# Louisiana Cancer Facts & Figures, Myeloma

Louisiana Tumor Registry

September, 2017



### Myeloma\*

- From 2010 to 2014, Louisiana had the 7<sup>th</sup> highest incidence rate and the 5<sup>th</sup> highest death rate of myeloma of any state in the nation (all races and sexes combined).<sup>1</sup>
- About 470 new myeloma cases are expected to be diagnosed and about 190 persons are expected to die of this cancer in Louisiana in 2017.<sup>2</sup>

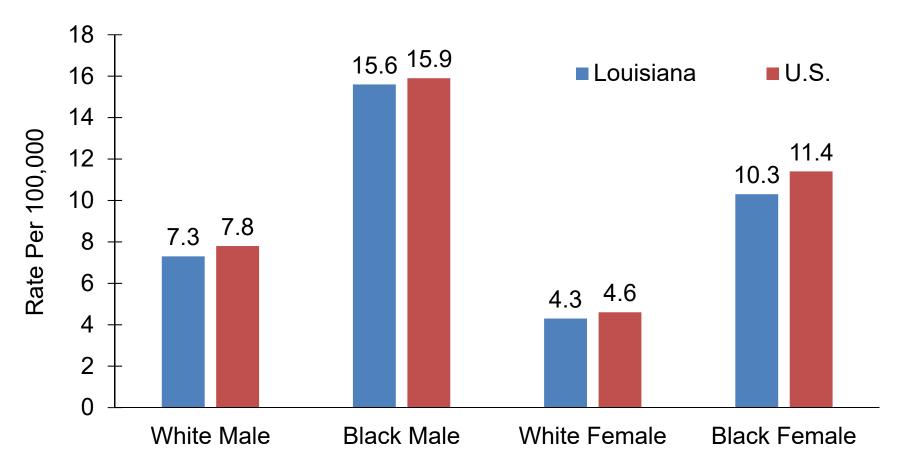
\*ICD O 3/WHO 2008: 9731-9732, 9734.

<sup>1</sup> Data source: <u>USCS</u>.



<sup>&</sup>lt;sup>2</sup> Data source: American Cancer Society, Cancer Facts & Figures 2017.

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



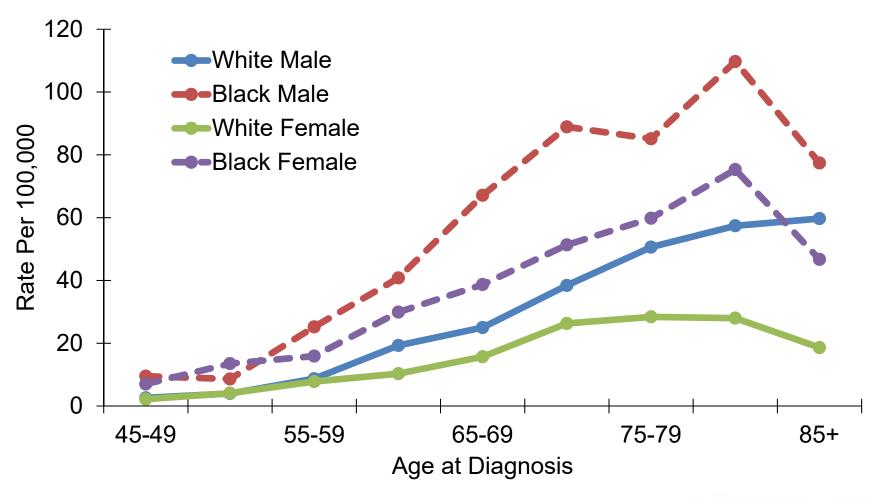
<sup>#</sup>Only invasive cases.



