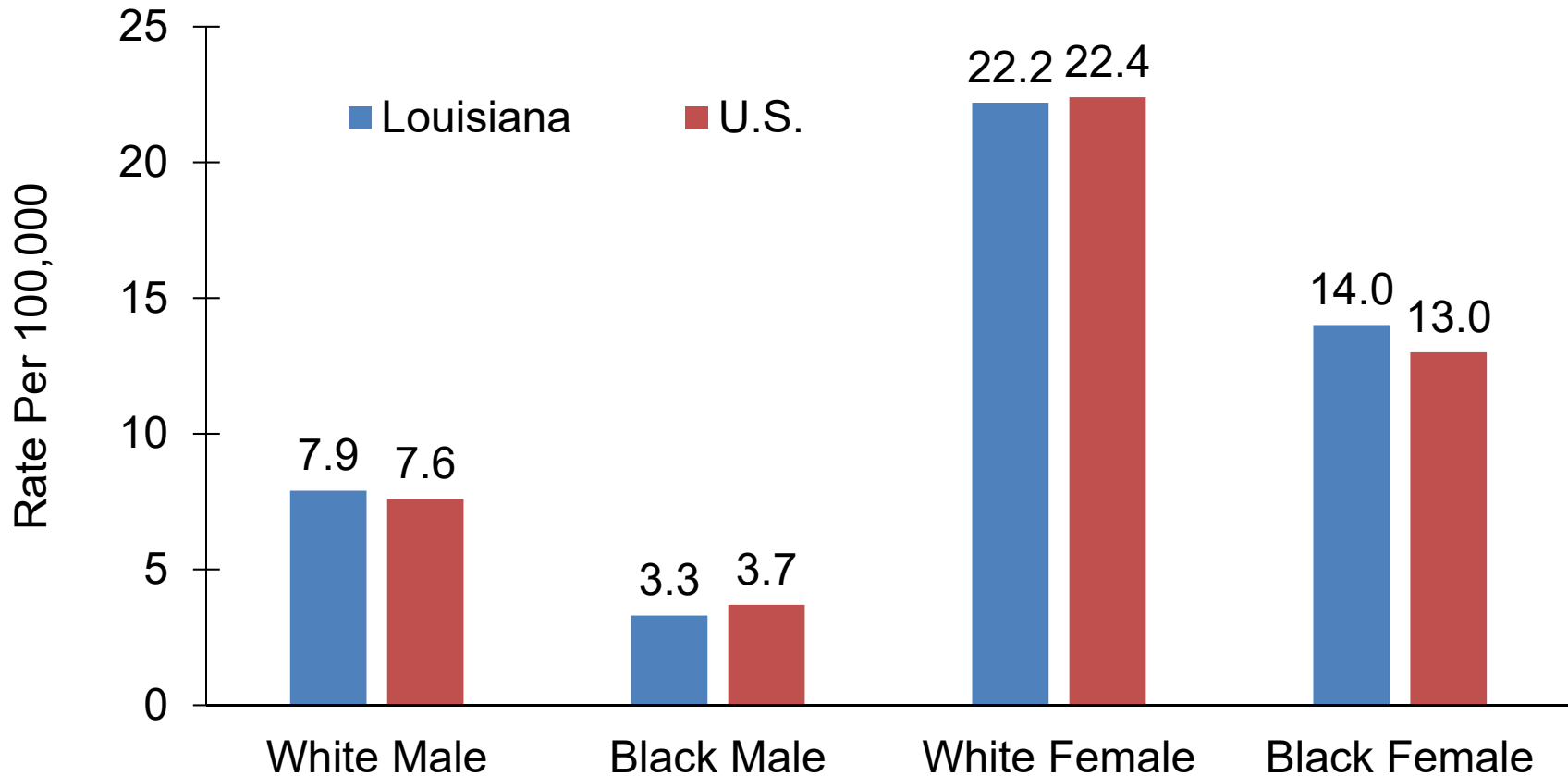
- From 2010 to 2014, Louisiana had the 32<sup>nd</sup> highest incidence rate and 44<sup>th</sup> highest death rate of thyroid cancer of any state in the nation (all races and sexes combined).<sup>1</sup>
- Thyroid cancer was the 4<sup>th</sup> most commonly diagnosed cancer among Louisiana females between 2010 to 2014.<sup>1</sup>
- About 650 new thyroid cancer cases are expected to be diagnosed in Louisiana in 2017.<sup>2</sup>

\* ICD\_O\_3/WHO 2008 code:C739; excluding ICD-O-3 histology (type): 9050-9055, 9140, 9590-9992

<sup>1</sup> Data source: [USCS](#).

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

# Thyroid Cancer Incidence Rates<sup>#,1</sup> Louisiana vs. U.S.<sup>2</sup>, 2010-2014

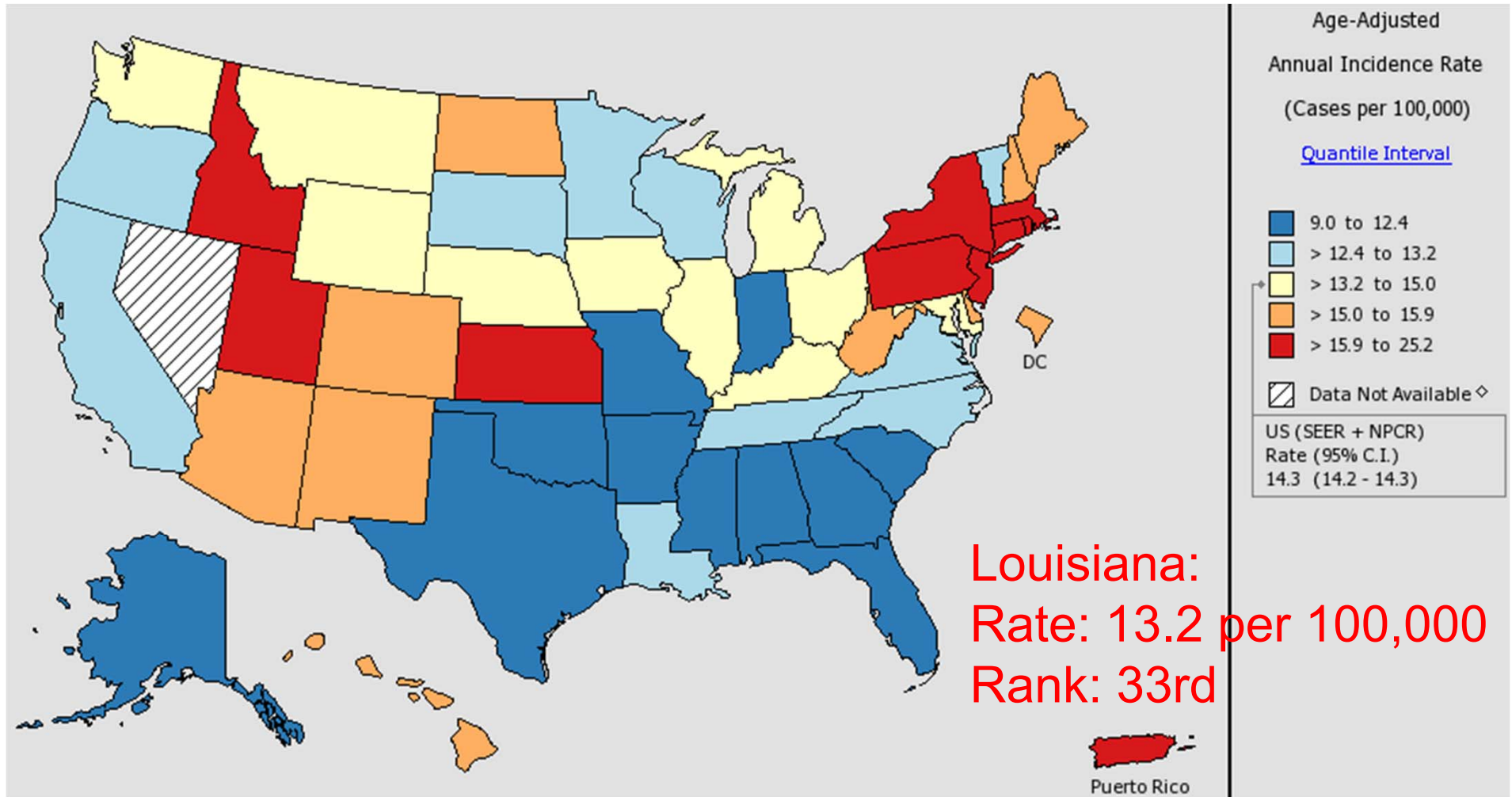


#Only invasive cases.

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

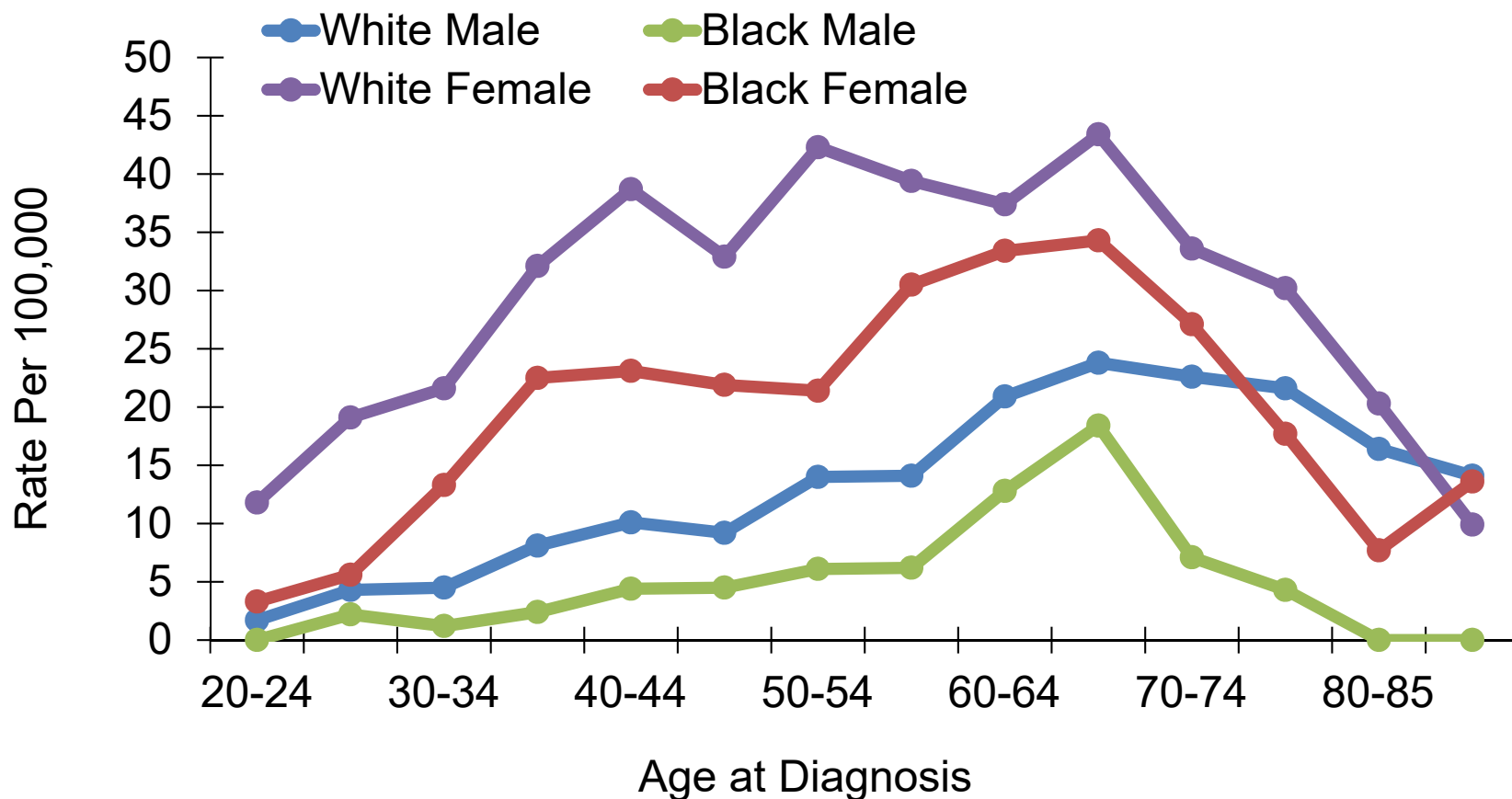
<sup>2</sup> Incidence data source: [18 SEER registries](#).

