

# Louisiana Cancer Facts & Figures Pediatric/Young Adult Cancer Cases Diagnosed in 2017

Louisiana Tumor Registry

August 8, 2017

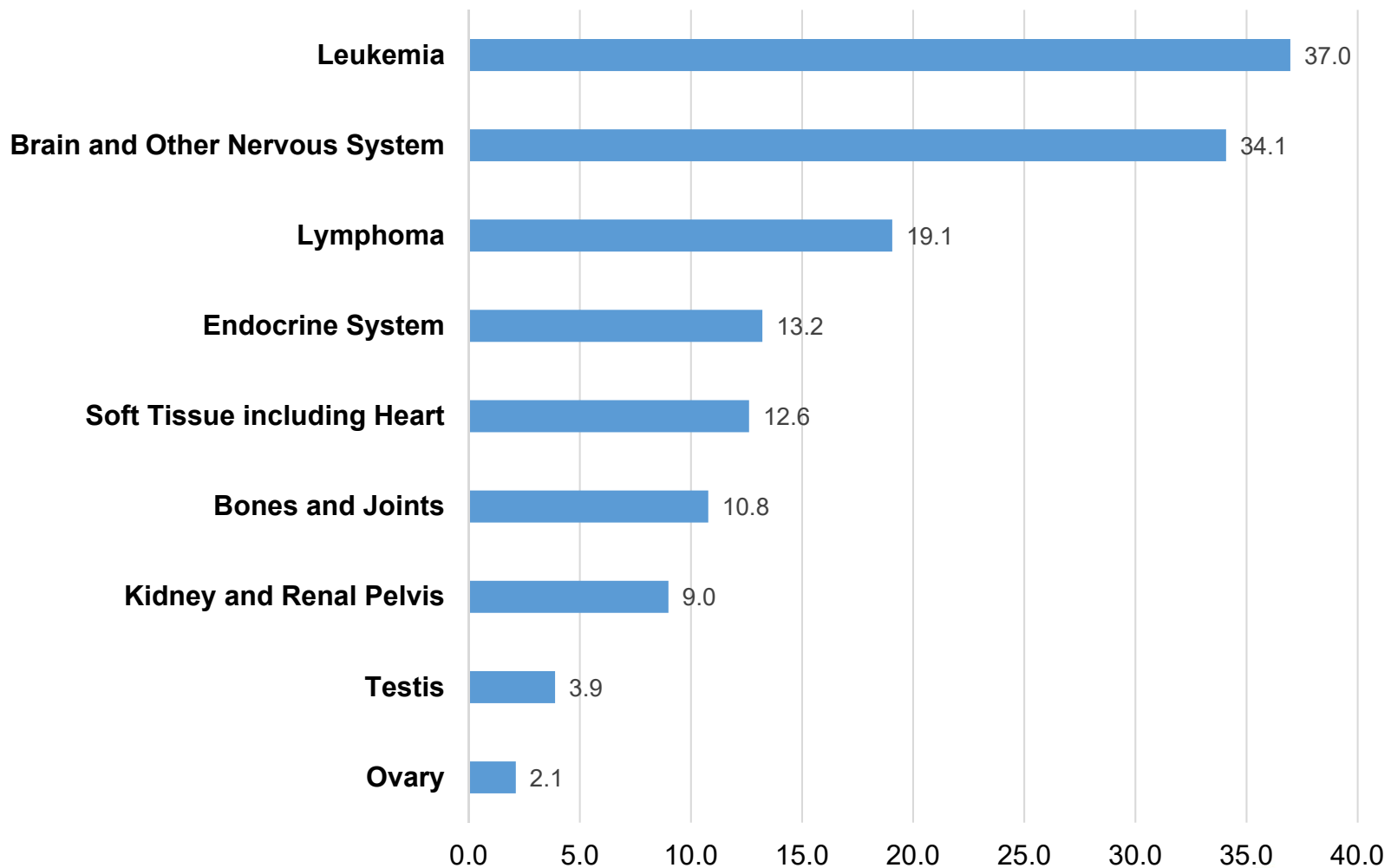


# **Pediatric/Young Adult Cancer Cases**

- Pediatric/young adult cancer cases refer to patients younger than 20 years old who were diagnosed with malignant cancers and solid benign and borderline tumors of the brain and central nervous system.
- Between 2010 and 2014, the average annual incidence rate of all cancer sites in Louisiana was the 35<sup>th</sup> highest and the mortality rate was the 8<sup>th</sup> highest in the U.S. <sup>1</sup>
- 204 New cancer cases were diagnosed and 31 deaths due to cancer among pediatric/young adult cancer cases in Louisiana each year during 2010-2014<sup>1</sup>.

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

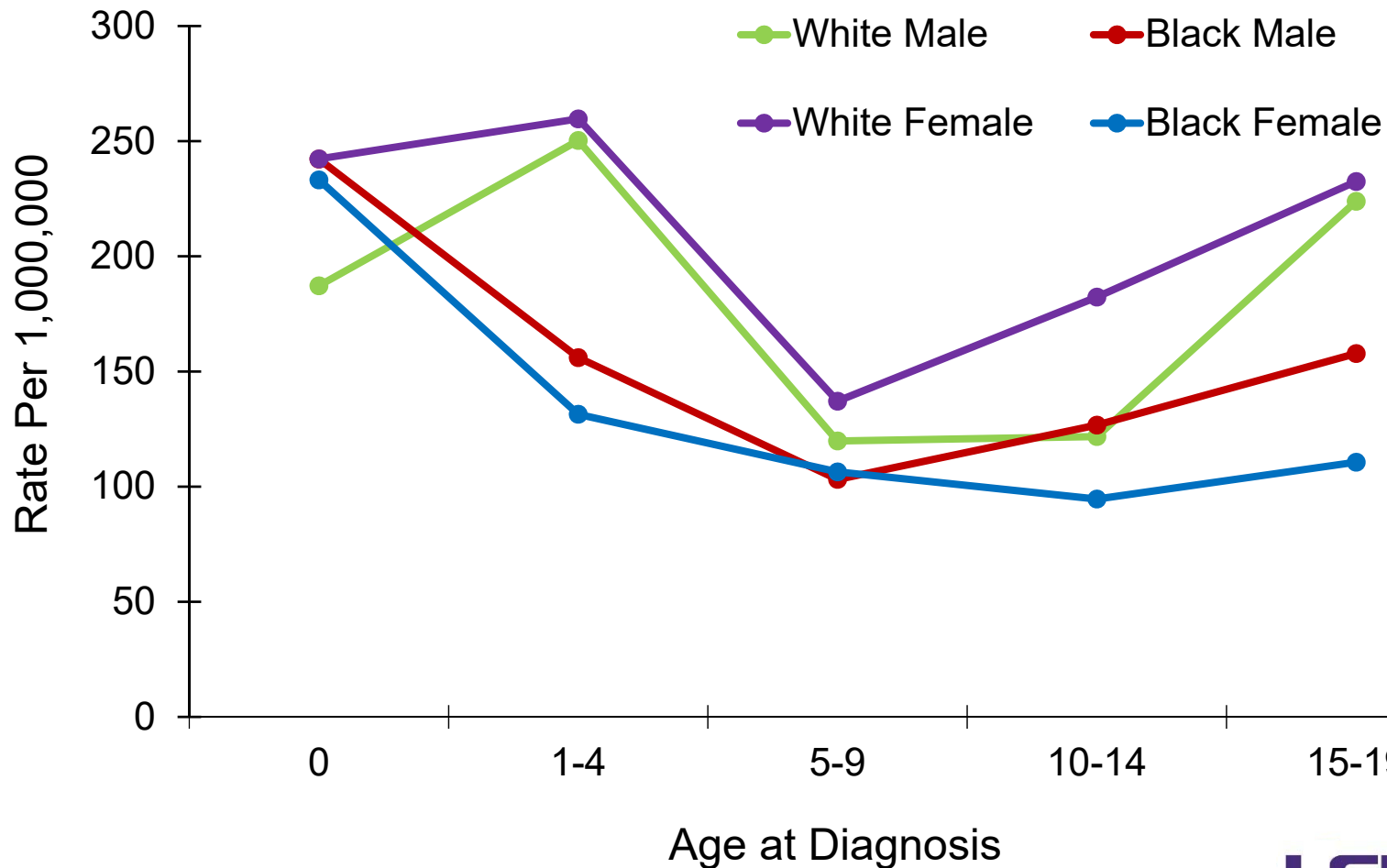
# Pediatric/Young Adult: Cancer Incidence Rates<sup>1,#</sup> by Cancer Site, Louisiana, 2010-2014



<sup>1</sup>Rates are per 1,000,000 and age-adjusted to the 2000 U.S. standard population.