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

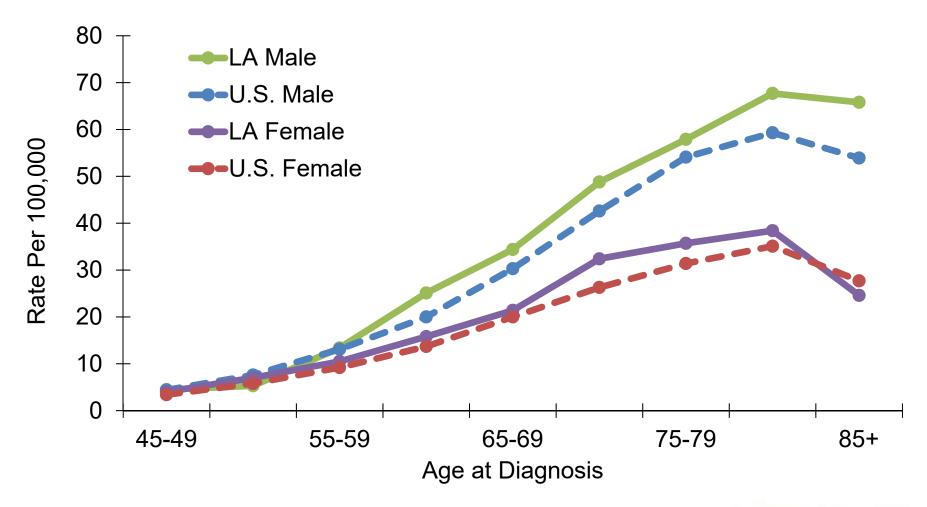
<sup>&</sup>lt;sup>2</sup> Incidence data source: 18 SEER registries.

# Myeloma: Age-Specific Incidence Rates# by Race and Sex, Louisiana, 2010-2014





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

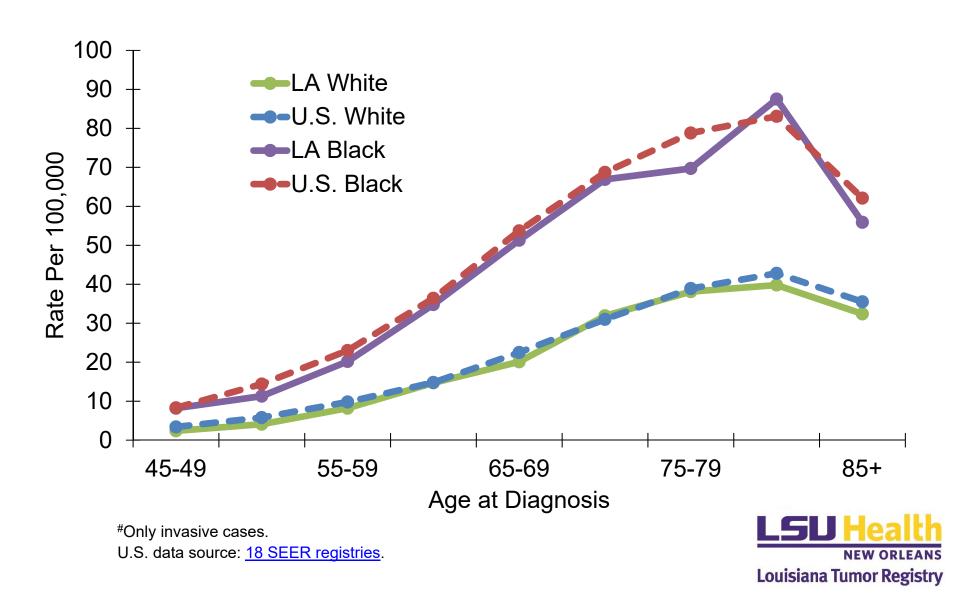


#Only invasive cases.

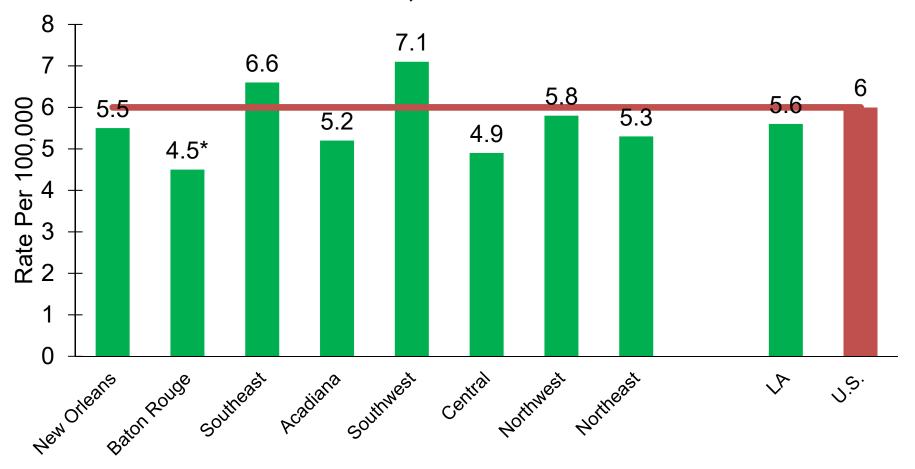
U.S. data source: 18 SEER registries.