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



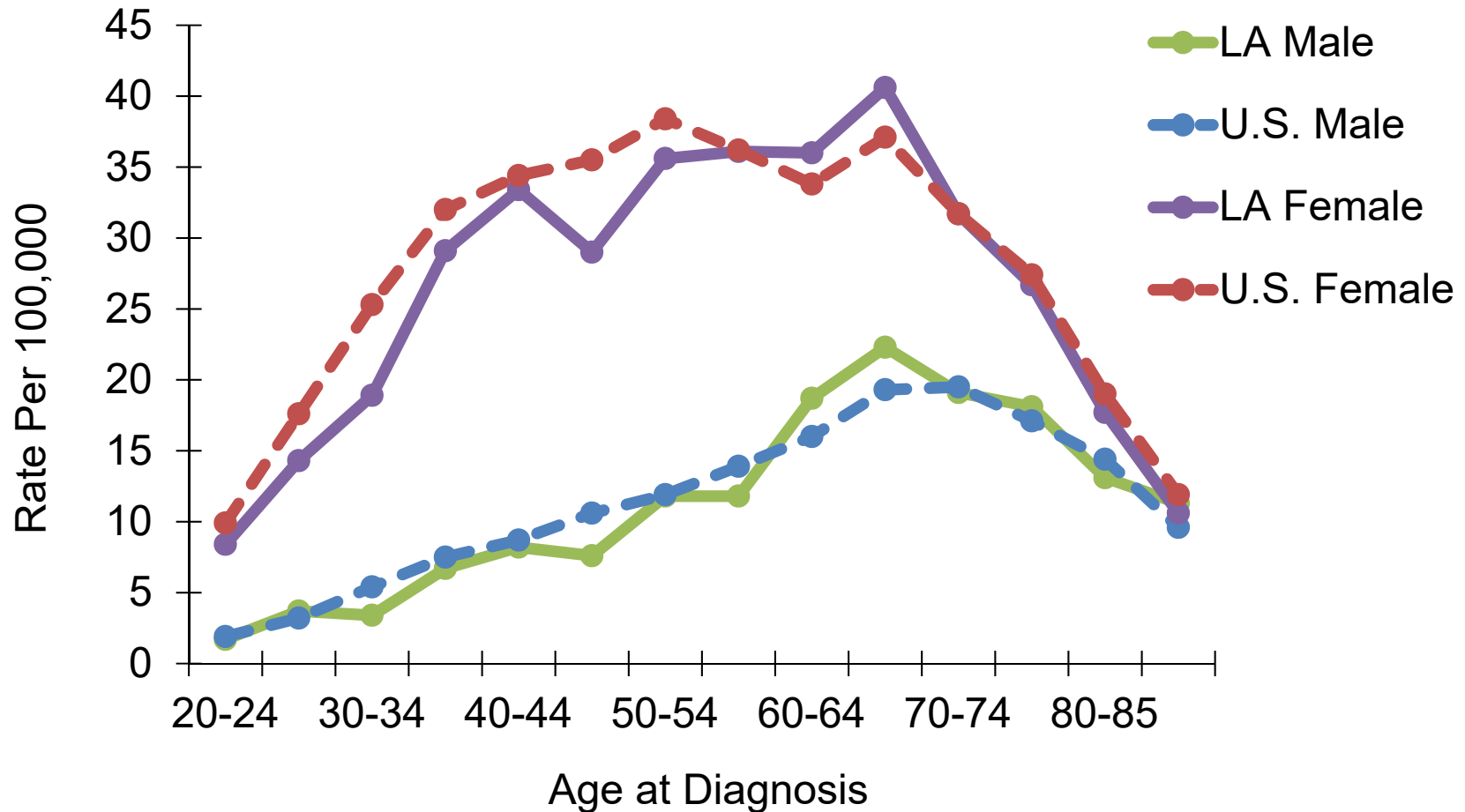
<sup>#</sup>Only invasive cases.

# Thyroid Cancer: Age-Specific Incidence Rates#, Louisiana\*, 2010-2014



#Only invasive cases.

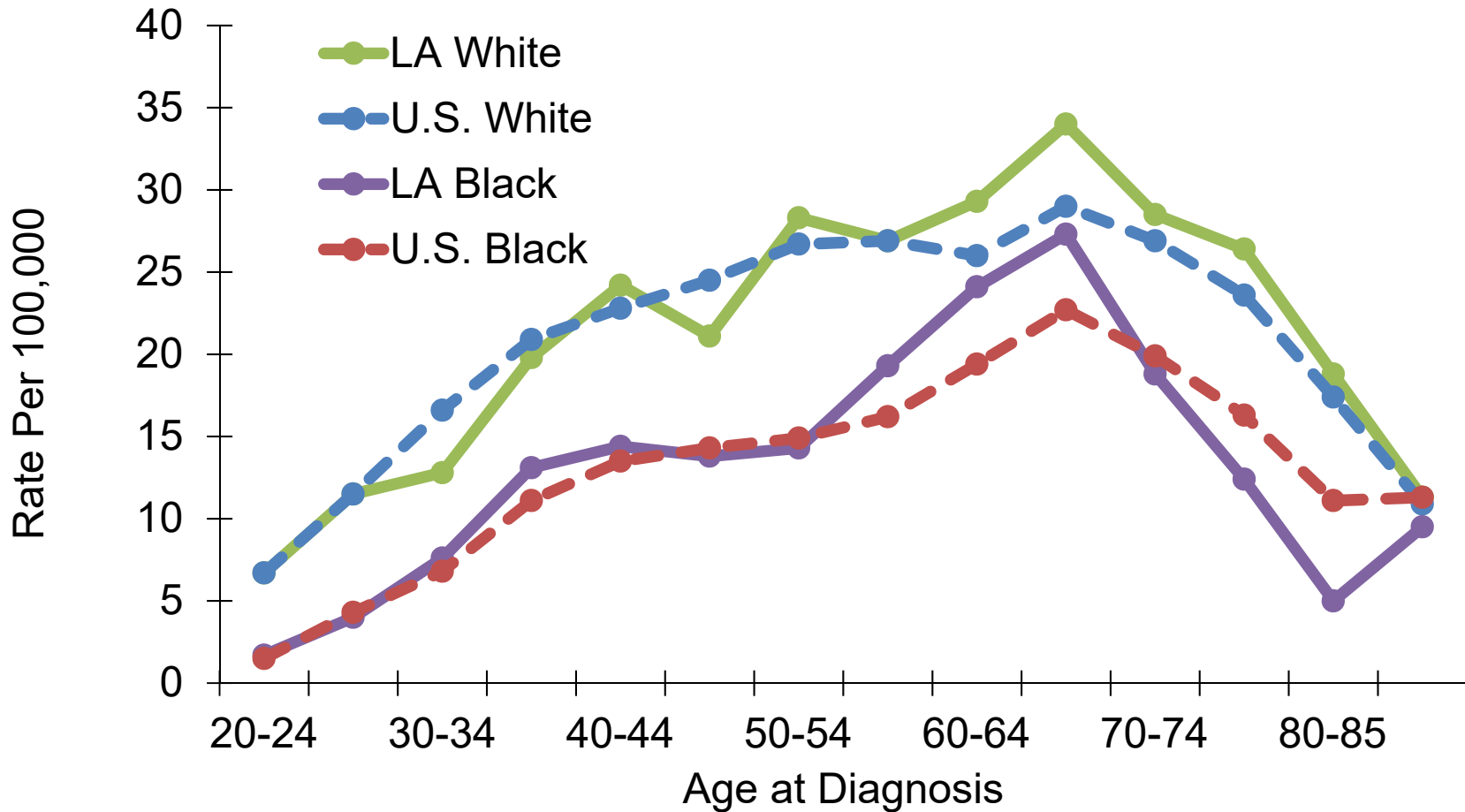
# Thyroid Cancer: Age-Specific Incidence Rates # by Gender, 2010-2014



#Only invasive cases

U.S. data source: [18 SEER registries](#).