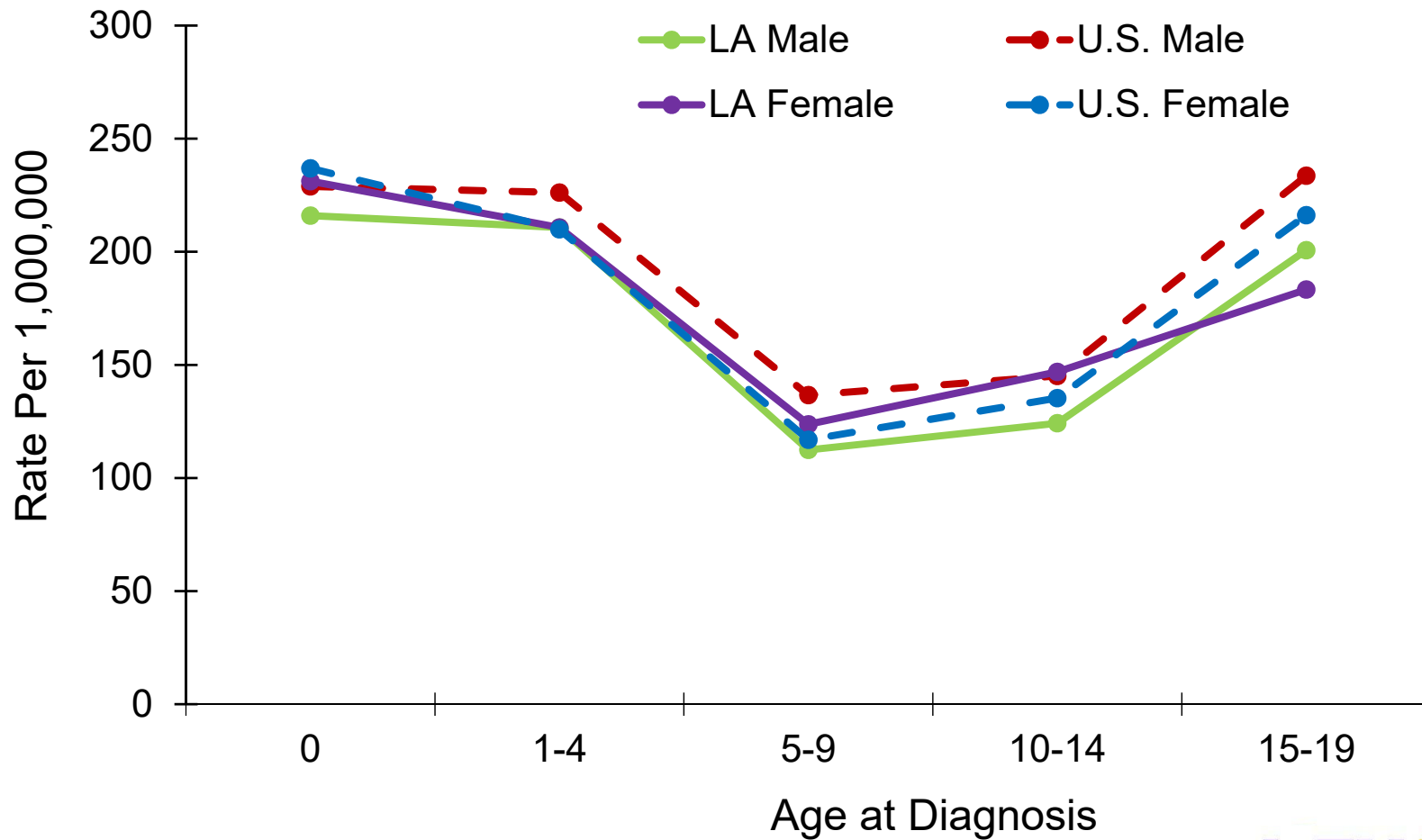
<sup>#</sup>Invasive cases only.

# Pediatric/Young Adult Cancer: Age-Specific Incidence Rates<sup>#</sup>, Louisiana, 2010-2014



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

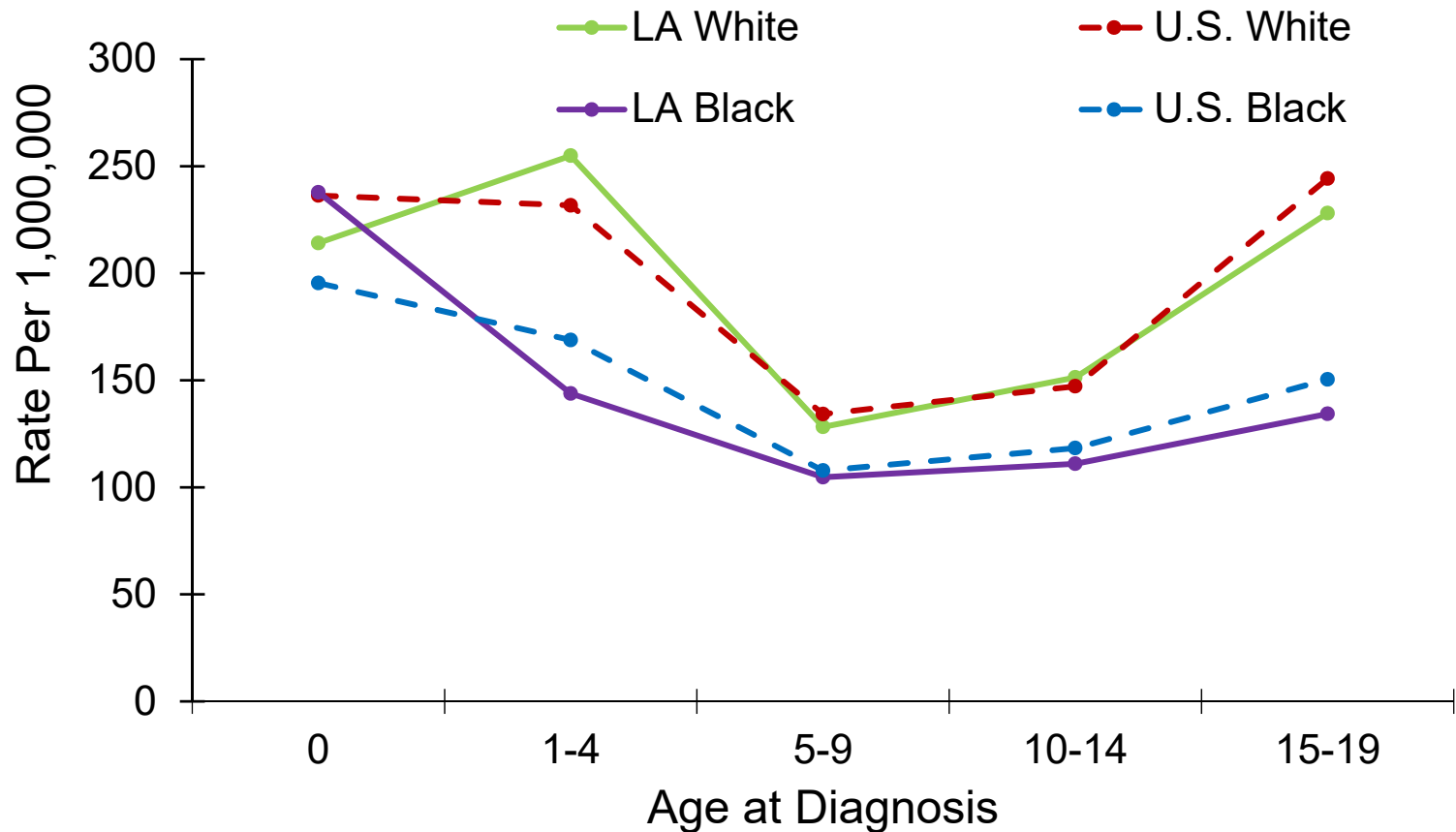
# Pediatric/Young Adult Cancer: Age-Specific Incidence Rates<sup>#</sup> by Gender, 2010-2014



U.S. data source: 18 SEER registries.

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

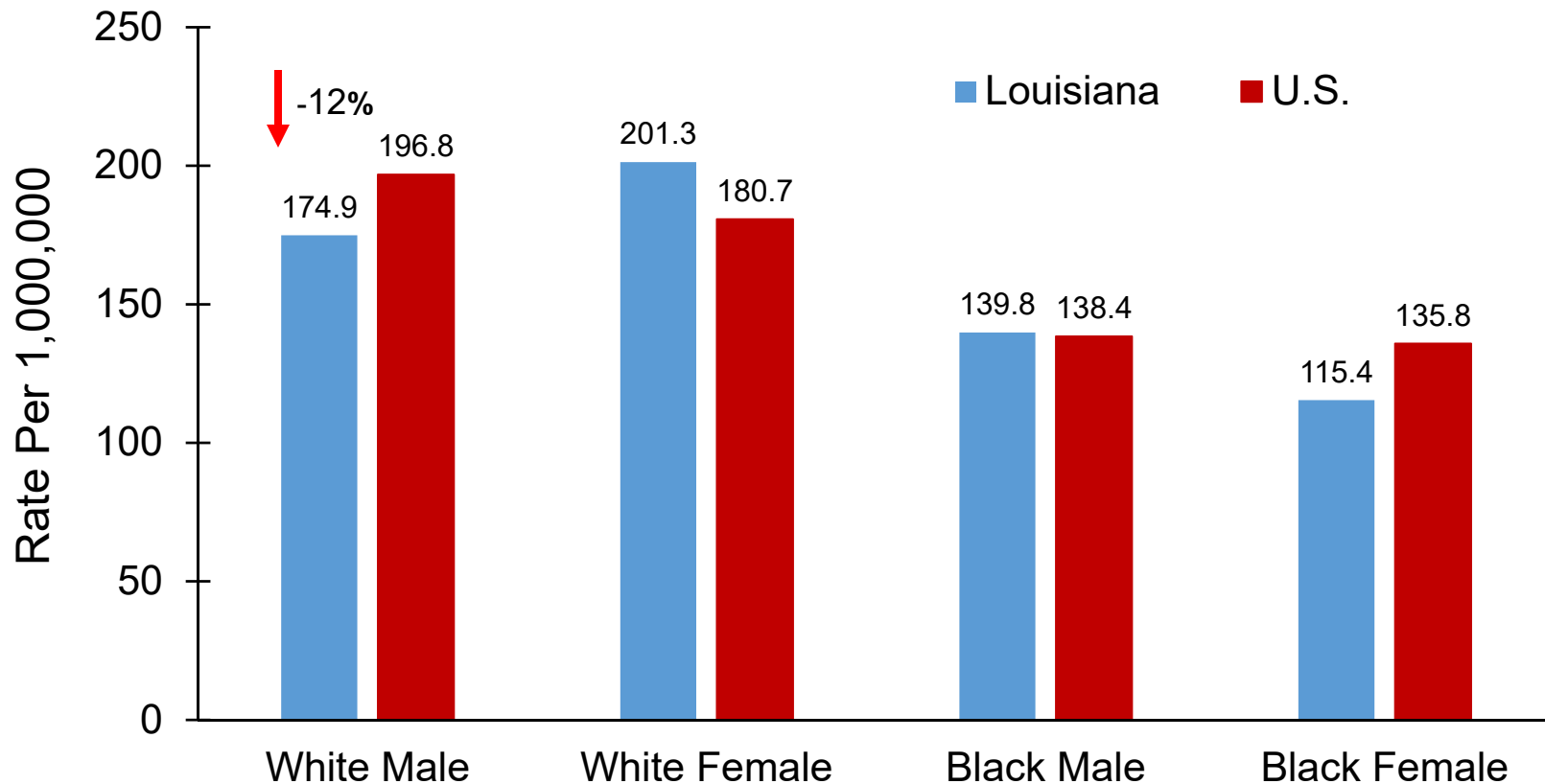
# Pediatric/Young Adult Cancer: Age-Specific Incidence Rates<sup>#</sup> by Race, 2010-2014



U.S. data source: 18 SEER registries.