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



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





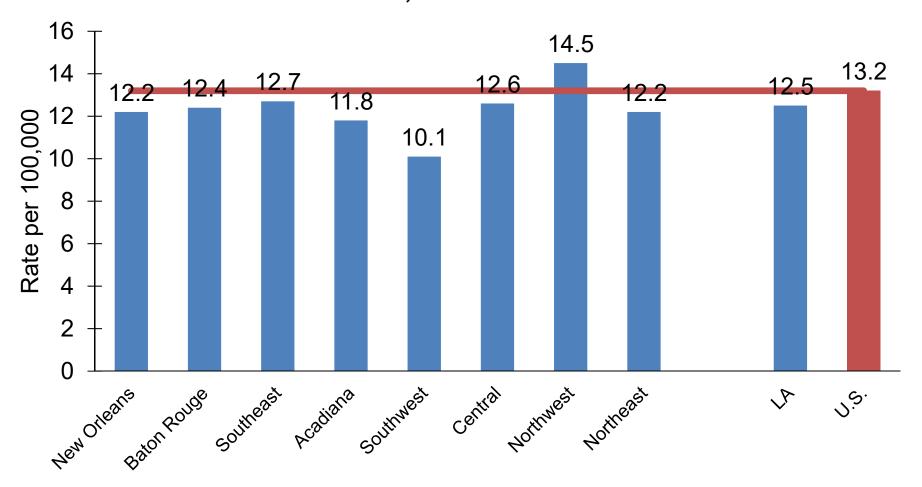
<sup>&</sup>lt;sup>1</sup> Age-adjusted to the 2000 U.S. standard population.

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

<sup>&</sup>lt;sup>3</sup> See Appendix A for Regions in the Louisiana Tumor Registry.

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

# Myeloma Incidence<sup>#,1,2</sup> by Region<sup>3</sup>: Louisiana, Black, 2010-2014





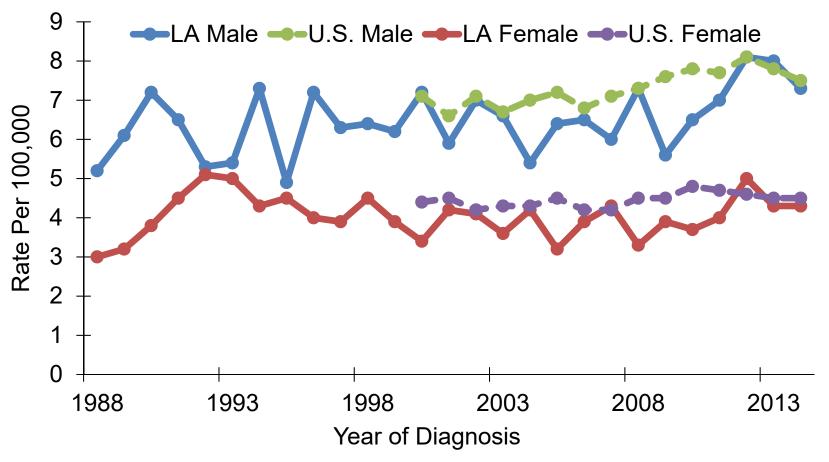
<sup>&</sup>lt;sup>1</sup> Age-adjusted to the 2000 U.S. standard population.

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

<sup>&</sup>lt;sup>3</sup> See Appendix A for Regions in the Louisiana Tumor Registry.