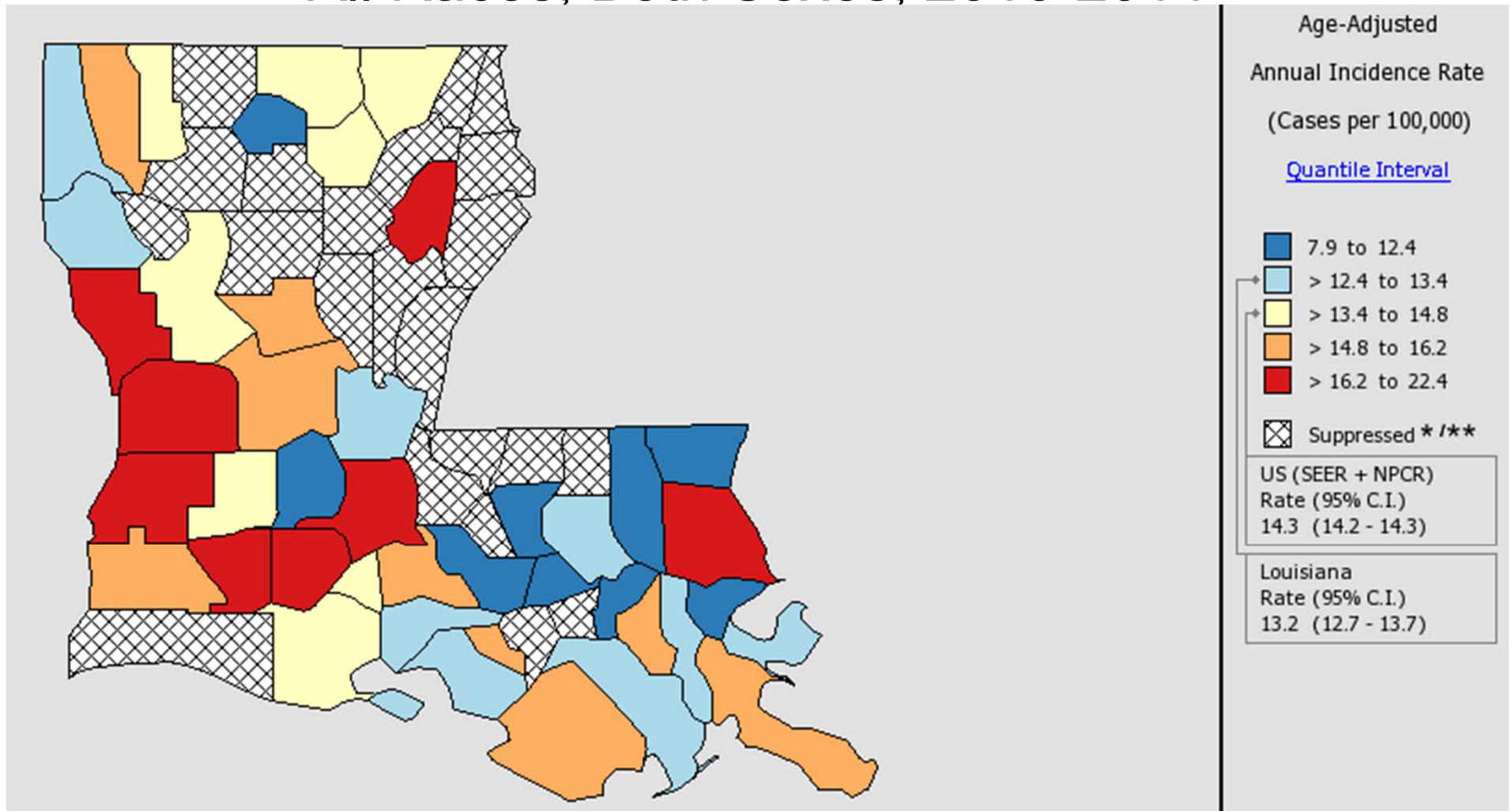
# Thyroid Cancer: Age-Specific Incidence Rates# by Race, 2010-2014



#Only invasive cases.

U.S. data source: [18 SEER registries](#).

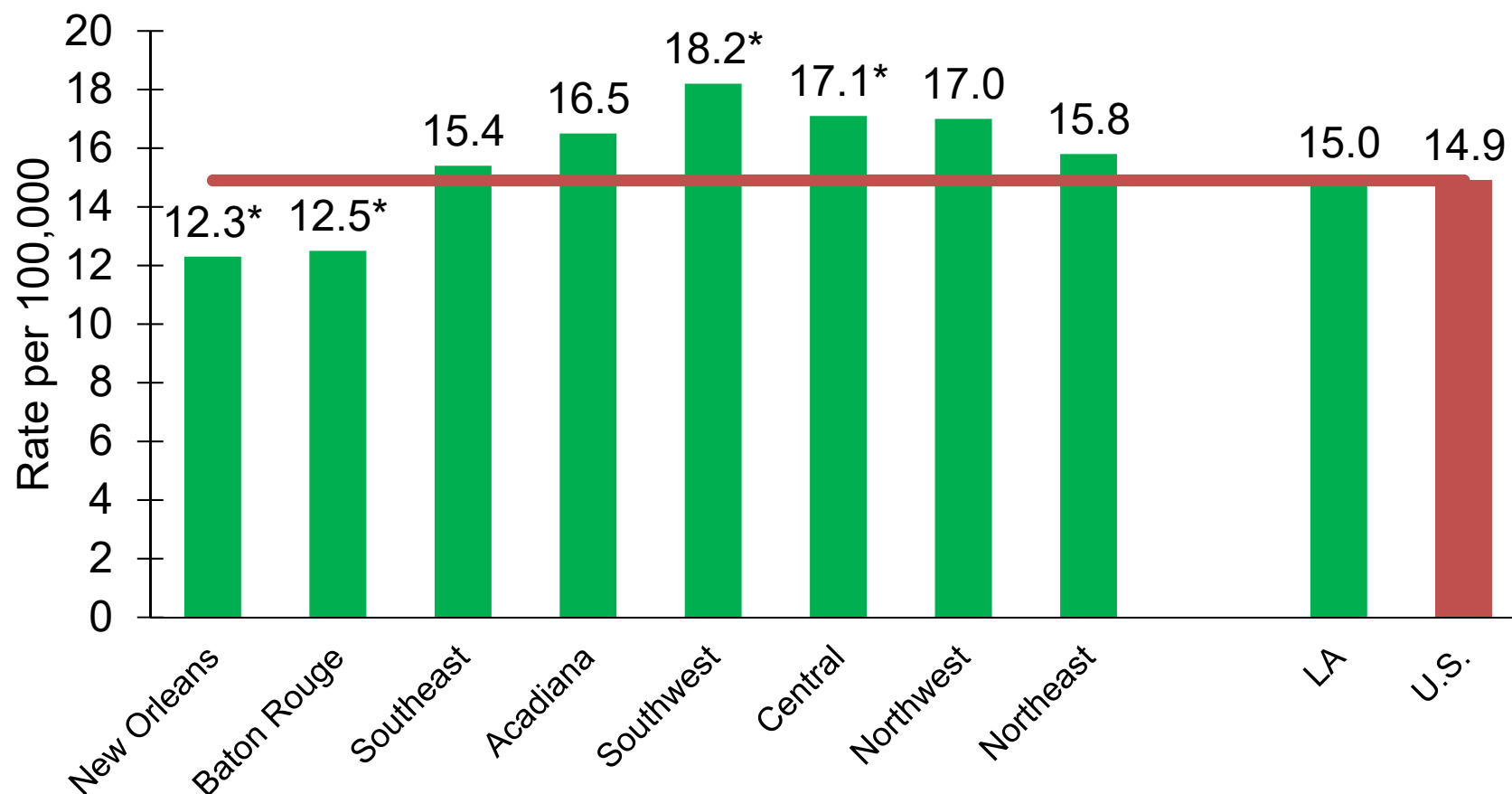
# Incidence Rates of Thyroid Cancer<sup>#</sup> in Louisiana, All Races, Both Sexes, 2010-2014



<sup>#</sup>Only invasive cases.



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



#Only invasive cases.

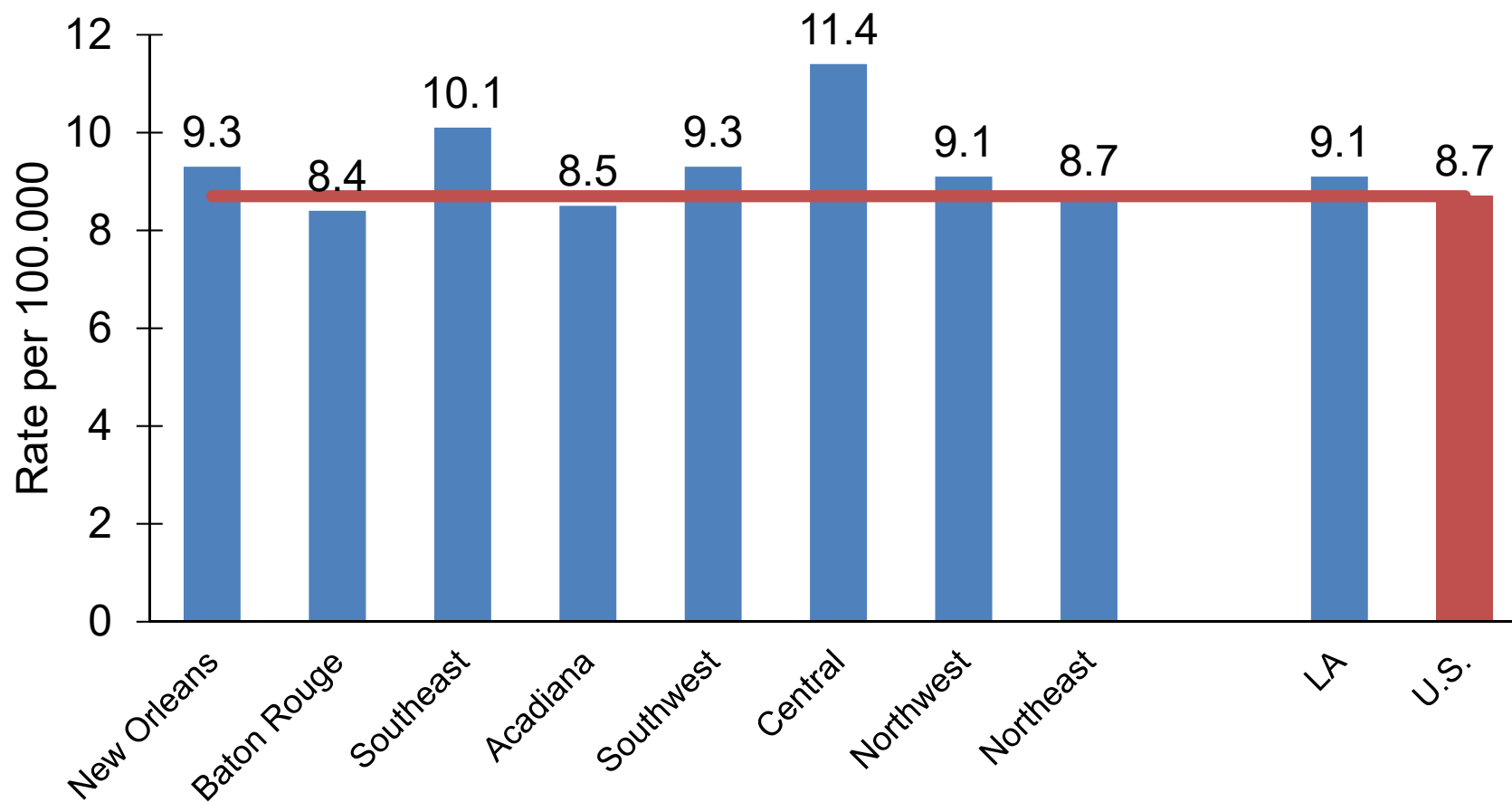
<sup>1</sup> Age-adjusted to the 2000 U.S. standard population.

<sup>2</sup> Data source for U.S. was [the 18 SEER registries](#).

<sup>3</sup> See Appendix A for [Regions in the Louisiana Tumor Registry](#).

\* Incidence rate of regions/Louisiana is significantly different from that of the US.

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



#Only invasive cases.