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

# Pediatric/Young Adult Cancer: Incidence Rates<sup>1#</sup> Louisiana vs. the U.S.<sup>2</sup>, 2010-2014



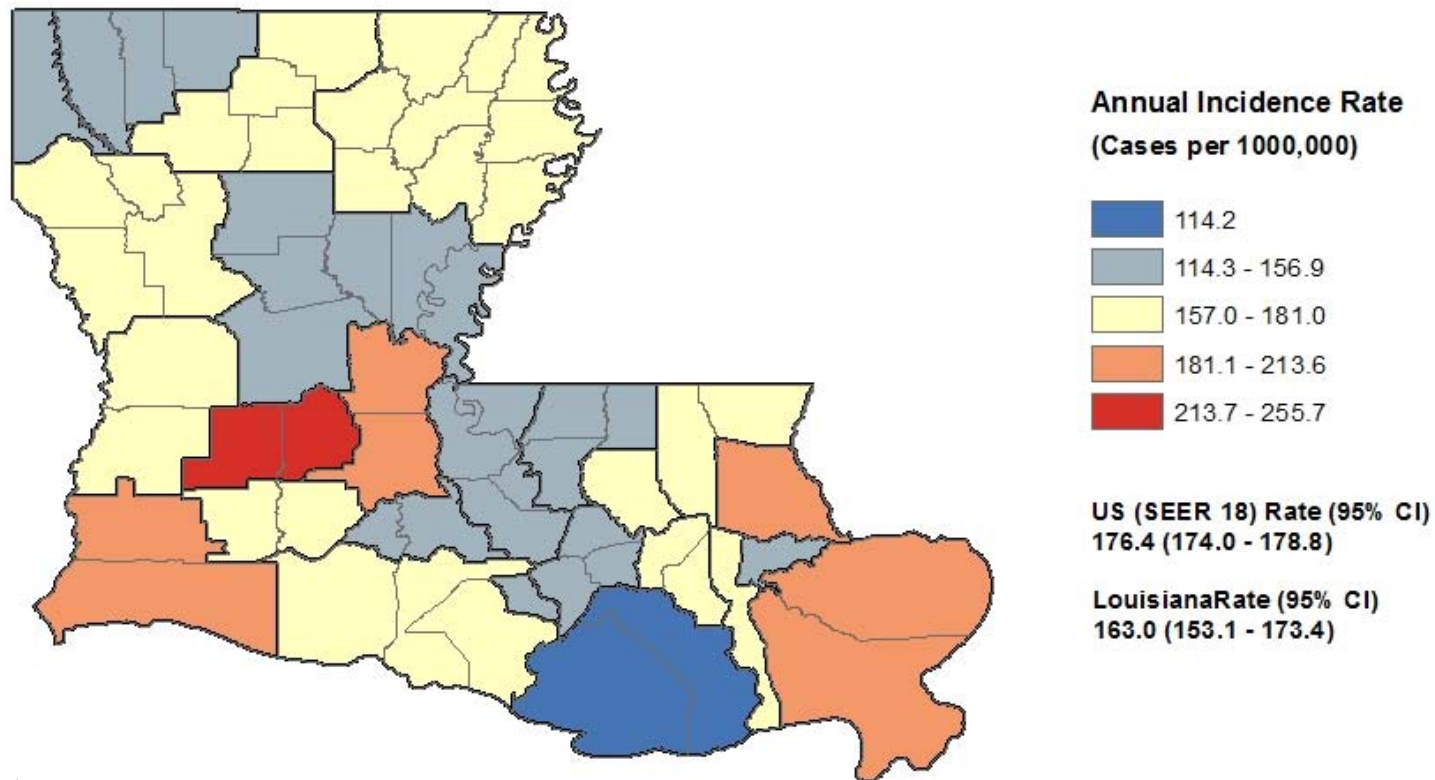
<sup>1</sup> Age-adjusted to the 2000 U.S. standard population.

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

# Invasive cases only.

↑↓ Incidence rate of Louisiana is significantly different from that of U.S.

# Pediatric/Young Adult Cancer Cases: Incidence Rate# Map for Louisiana, 2010-2014



**Notes:**

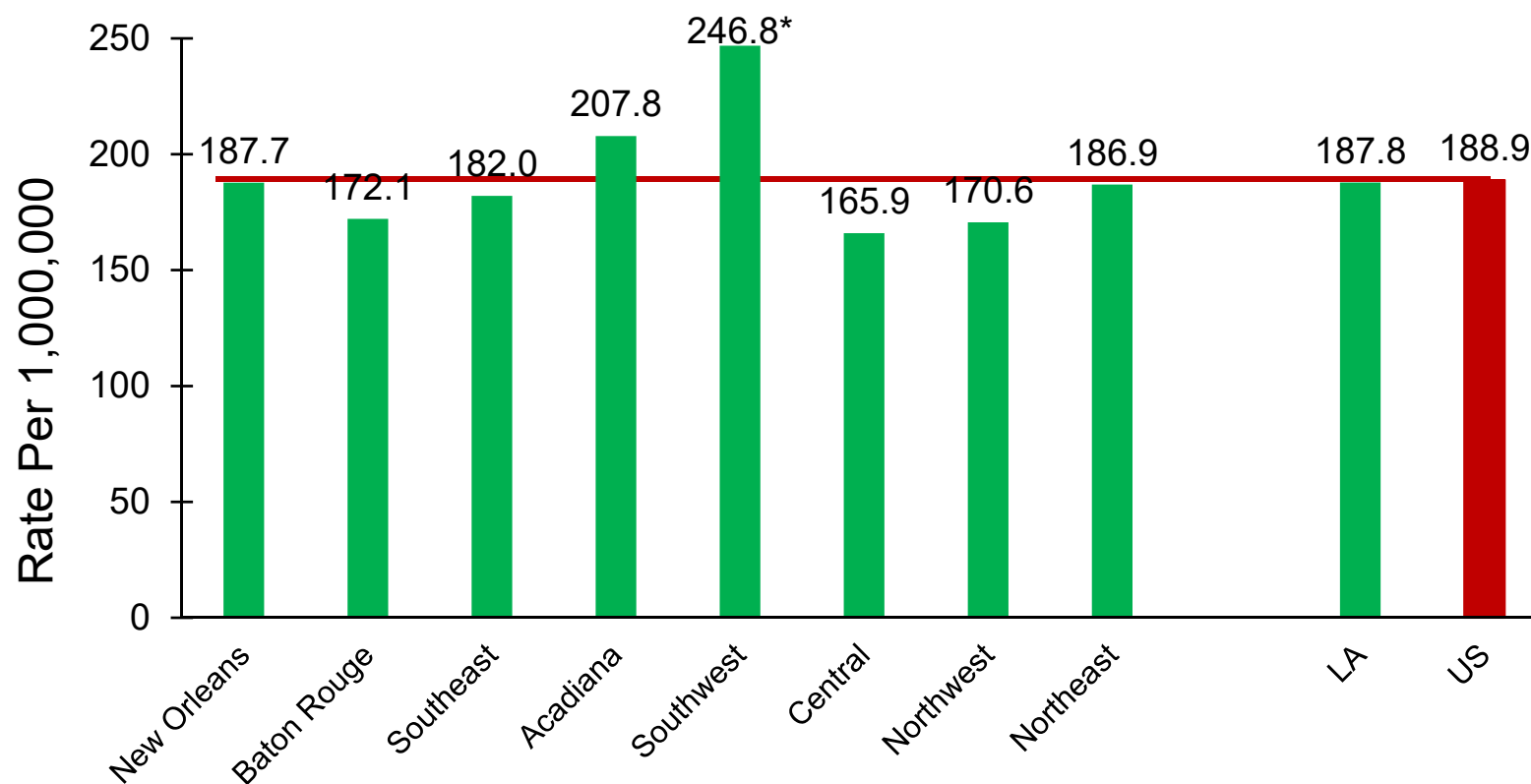
Created by Louisiana Tumor Registry on 09/07/2017.

Counties with less than 16 cases were aggregated with neighboring counties using NY state Geographic Aggregation Tool (GAT).