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

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

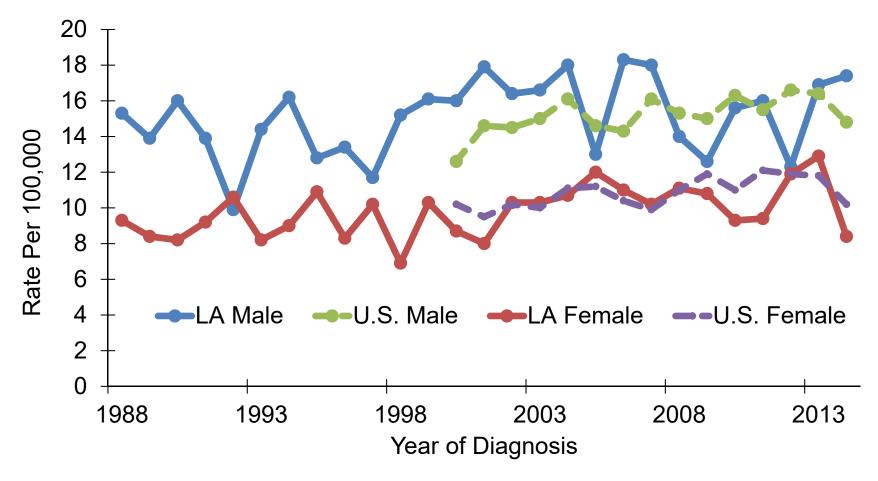




<sup>&</sup>lt;sup>1</sup> Age-adjusted to the 2000 U.S. standard population.

<sup>&</sup>lt;sup>2</sup> U.S. data source: <u>18 SEER registries</u>.

Myeloma: Trends of Incidence Rates<sup>#,1,2</sup>, Blacks, 2000-2014

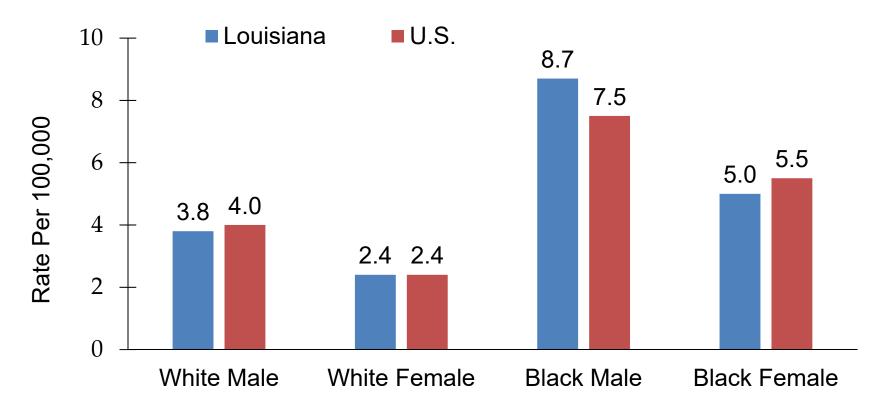




<sup>&</sup>lt;sup>1</sup> Age-adjusted to the 2000 U.S. standard population.

<sup>&</sup>lt;sup>2</sup> U.S. data source: <u>18 SEER registries</u>.

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

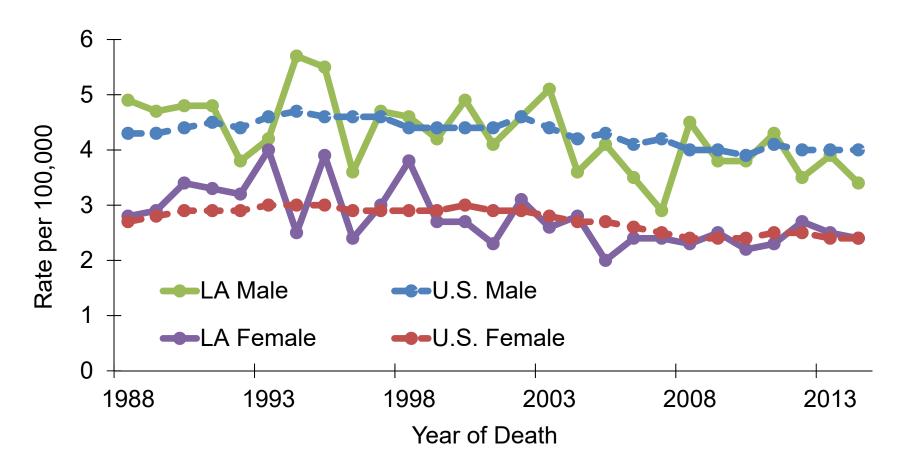


<sup>&</sup>lt;sup>1</sup>Age-adjusted to the 2000 U.S. standard population.