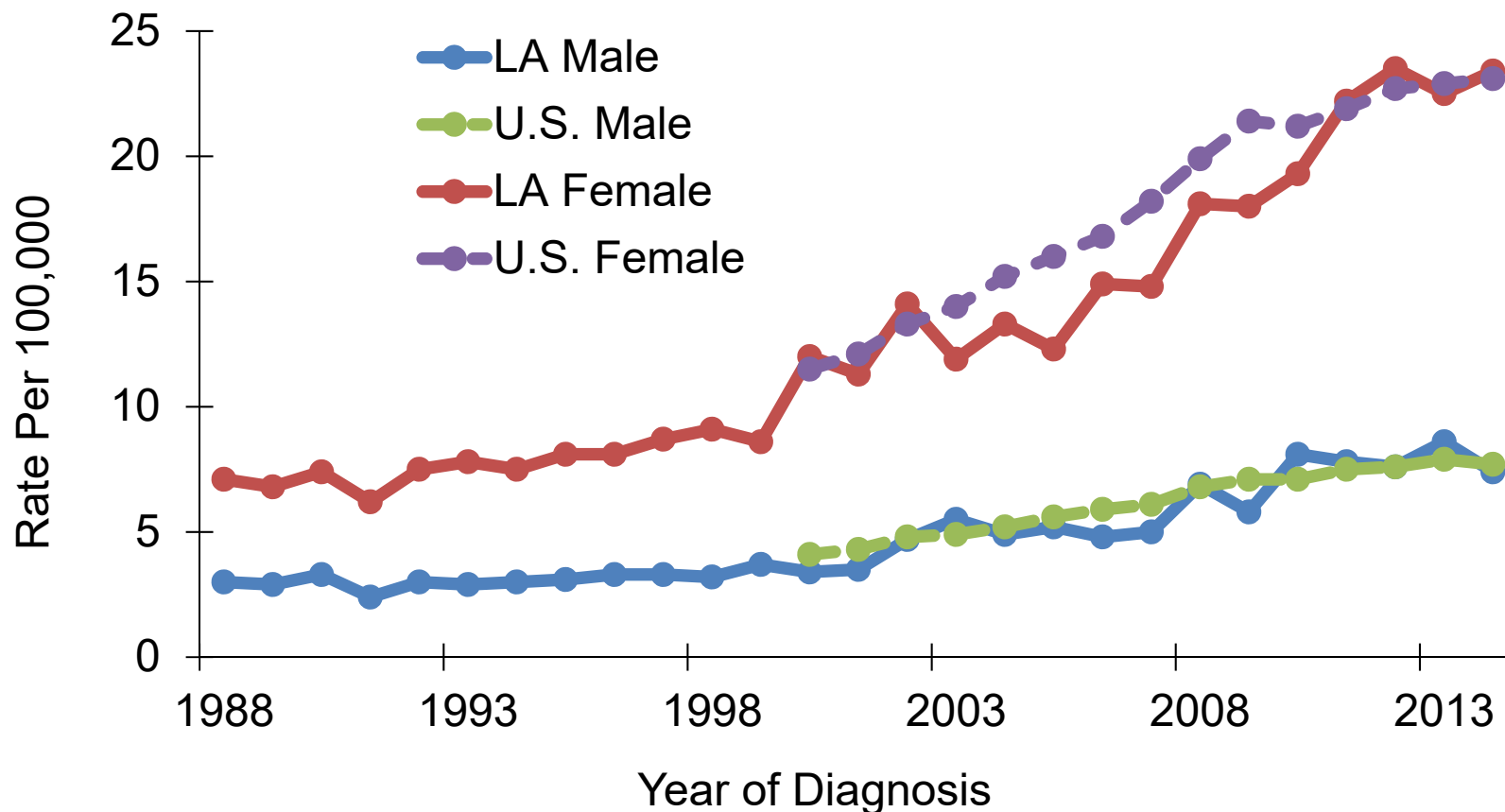
<sup>1</sup> Age-adjusted to the 2000 U.S. standard population.

<sup>2</sup> Data source for U.S. was [the 18 SEER registries](#).

<sup>3</sup> See Appendix A for [Regions in the Louisiana Tumor Registry](#).

\* Incidence rate of regions/Louisiana is significantly different from that of the US.

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

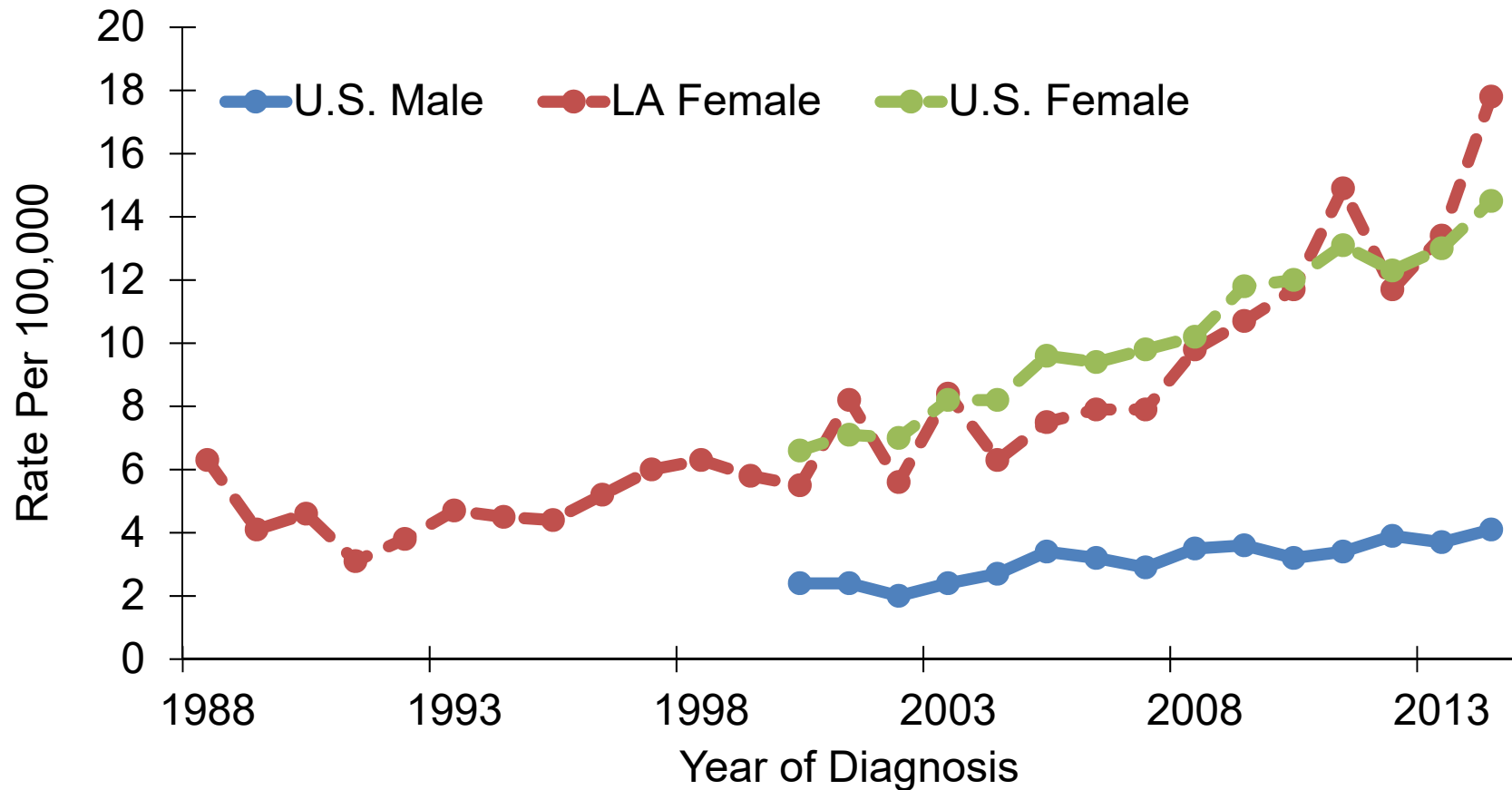


#Only invasive cases.

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

<sup>2</sup> U.S. data source: [18 SEER registries](#).

# Thyroid Cancer: Trends of Incidence Rates<sup>#,1,2</sup>, Blacks\*, 1988-2014



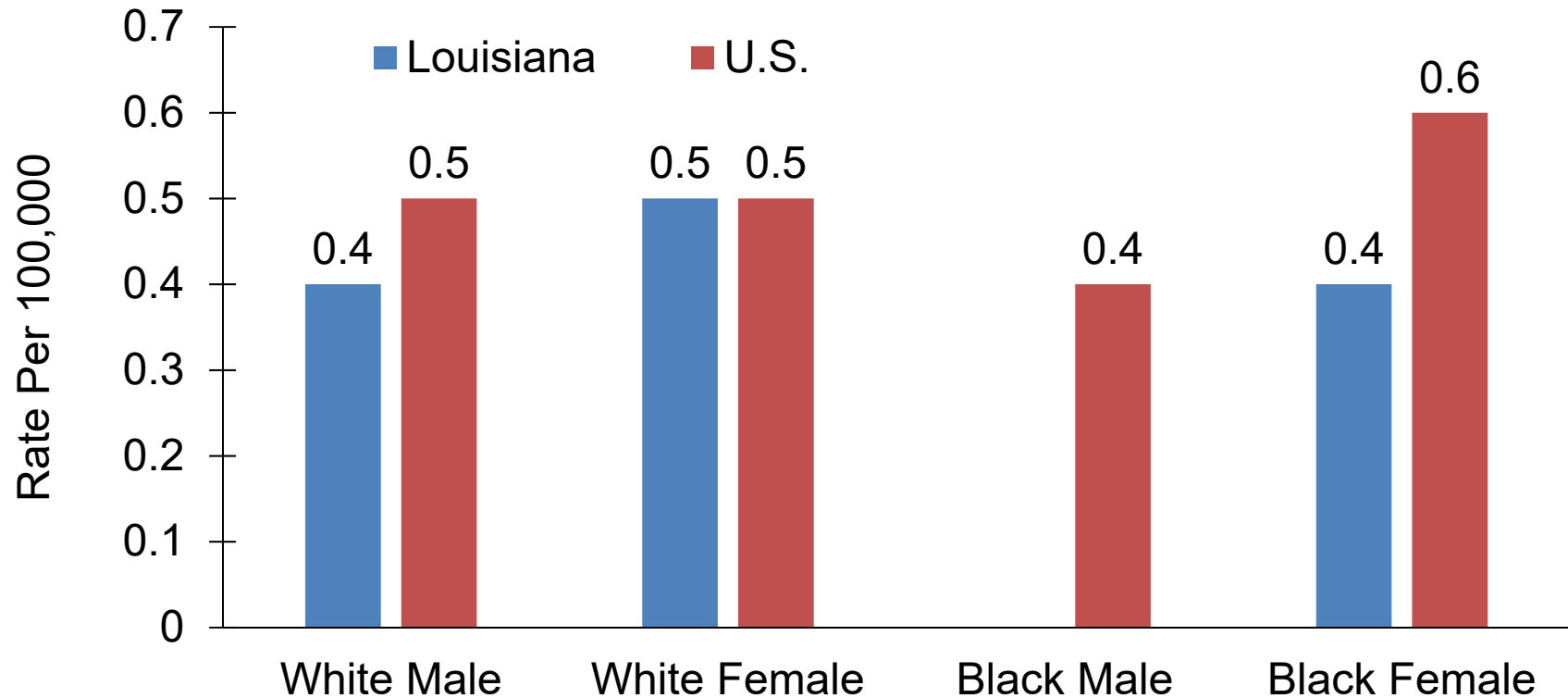
<sup>#</sup>Only invasive cases.