# Invasive cases only.



# Pediatric/Young Adult Cancer: Incidence Rates<sup>1,2,#</sup> by Region<sup>3</sup>: Louisiana, Whites, 2010-2014



# Invasive cases only.

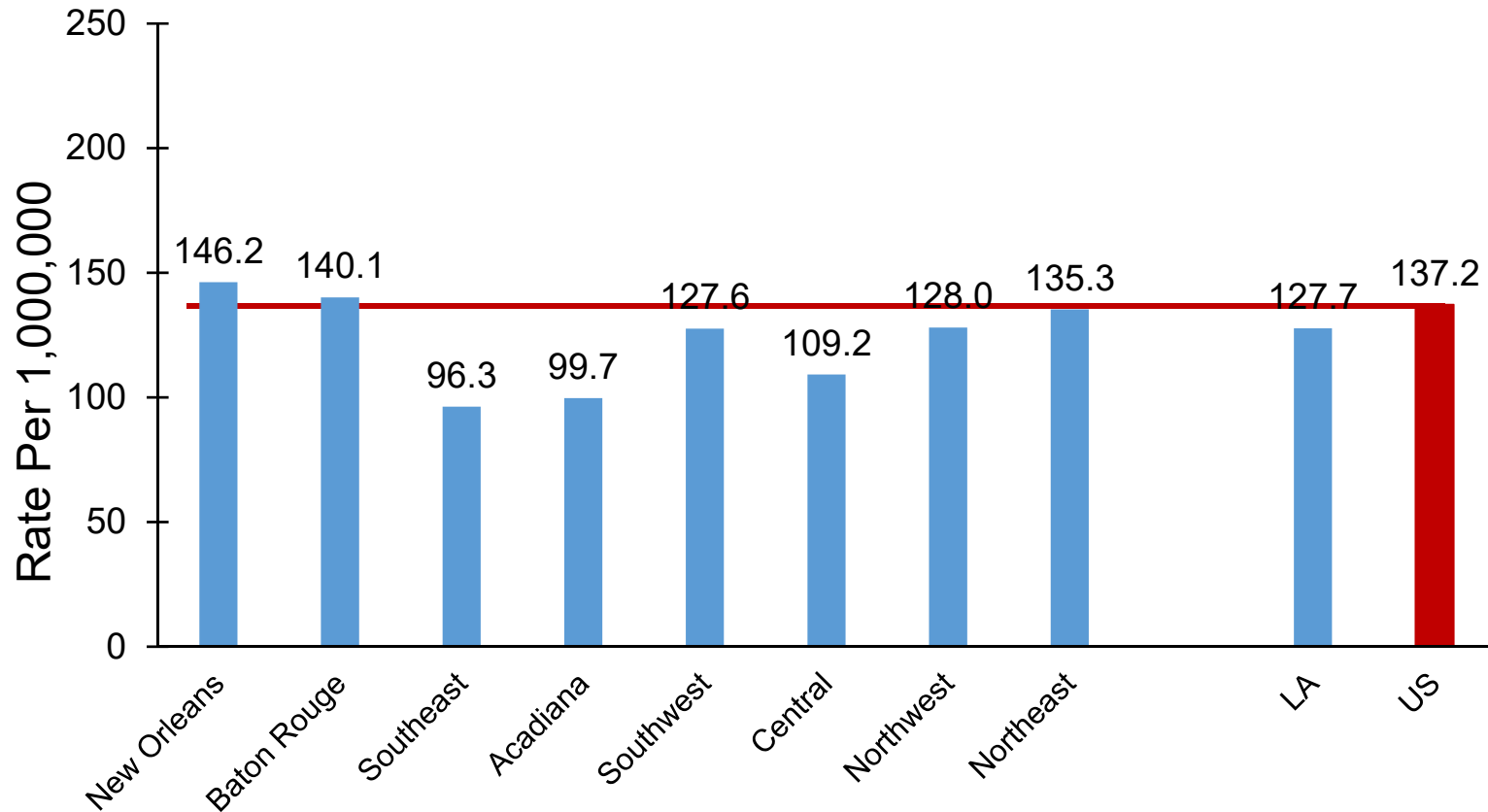
<sup>1</sup> Age-adjusted to the 2000 US standard population.

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

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

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

# Pediatric/Young Adult Cancer: Incidence Rates<sup>1,2,#</sup> by Region<sup>3</sup>: Louisiana, Blacks, 2010-2014



# Invasive cases only.

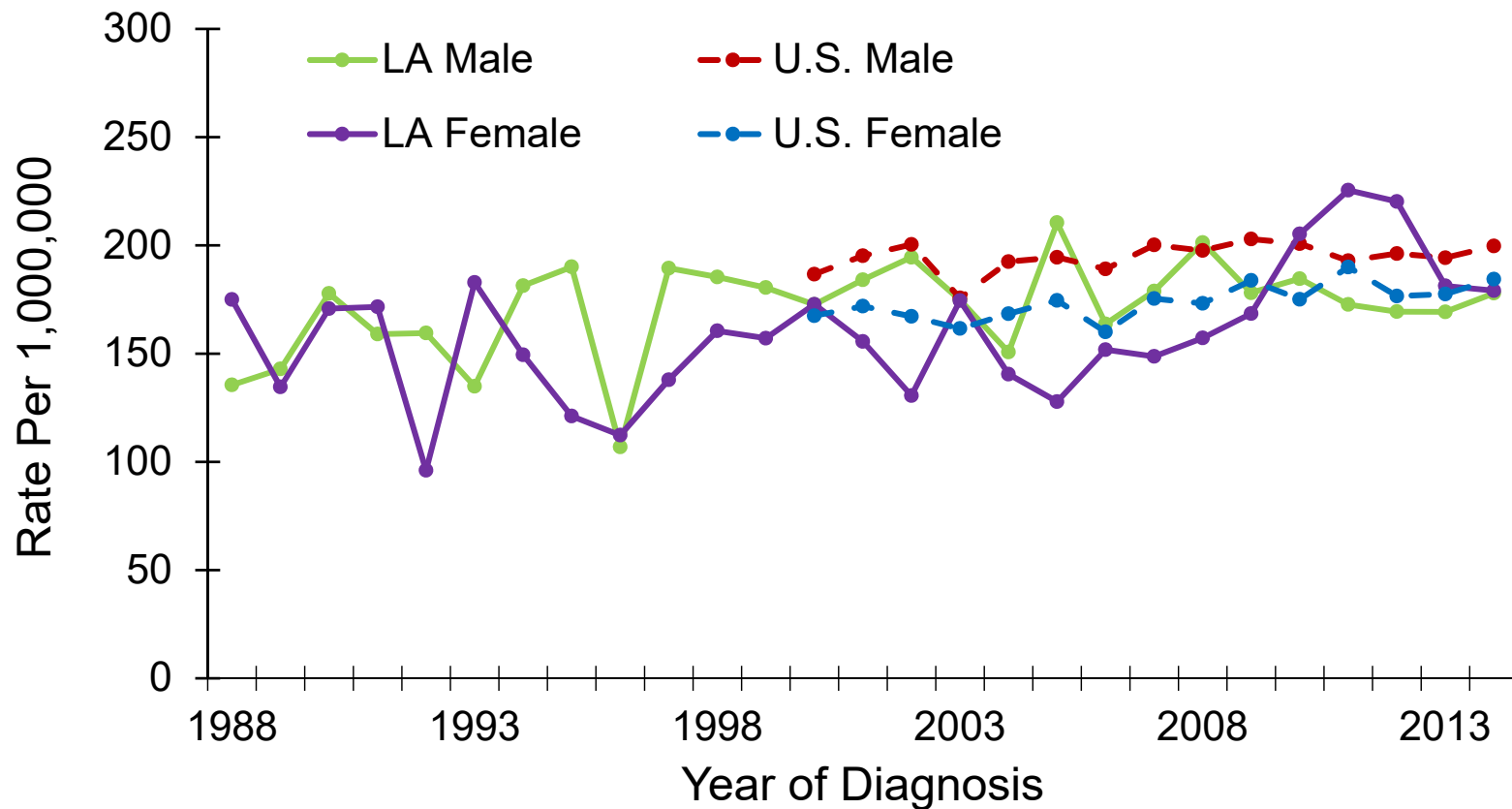
<sup>1</sup> Age-adjusted to the 2000 US standard population.