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

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

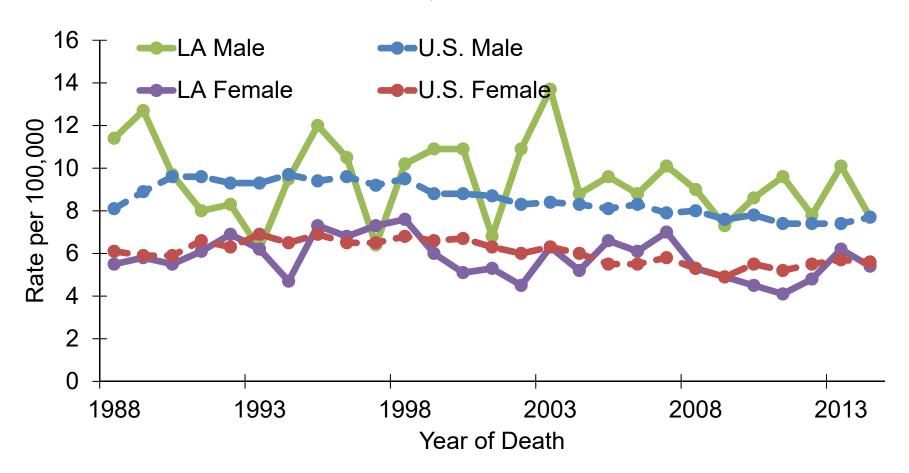


<sup>&</sup>lt;sup>1</sup> Adjusted to the 2000 U.S. standard population.



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

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

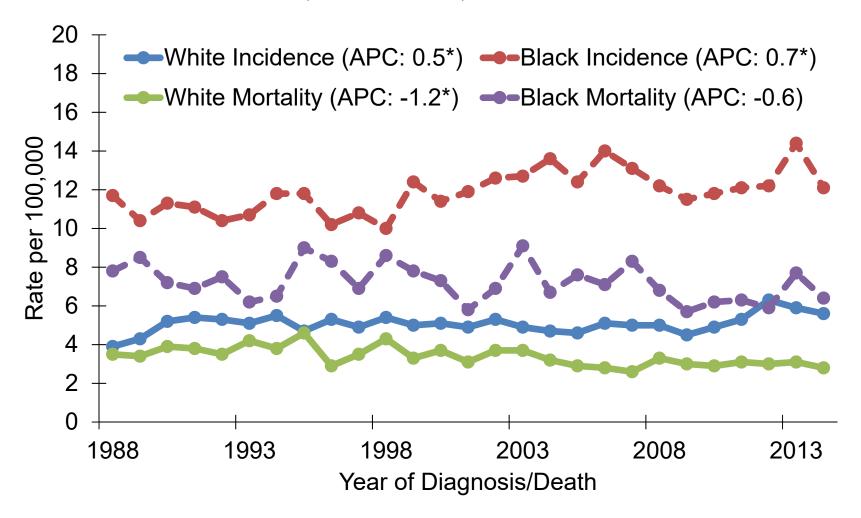


<sup>&</sup>lt;sup>1</sup> Age-adjusted to the 2000 U.S. standard population.



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

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

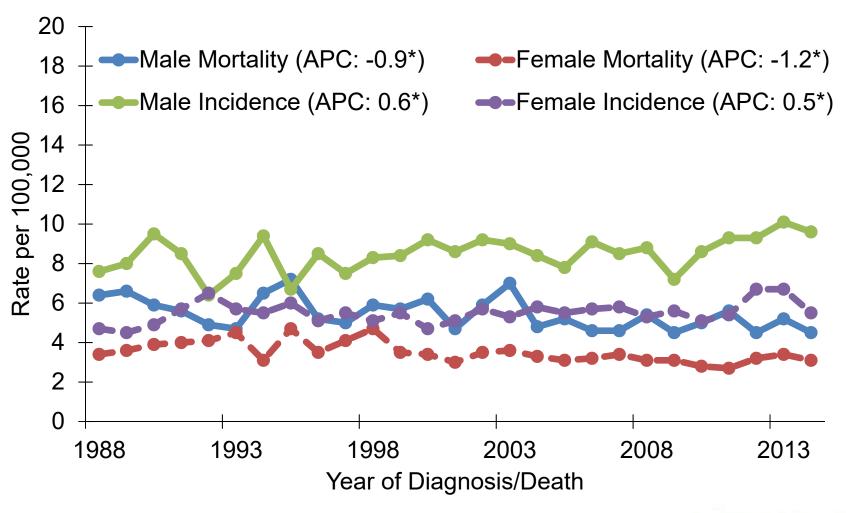


\*Only invasive cases.