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

<sup>2</sup> U.S. data source: [18 SEER registries](#).

\* Black LA male incidence trends can not displayed due to small case counts.

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

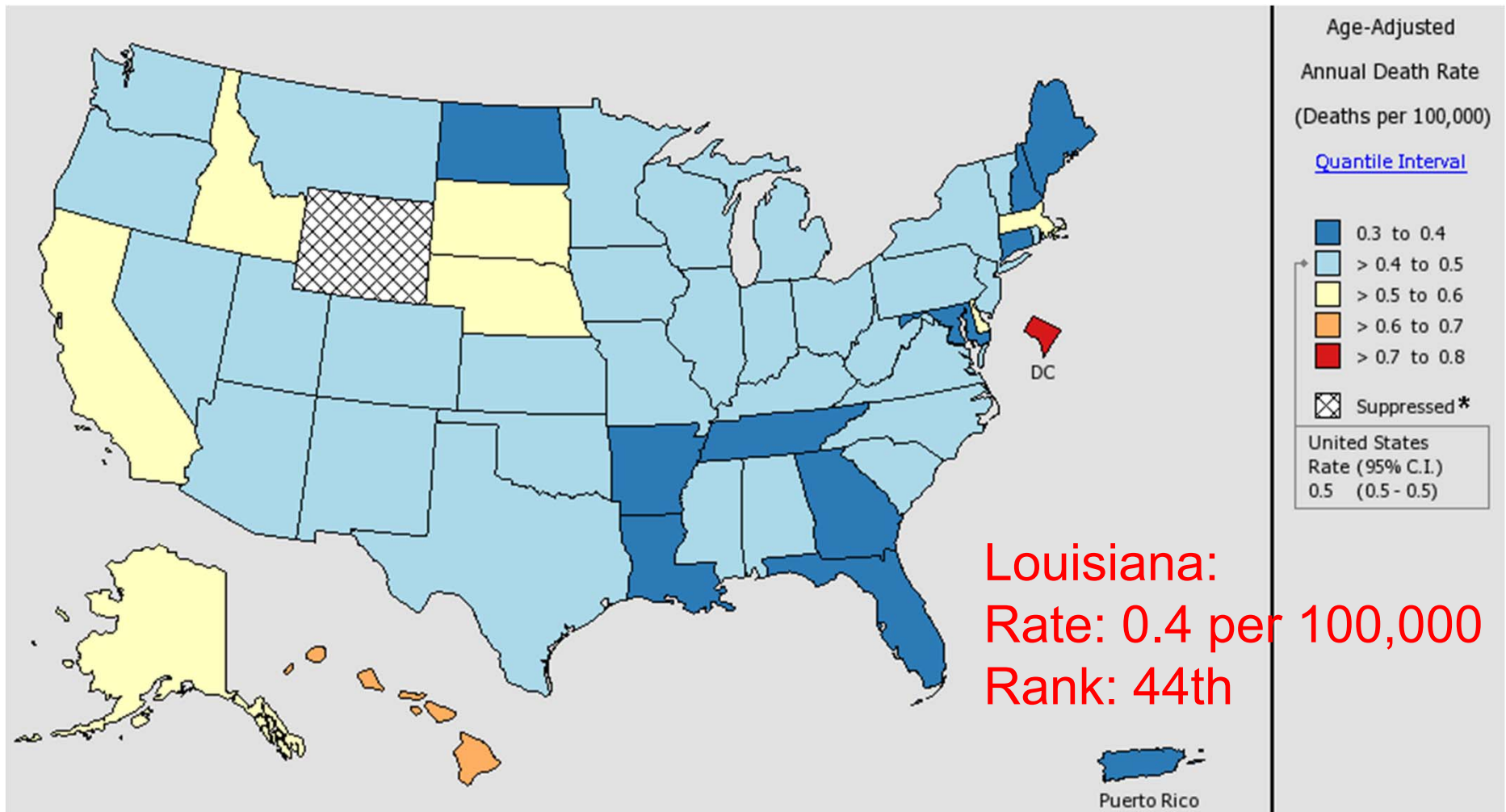


<sup>1</sup> Age-adjusted to the 2000 U.S. standard population.

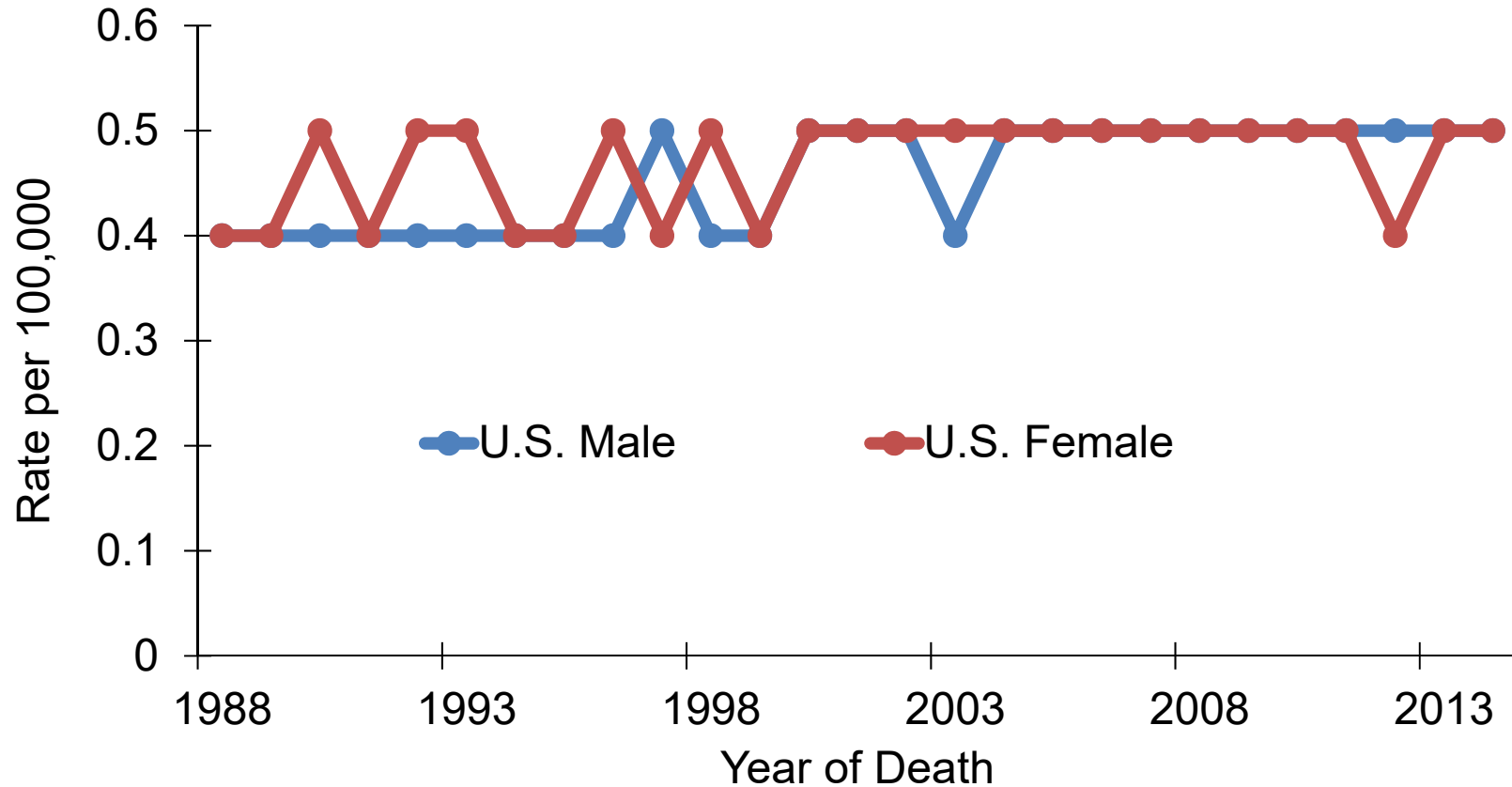
<sup>2</sup> Data source: [National Center of Health Statistics \(NCHS\)](#).

\* Louisiana black male mortality rate, 2010-2014, could not be displayed due to small case counts.

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



# Thyroid Cancer: Trends of Mortality Rates<sup>1,2,3</sup>, Whites, 1988-2014

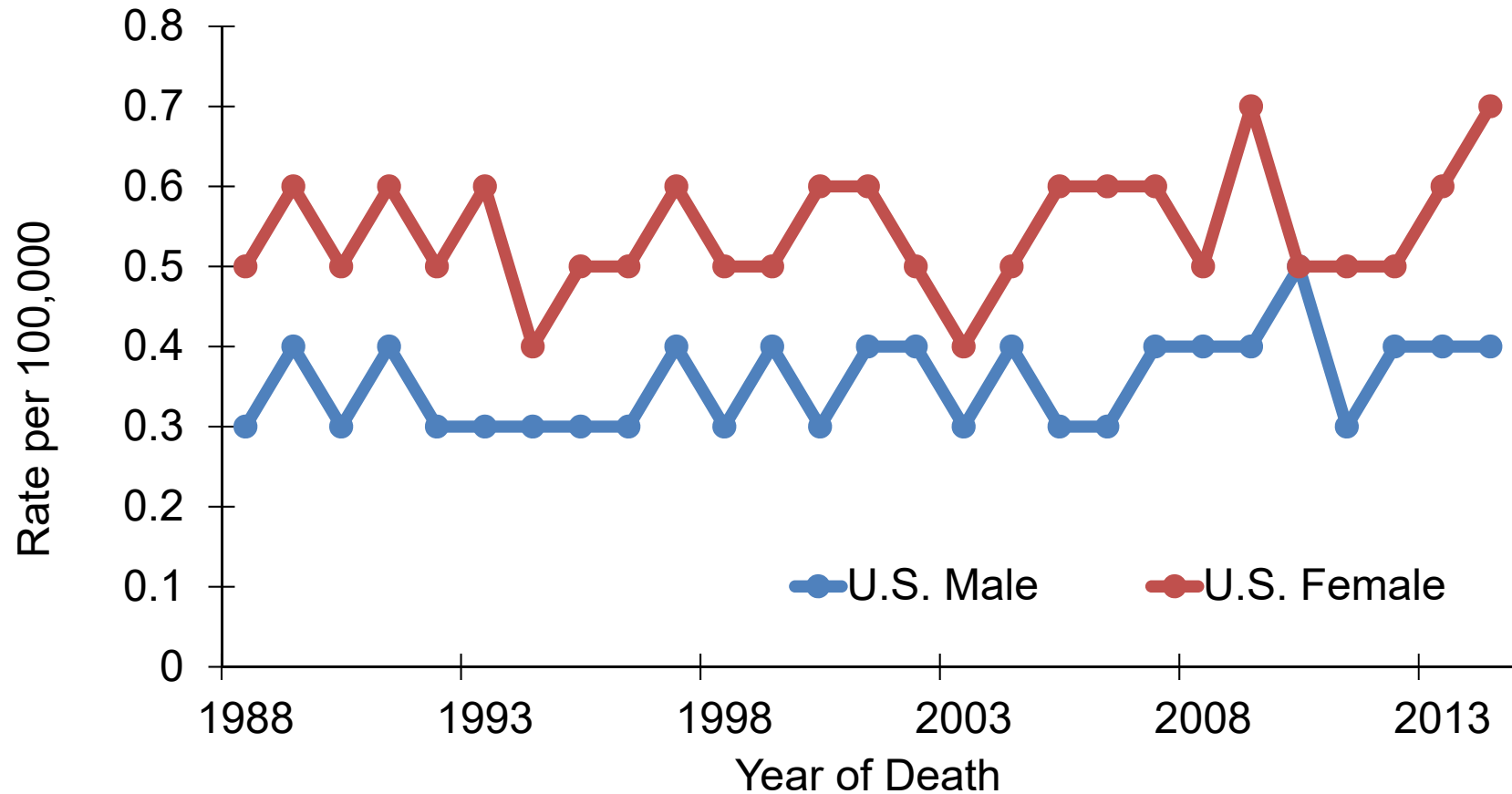


<sup>1</sup> Adjusted to the 2000 U.S. standard population.