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

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

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

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

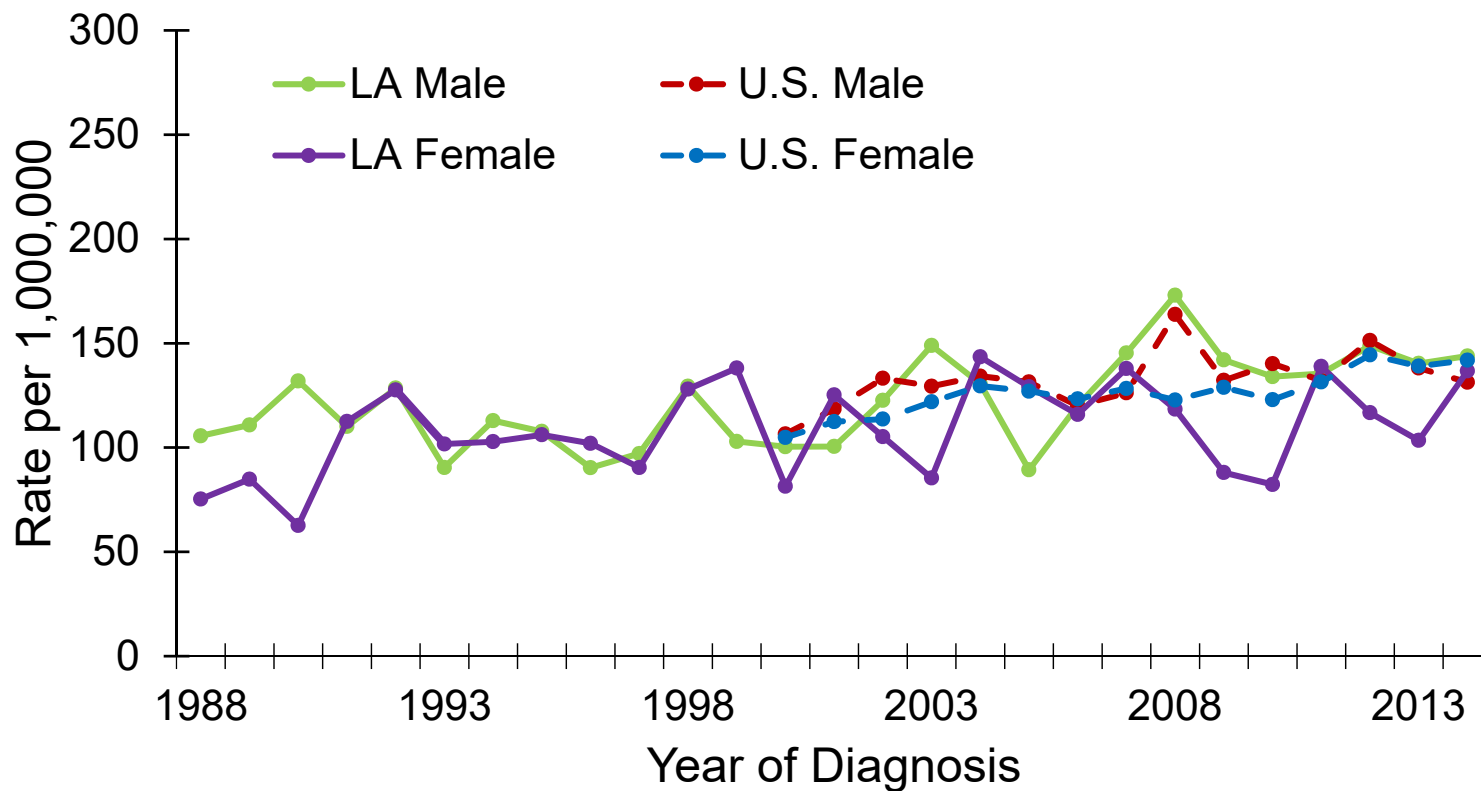


# Invasive cases only.

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

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

# Pediatric/Young Adult Cancer: Trends of Incidence Rates<sup>1,2,#</sup>, Blacks, 1988-2014

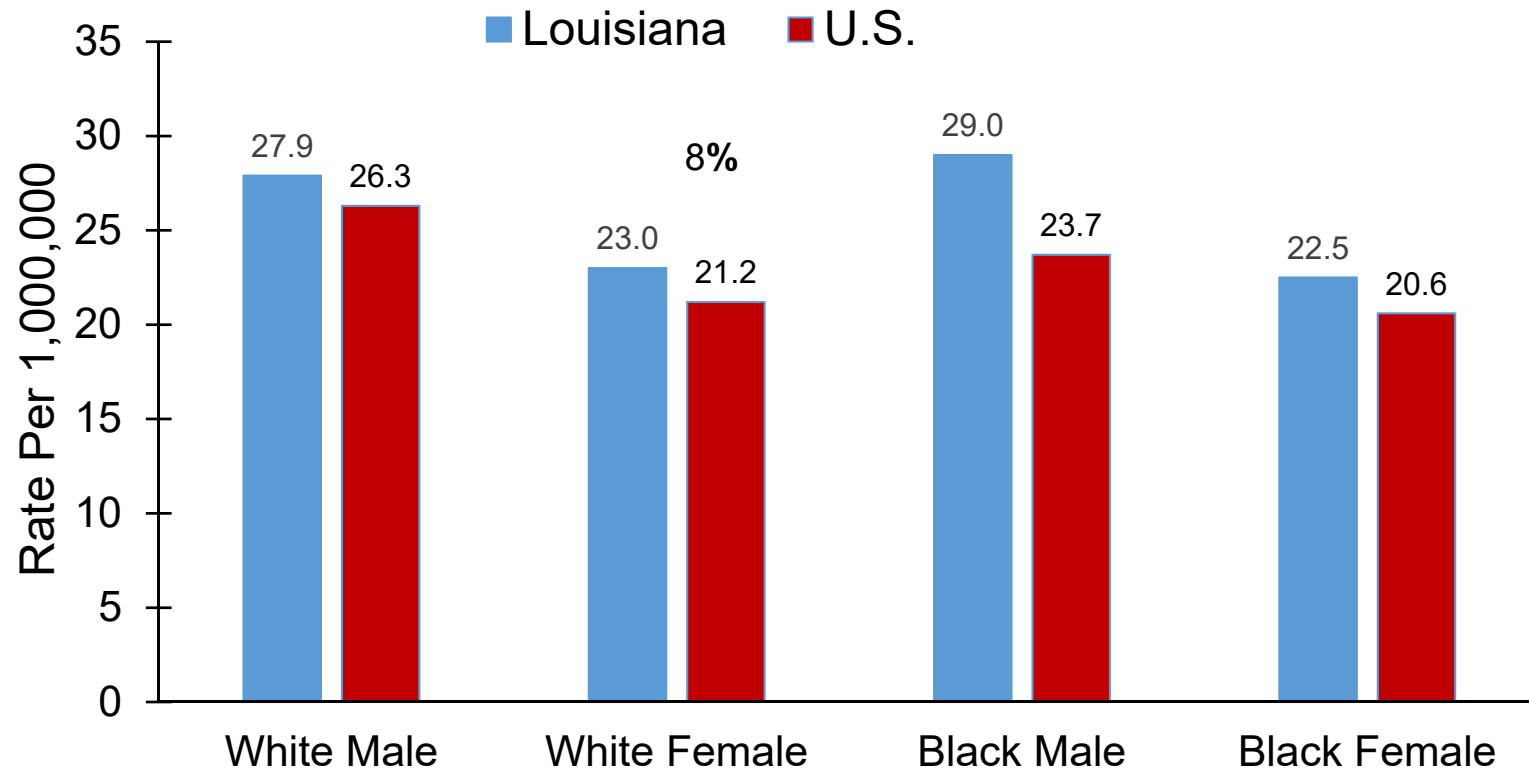


# Invasive cases only.

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

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

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

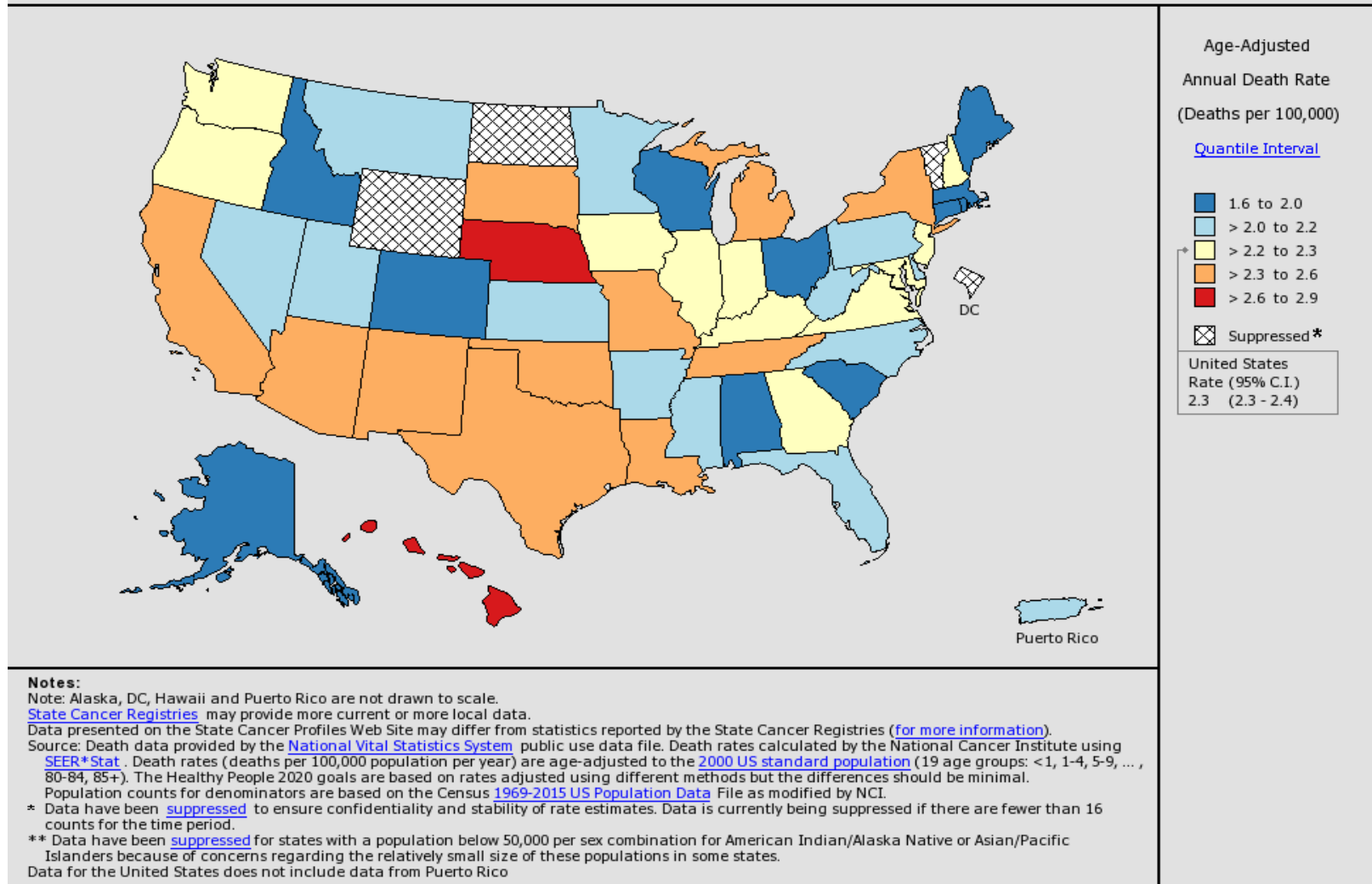


<sup>1</sup> Age-adjusted to the 2000 US standard population.