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



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

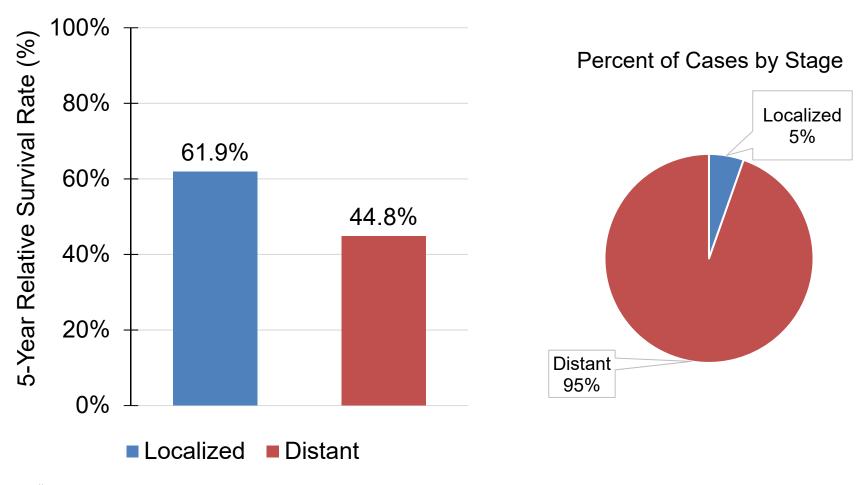


\*Only invasive cases.

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



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

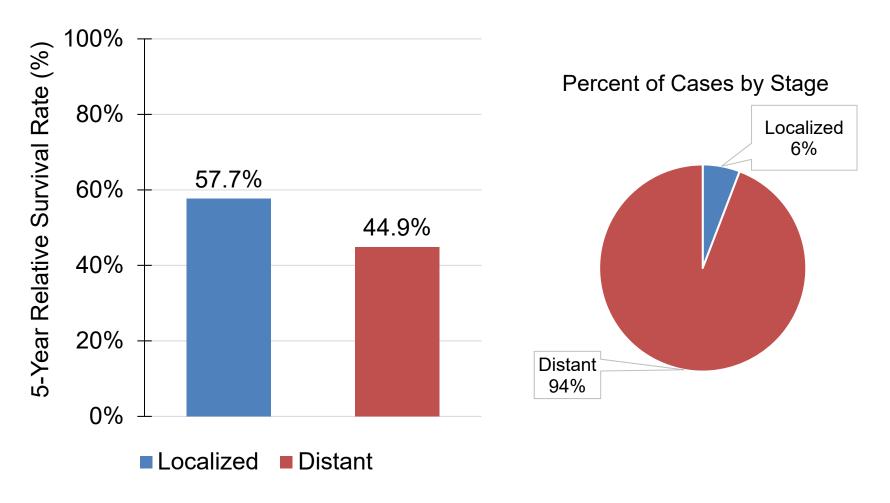


<sup>#</sup>Only invasive cases.



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

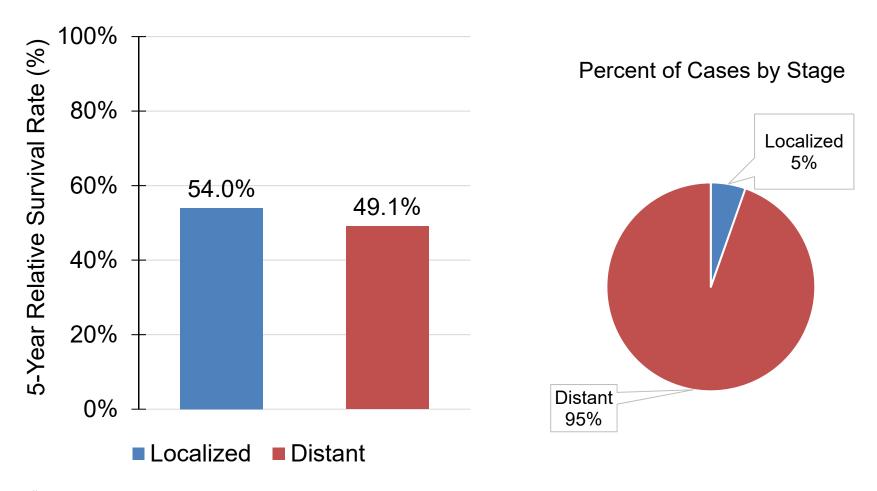
## Myeloma<sup>#</sup>: Louisiana 5-Year Relative Survival by Stage<sup>1</sup>, White Males, 2007-2013