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

<sup>3</sup> Louisiana male and female mortality trends could not be displayed due to small case count.

# Thyroid Cancer: Trends of Mortality Rates<sup>1,2,3</sup>, Blacks, 1988-2014



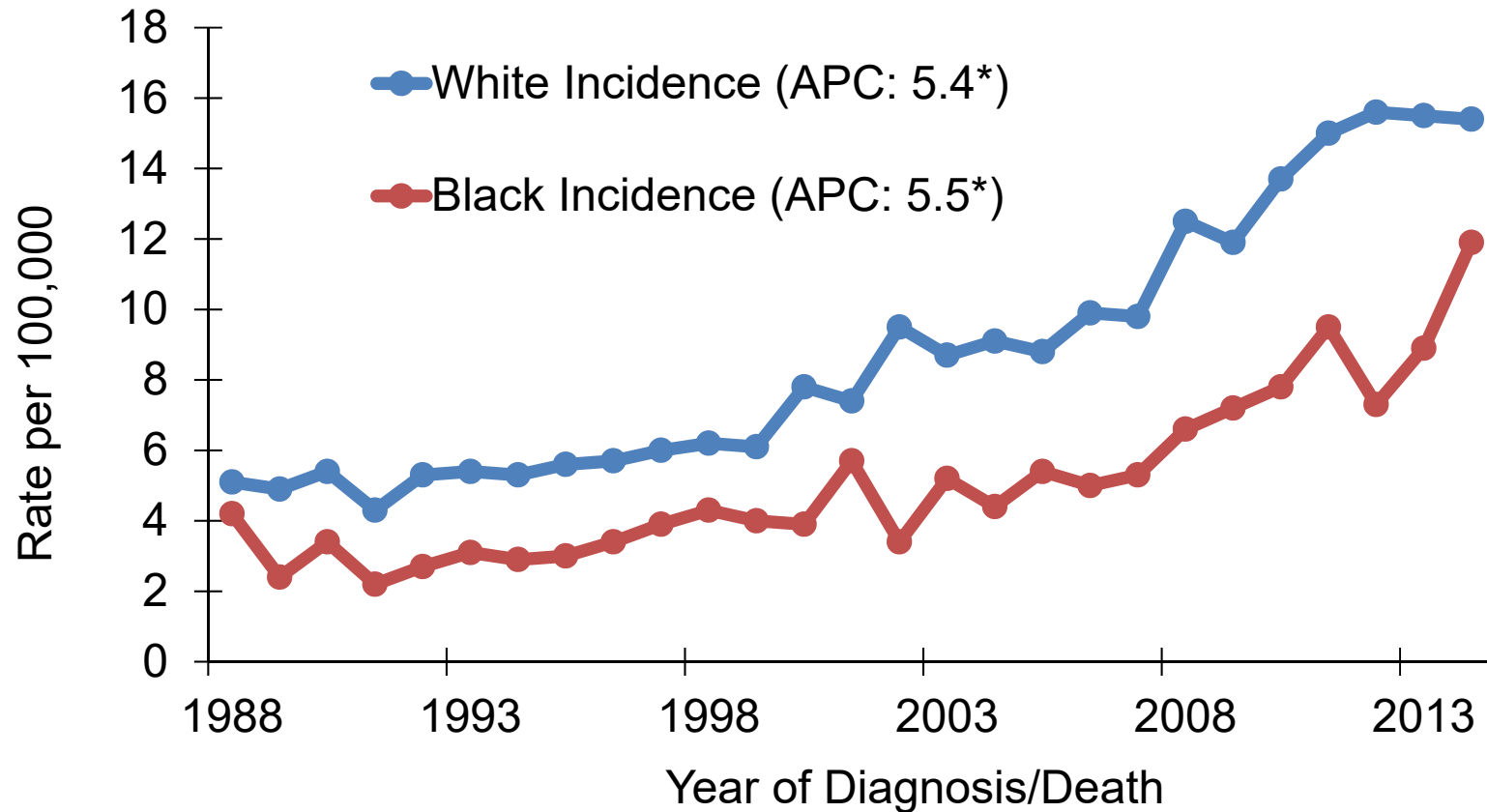
<sup>1</sup> Age-adjusted to the 2000 U.S. standard population.

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

<sup>3</sup> Louisiana male and female mortality trends could not be displayed due to small case count.



# Thyroid Cancer: Trends of Incidence<sup>#</sup> and Mortality Rates<sup>1</sup>, by Race, Louisiana, 1988-2014

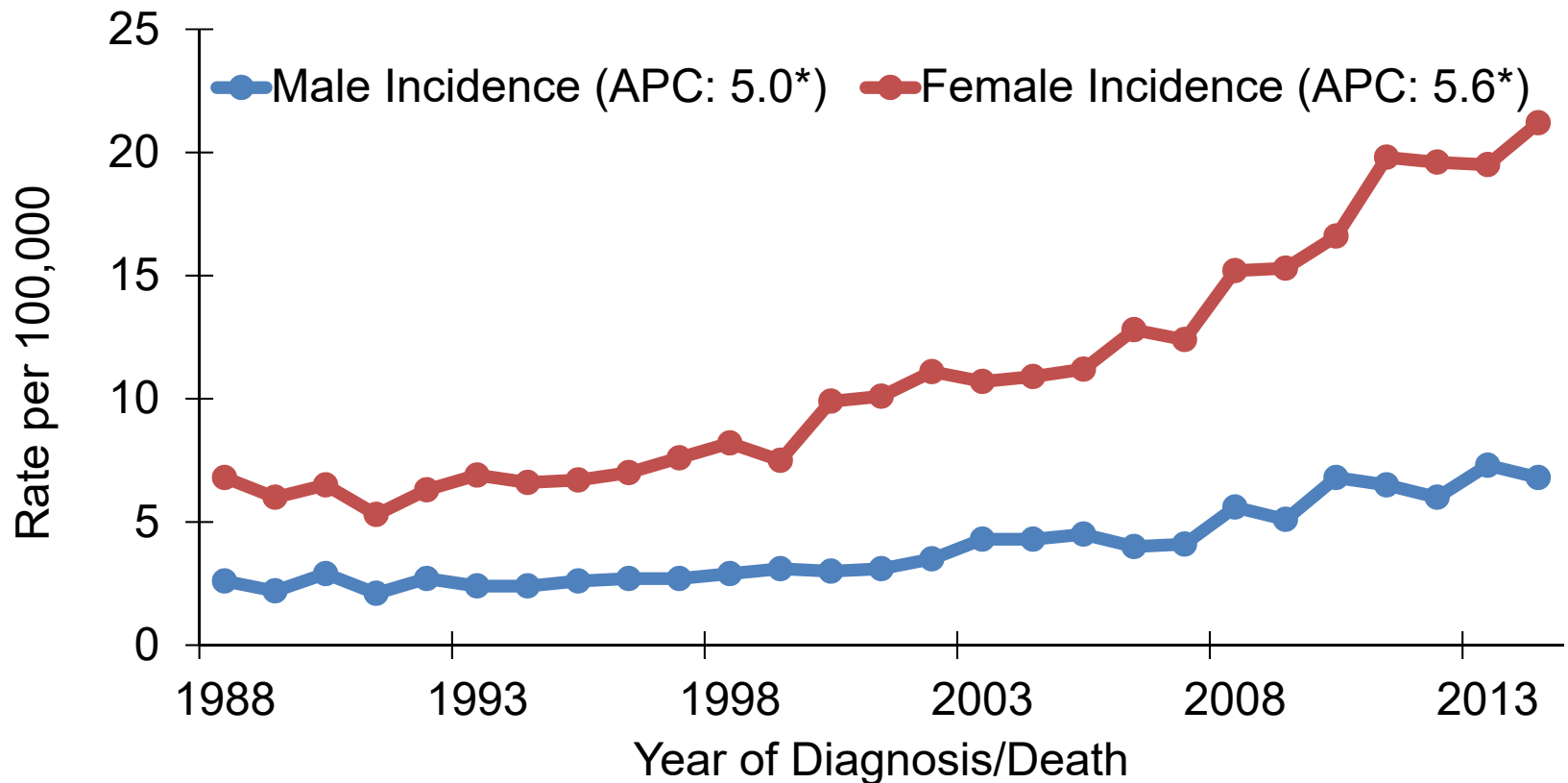


<sup>#</sup>Only invasive cases.

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

<sup>1</sup> Louisiana mortality trends by race could not be displayed due to small case count.