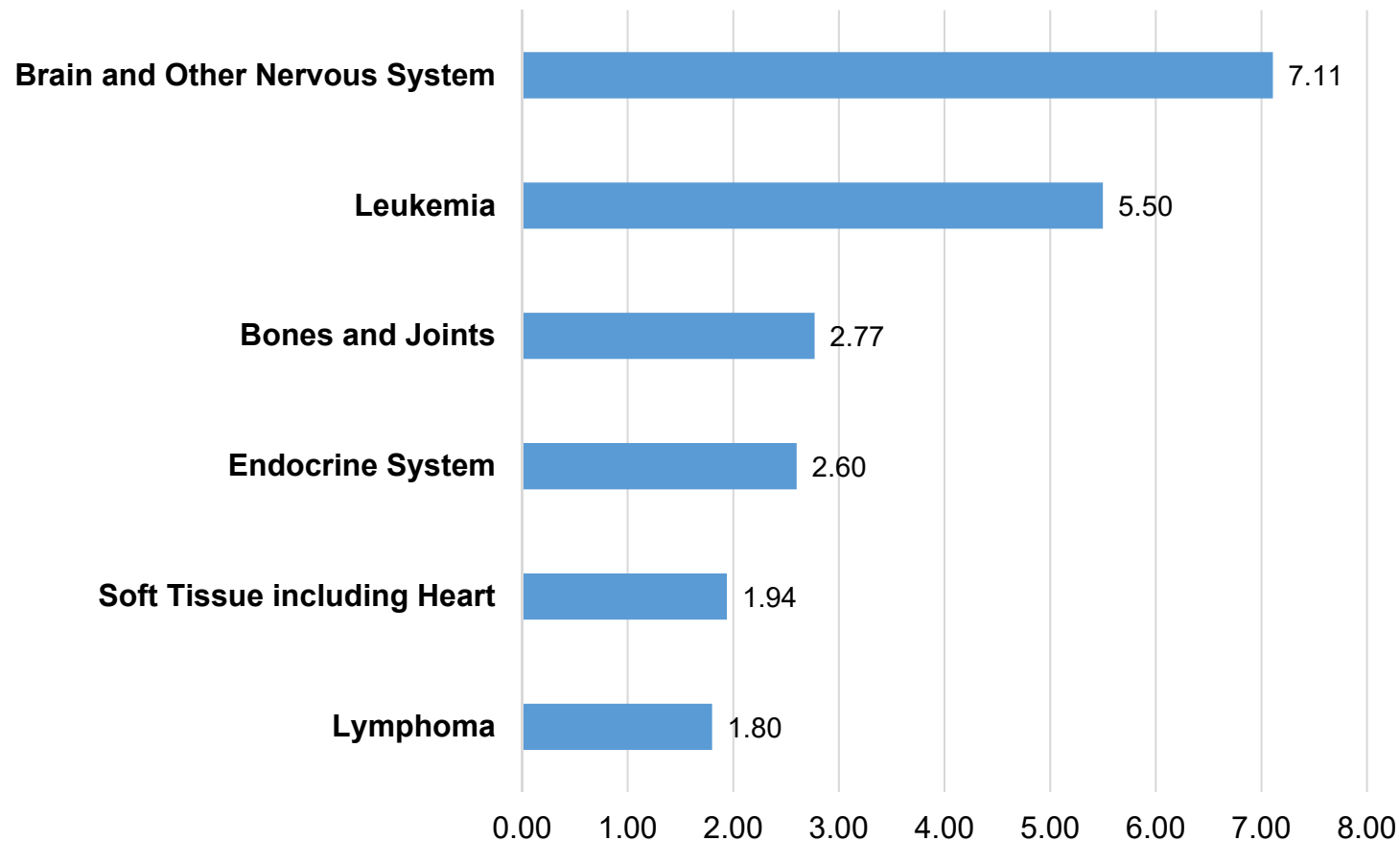
<sup>2</sup> Mortality data source: National Center of Health Statistics (NCHS).

No mortality rate of Louisiana is significantly different from that of US.

# Pediatric/Young Adult Cancer Cases: Mortality Rate Map for U.S., 2010-2014



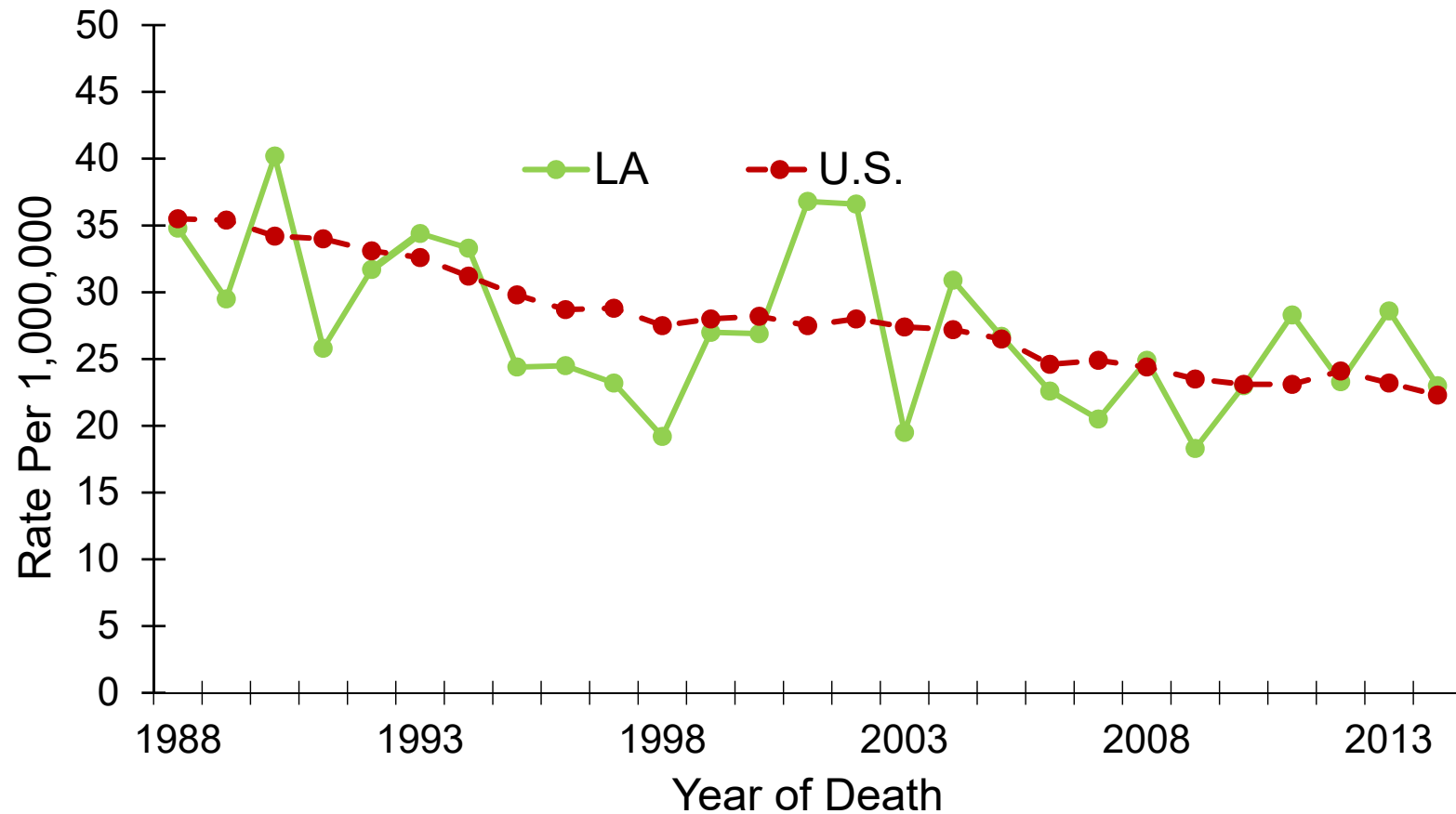
# Pediatric/Young Adult Cancer: Mortality Rates<sup>1,2</sup> by Cancer Site, Louisiana, 2010-2014



<sup>1</sup> Rates are per 1,000,000 and age-adjusted to the 2000 US standard population.

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

# Pediatric/Young Adult Cancer: Trends of Mortality Rates<sup>1,2</sup>, 1988-2014



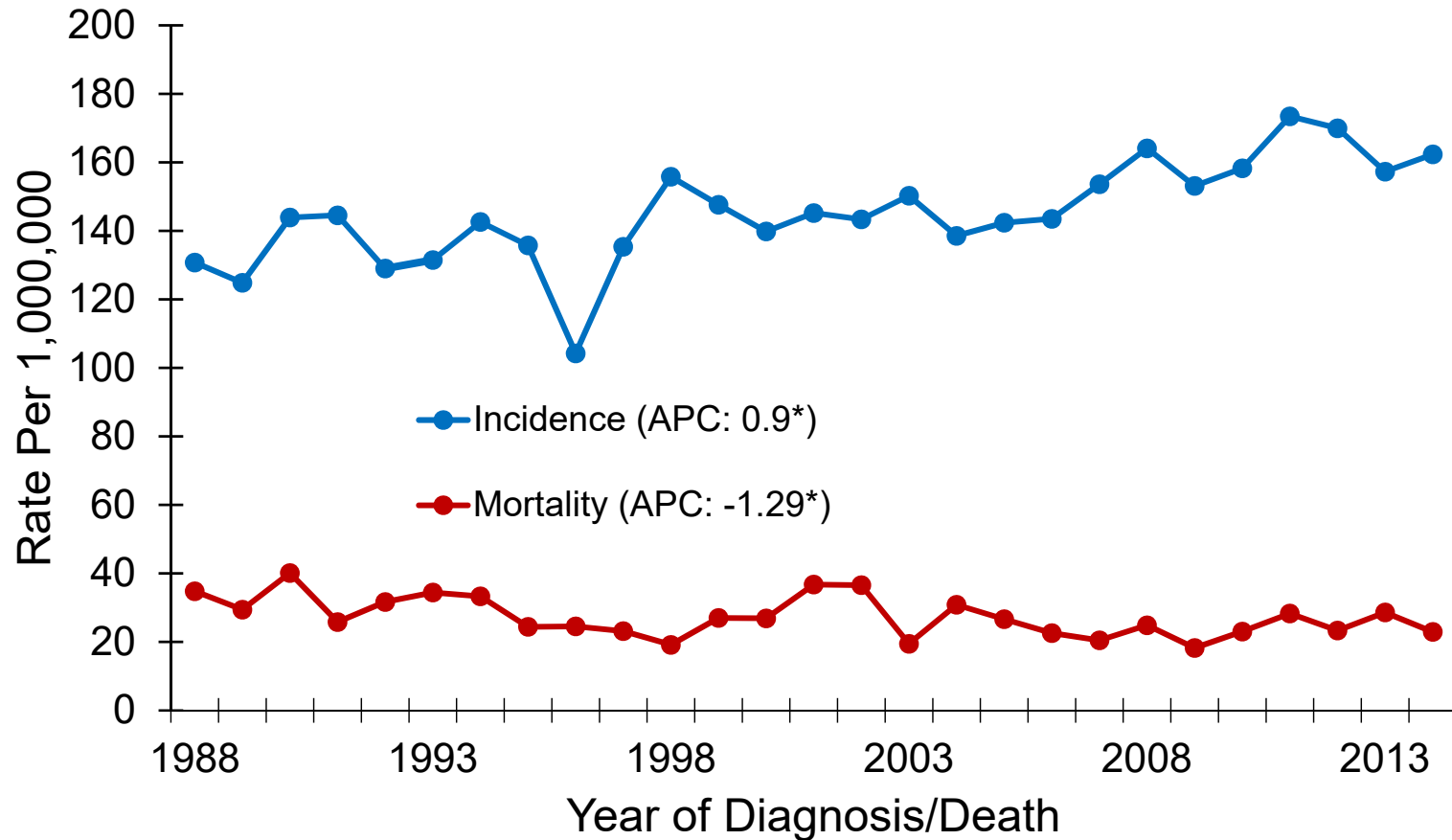
<sup>1</sup> Age-adjusted to the 2000 US standard population.