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

## Myeloma<sup>#</sup>: Louisiana 5-Year Relative Survival by Stage<sup>1</sup>, White females, 2007-2013

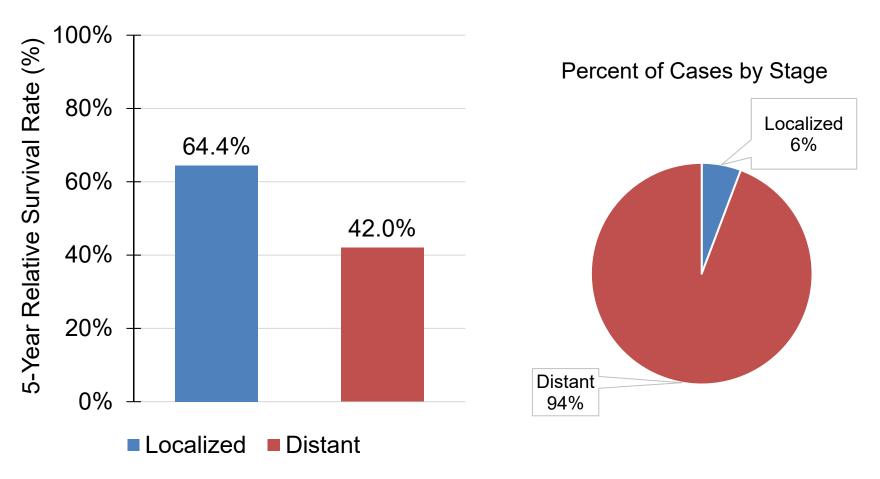


<sup>#</sup>Only invasive cases.



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

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

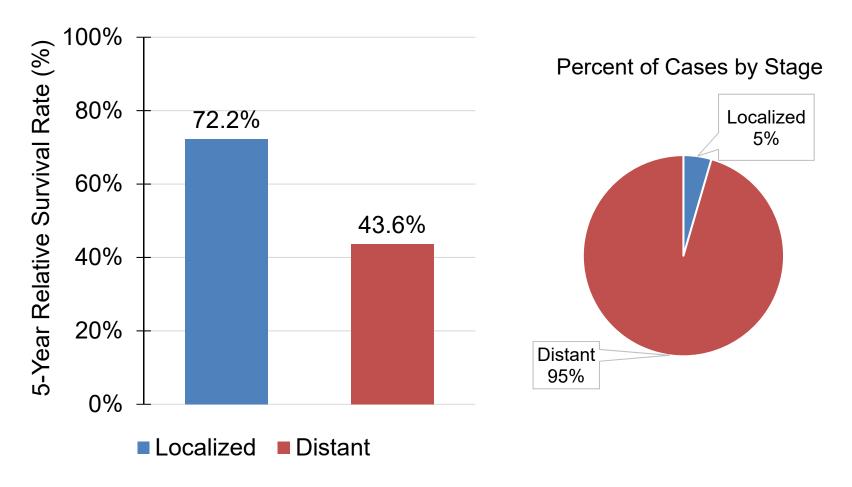


<sup>#</sup>Only invasive cases.



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

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



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



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

#### 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 (<a href="http://louisianatumorregistry.lsuhsc.edu/">http://louisianatumorregistry.lsuhsc.edu/</a>)
- Louisiana Cancer Registrars' Association (<a href="http://www.lcra-usa.org/">http://www.lcra-usa.org/</a>)
- 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 (<a href="http://louisianatumorregistry.lsuhsc.edu/regionalregistries.html">http://louisianatumorregistry.lsuhsc.edu/regionalregistries.html</a>)
- School of Public Health, LSU Health Sciences Center–New Orleans
- Louisiana Cancer and Lung Trust Fund Board
- Coroners' offices



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- Louisiana Health Care Services Division



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