# Thyroid Cancer: Trends of Incidence<sup>#</sup> and Mortality Rates<sup>1</sup>, by Gender, Louisiana, 1988-2014

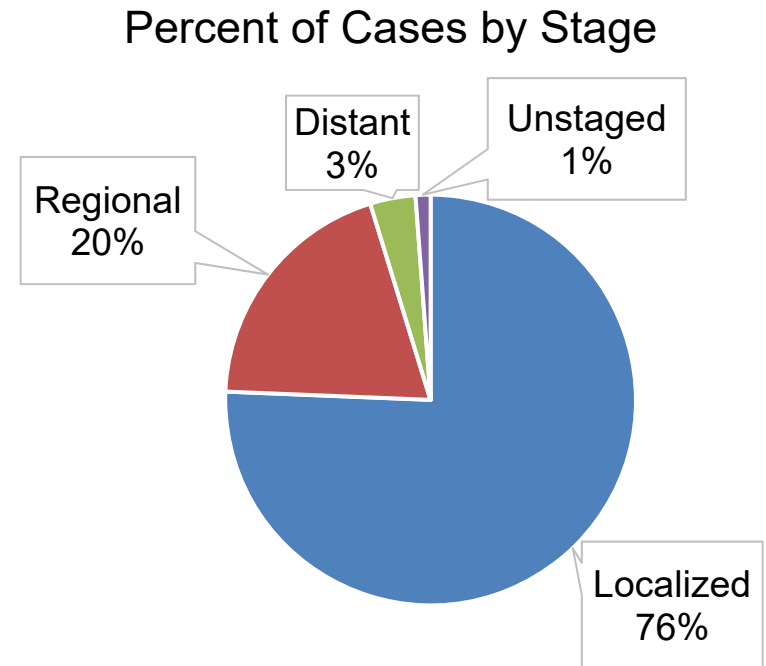
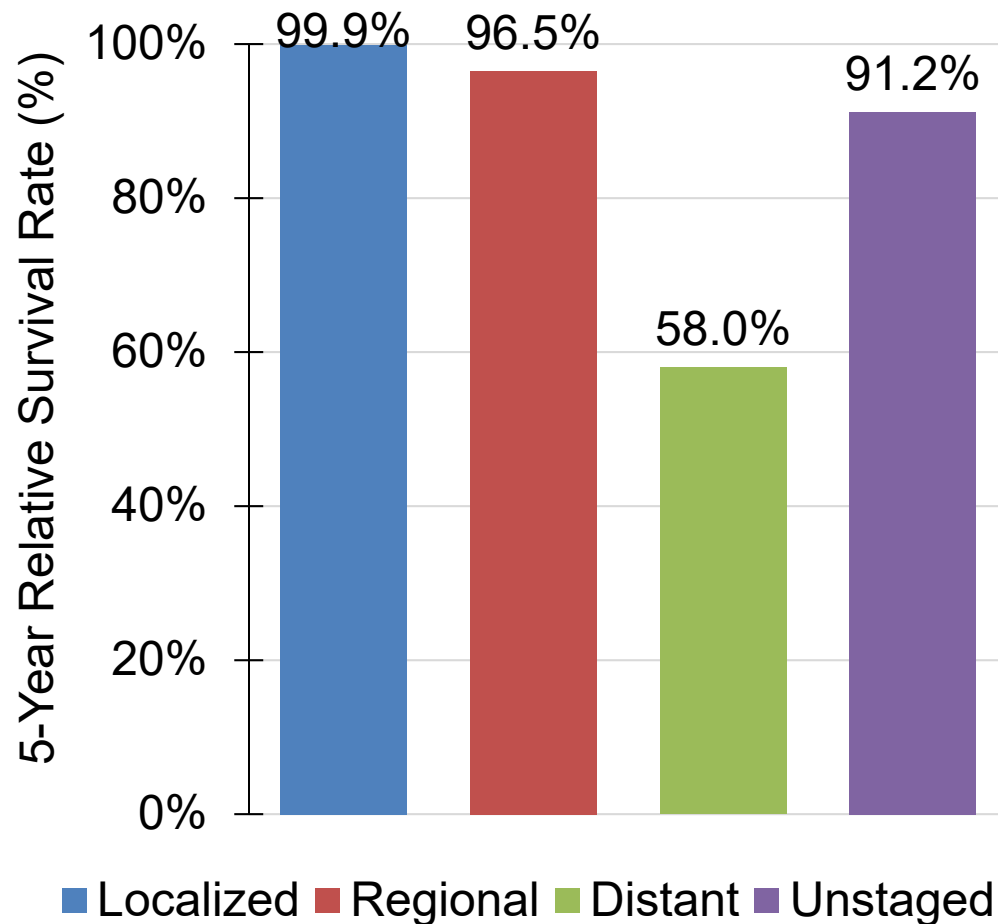


<sup>#</sup>Only invasive cases.

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

<sup>1</sup> Louisiana mortality trends by race could not be displayed due to small case count.

# Thyroid Cancer#: Louisiana 5-Year Relative Survival by Stage<sup>1,2</sup>, All Races, Both Sexes, 2007-2013

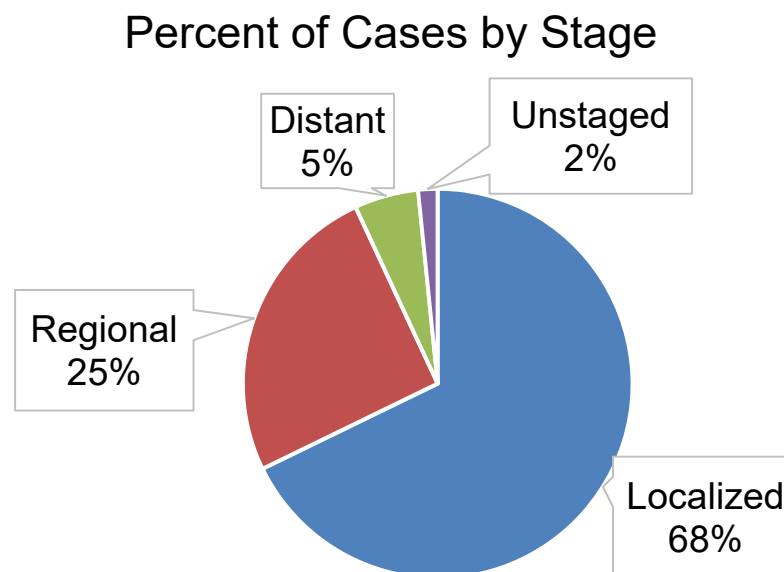
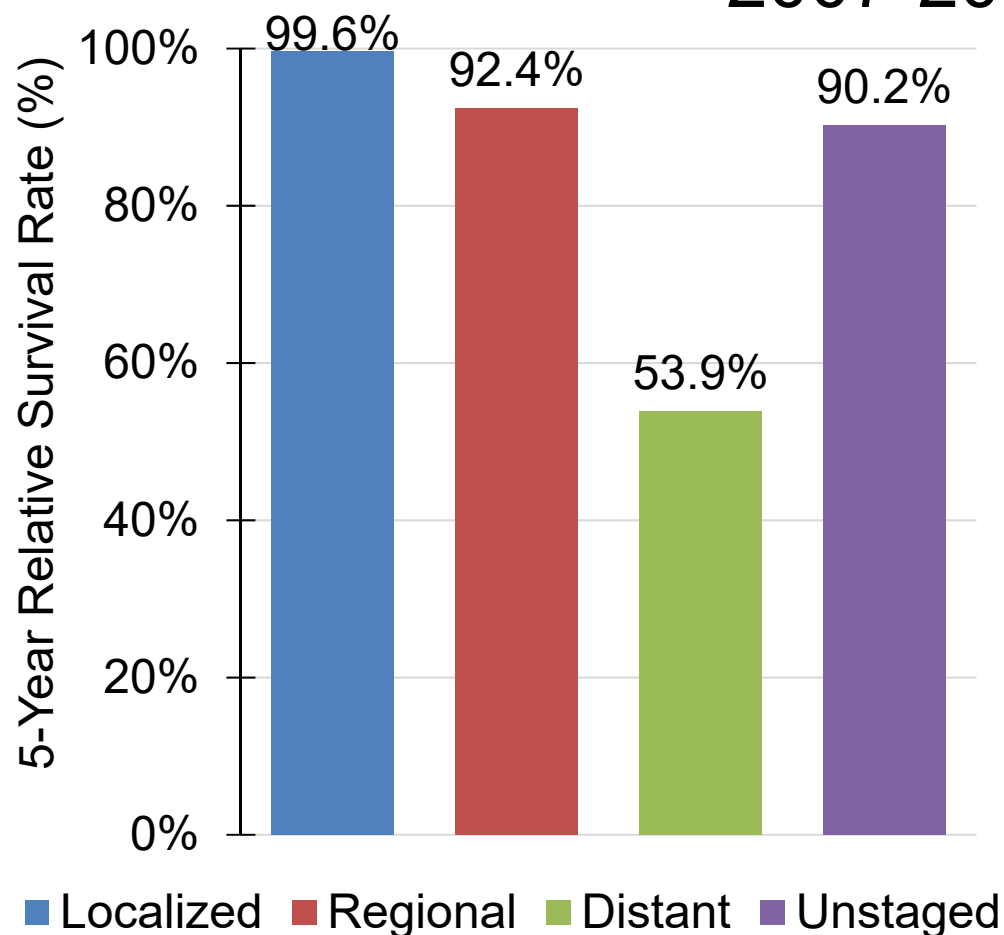


#Only invasive cases.

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

# Thyroid Cancer#: Louisiana

## 5-Year Relative Survival by Stage<sup>1,2</sup>, White Males, 2007-2013



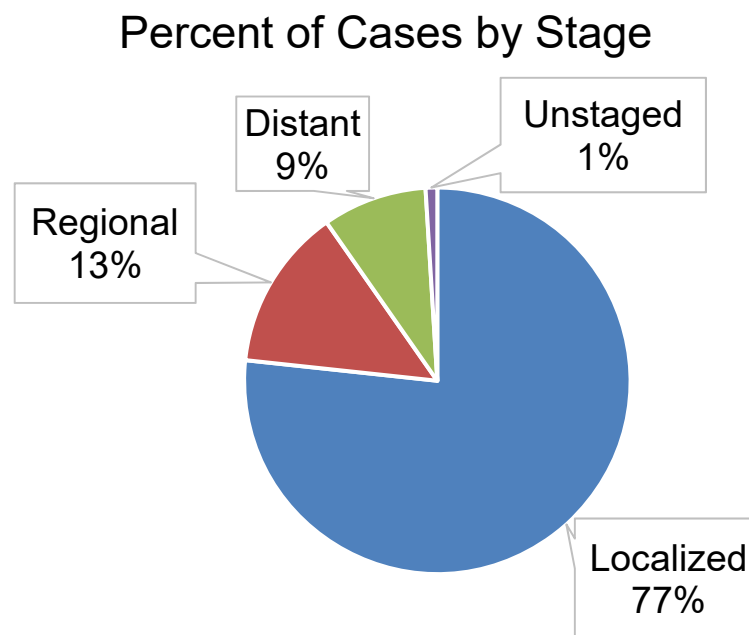
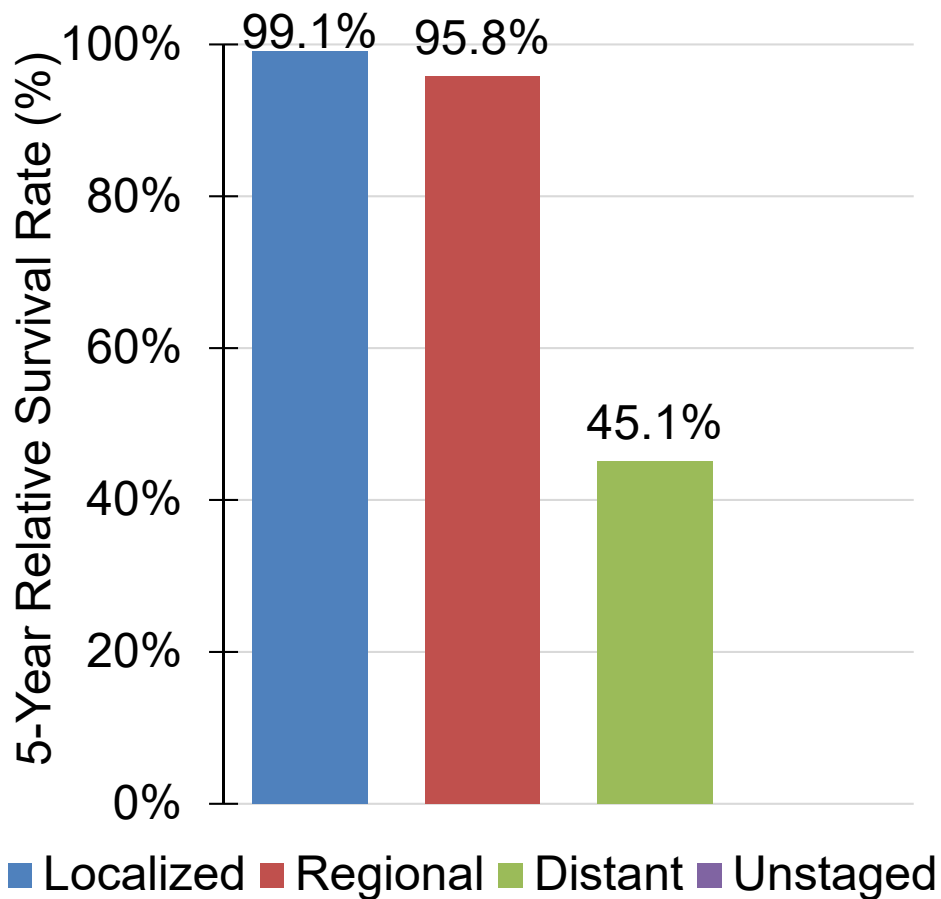
#Only invasive cases.