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



# Pediatric/Young Adult Cancer: Louisiana, 1988-2014

## Trends of Incidence<sup>#</sup> and Mortality Rates

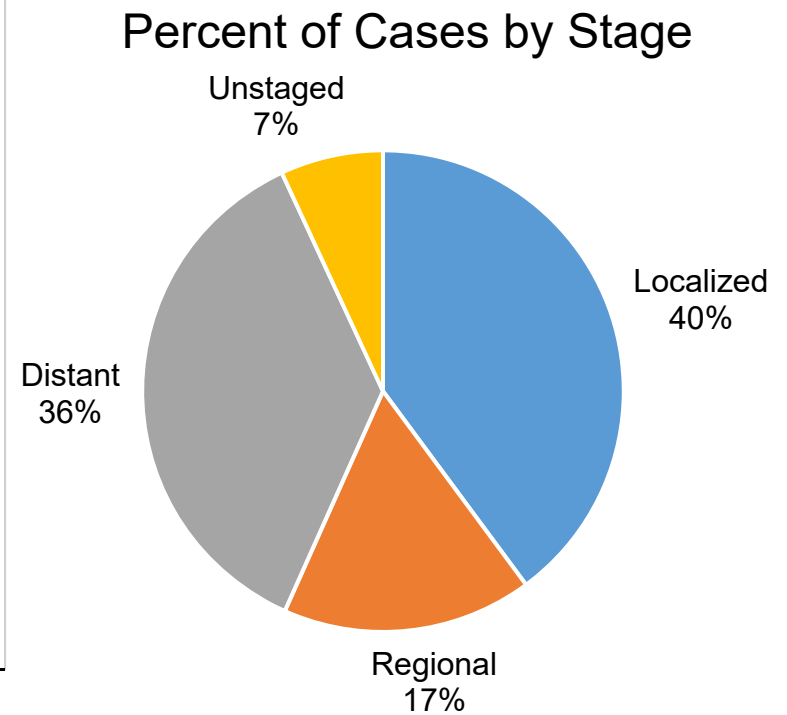
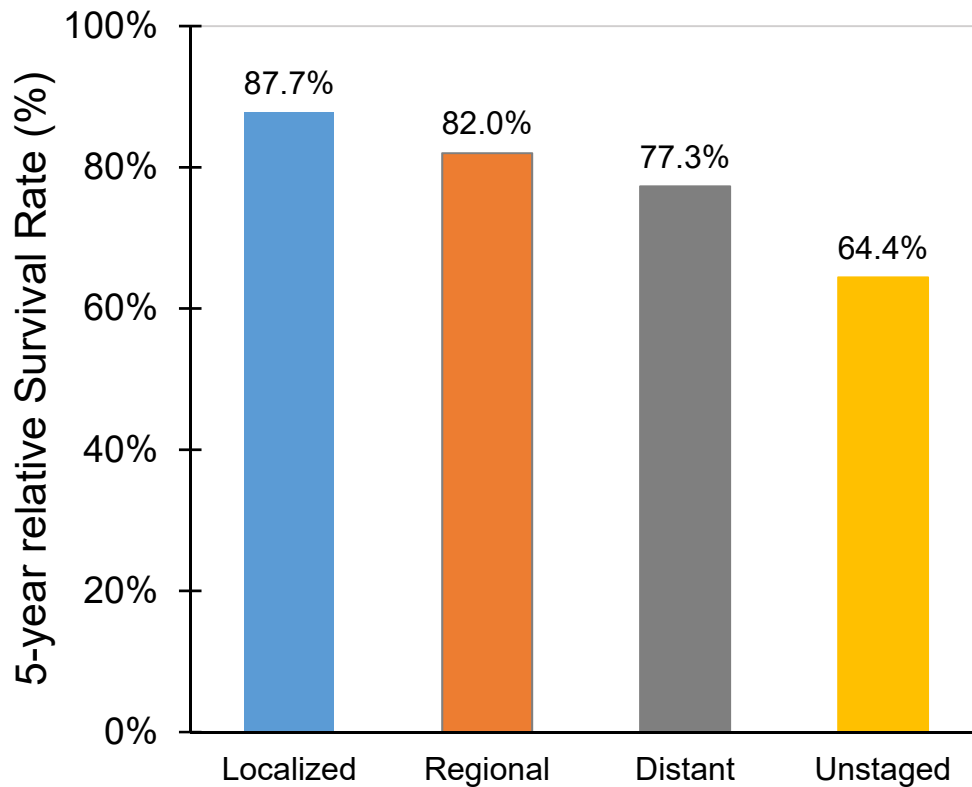


Annual average percent change (APC) were calculated using weighted least squares method.

\* APC significantly different from zero.

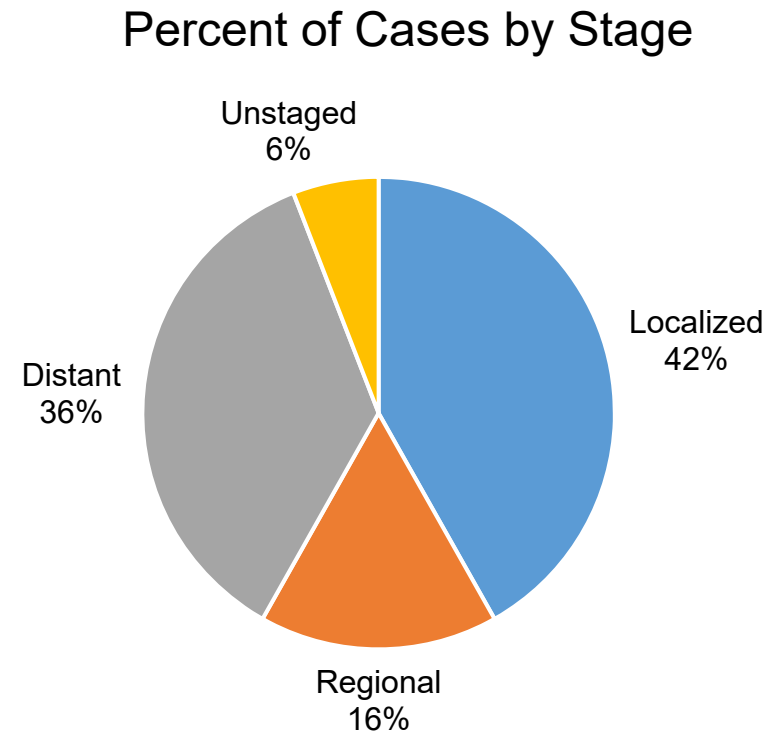
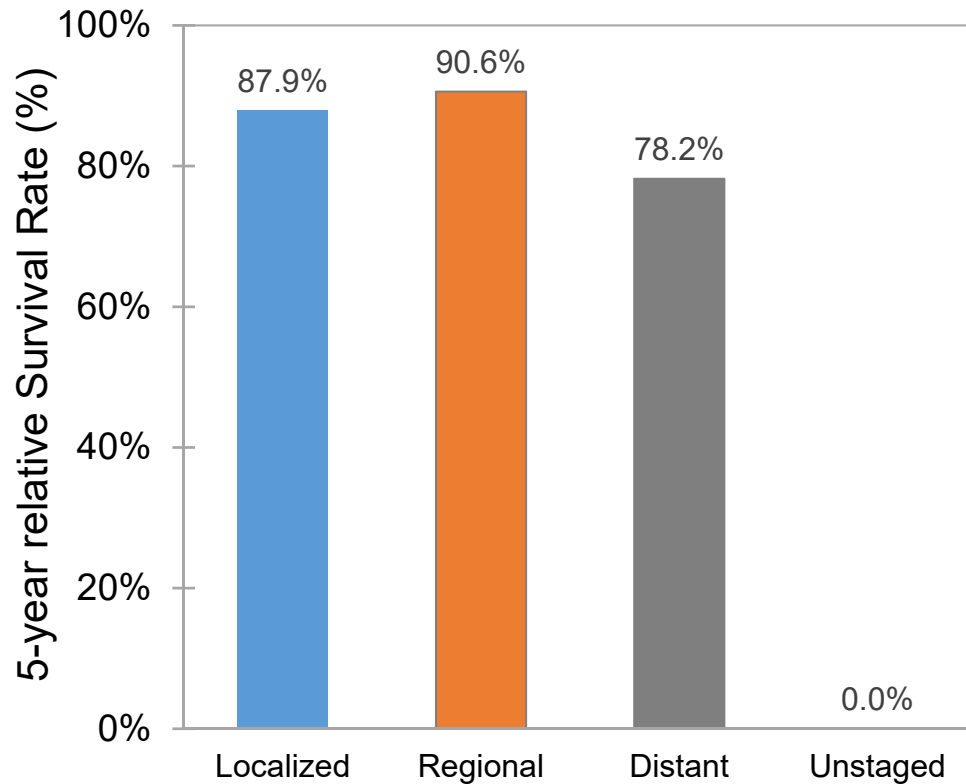
<sup>#</sup> Invasive cases only.

# Pediatric/Young Adult Cancer: Louisiana 5-Year Relative Survival by Stage<sup>1</sup>, White Males, 2007-2013



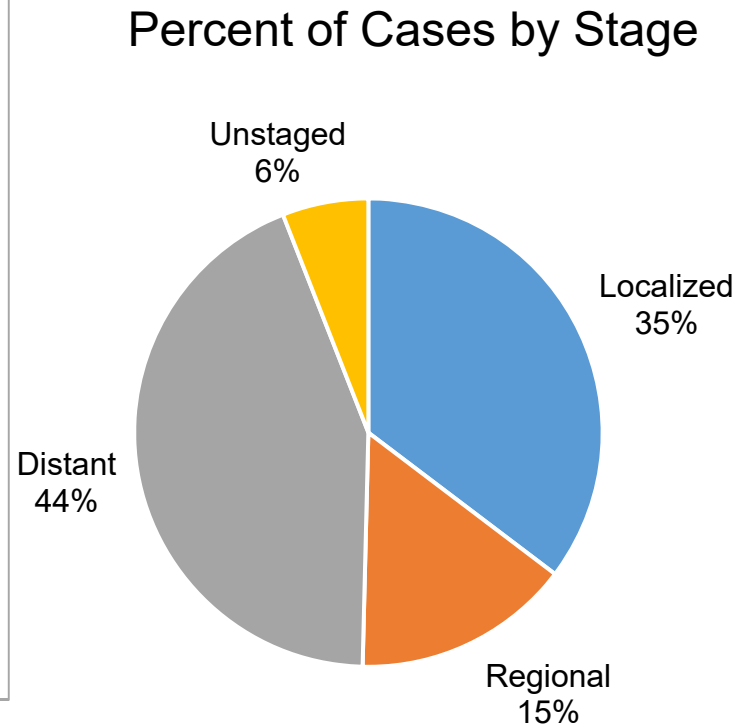
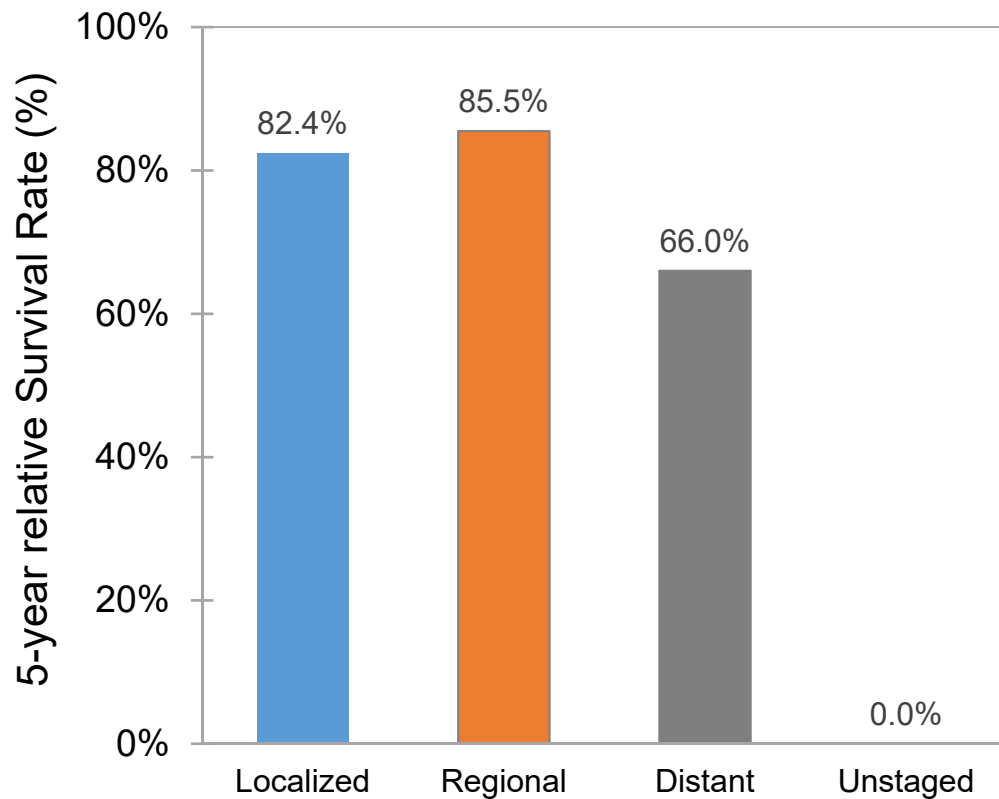
<sup>1</sup> The stage distribution is based on Derived Summary Stage 2000.

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



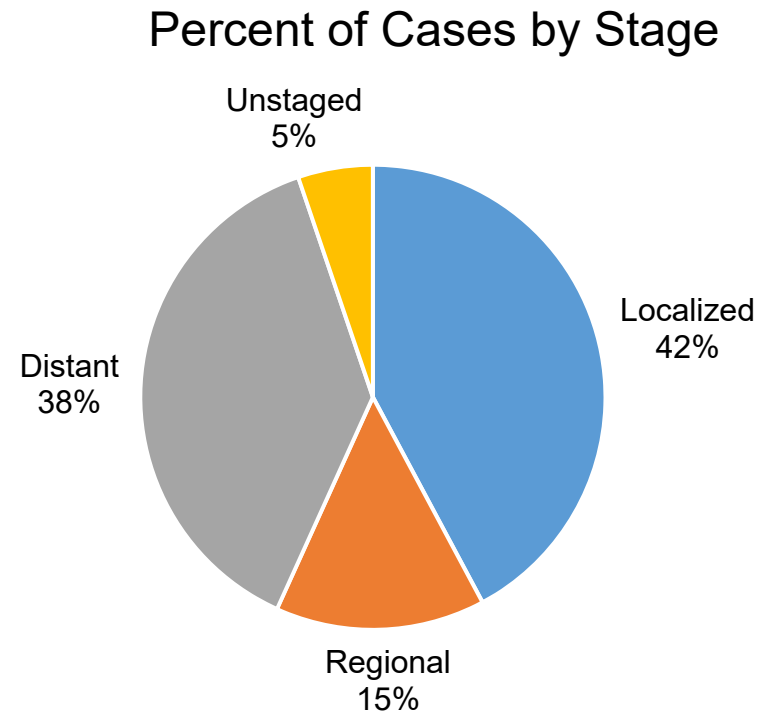
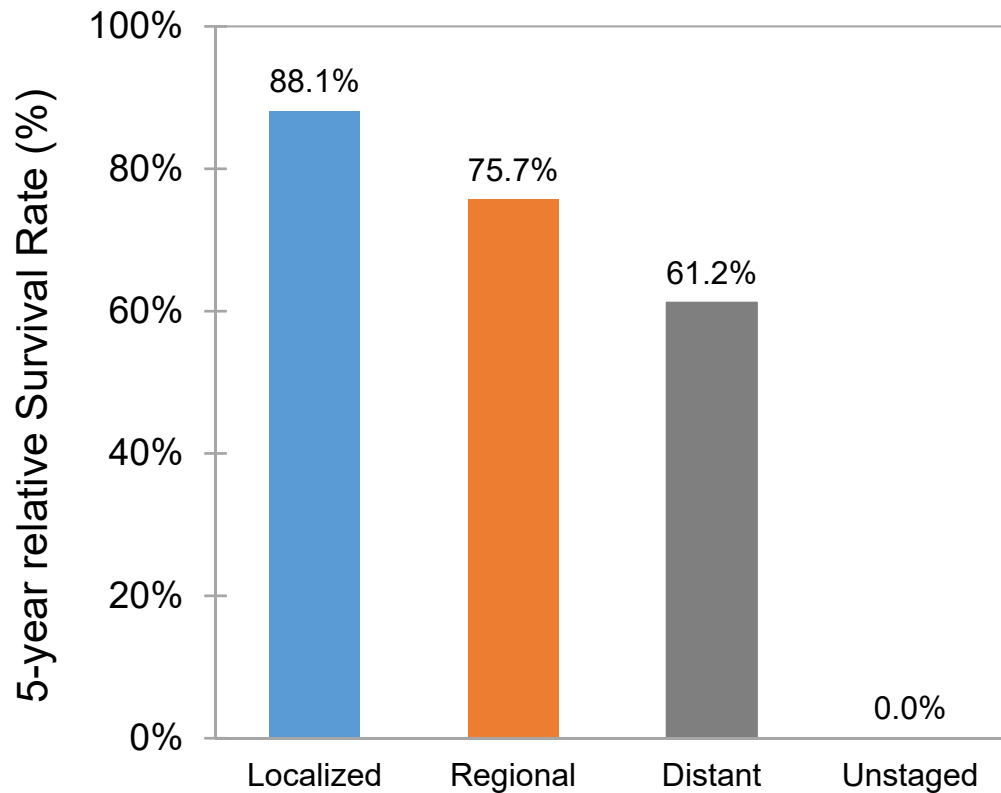
<sup>1</sup> The stage distribution is based on Derived Summary Stage 2000. Survival rate for Unstaged was suppressed (with less than 25 cases).

# Pediatric/Young Adult Cancer: Louisiana 5-Year Relative Survival by Stage<sup>1</sup>, Black Males, 2007-2013



<sup>1</sup> The stage distribution is based on Derived Summary Stage 2000. Survival rate for Unstaged was suppressed (with less than 25 cases).

# Pediatric/Young Adult Cancer: Louisiana 5-Year Relative Survival by Stage<sup>1</sup>, Black Females, 2007-2013



<sup>1</sup> The stage distribution is based on Derived Summary Stage 2000. Survival rate for Unstaged was suppressed (with less than 25 cases).

# 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.



# 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.

# 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
- National Program of Cancer Registries, CDC
- Louisiana Health Care Services Division

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