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

<sup>2</sup> The survival rate for unstaged cases could not be displayed due to small case counts.

# Thyroid Cancer#: Louisiana

## 5-Year Relative Survival by Stage<sup>1,2</sup>, Black Males, 2007-2013

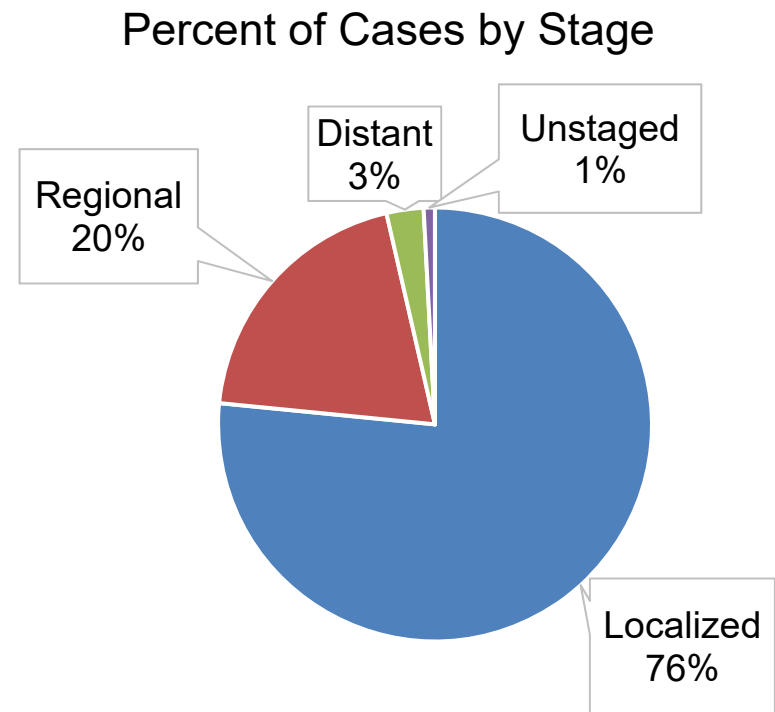
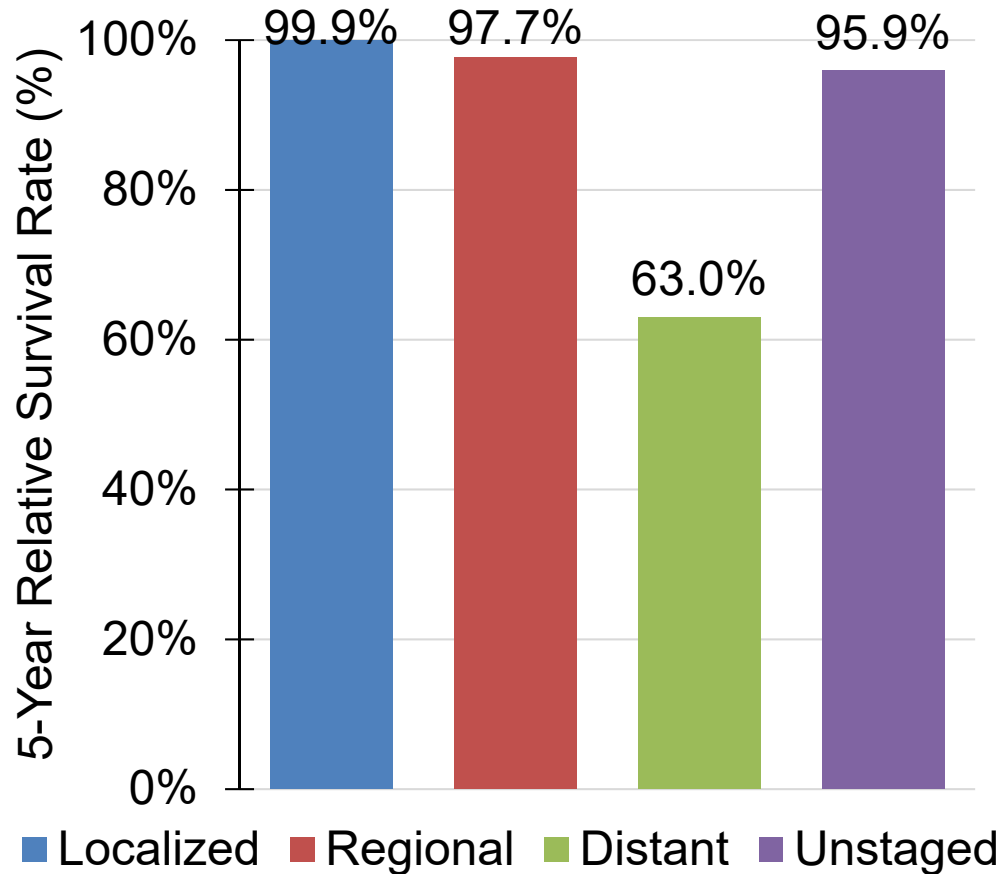


#Only invasive cases.

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

<sup>2</sup> The survival rates for unstaged cases could not be displayed due to small case counts.

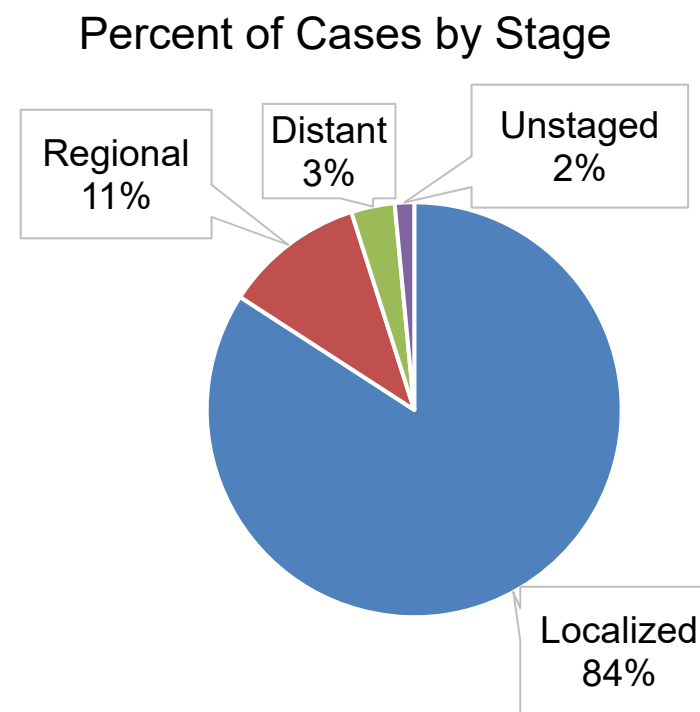
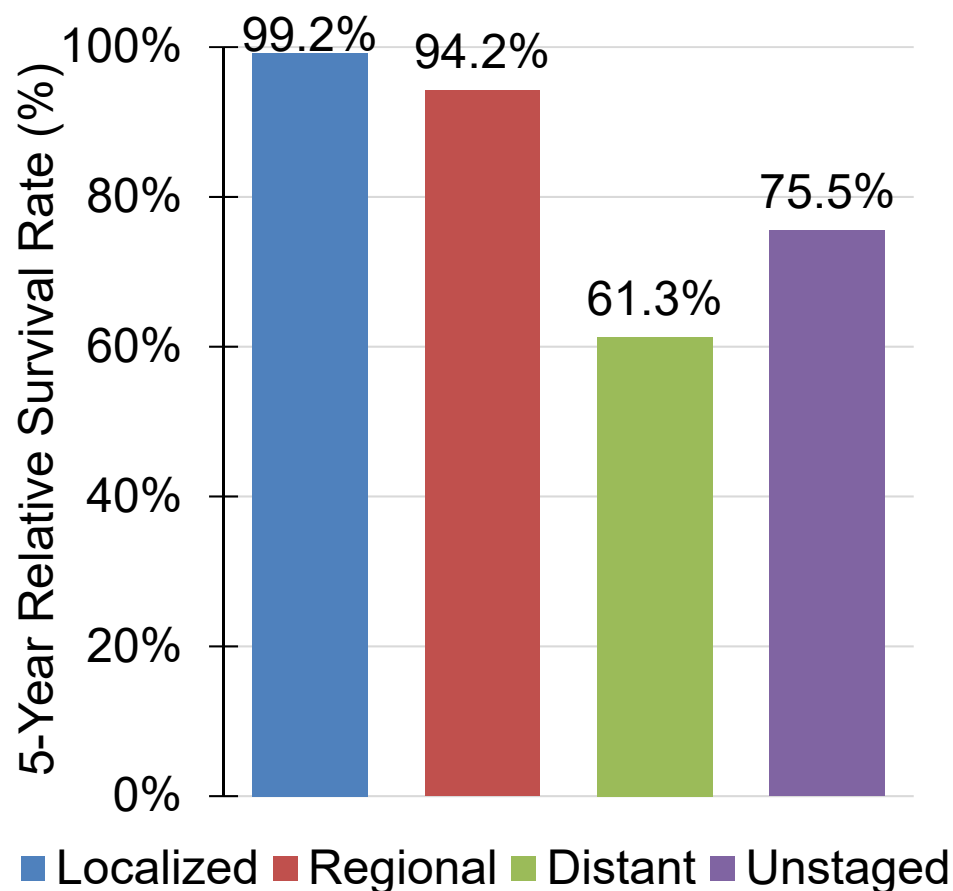
# Thyroid Cancer#: Louisiana 5-Year Relative Survival by Stage<sup>1</sup>, White Females, 2007-2013



#Only invasive cases.

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

# Thyroid 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)
- Louisiana Health Care Services Division

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