Louisiana Cancer Facts & Figures, Liver and Intrahepatic Bile Duct Cancer

Louisiana Tumor Registry

September, 2017



Liver and Intrahepatic Bile Duct Cancer

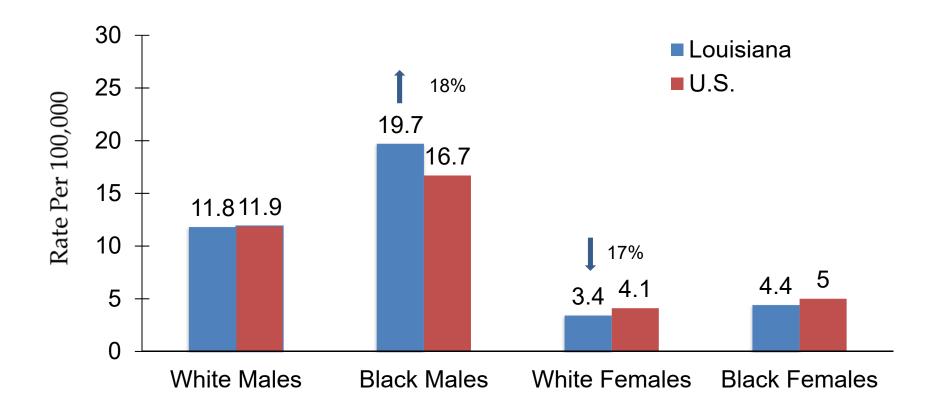
- From 2010 to 2014, Louisiana had the 7th highest incidence rate for liver and intrahepatic bile duct cancer, and the 3rd highest mortality rate of any state in the nation (all races and sexes combined). 1
- In Louisiana, liver cancer has the 6th highest death rate and 8th in the U.S. for 2010-2014.
- About 660 new cases of liver cancer are expected to be diagnosed and about 520 people are expected to die of liver cancers in Louisiana in 2017.

¹Data source: <u>State Cancer Profiles</u>

²Data source: <u>American Cancer Society, Cancer Facts & Figures 2017</u>



Liver and Intrahepatic Bile Duct Cancer: Incidence Rates^{#,1,2}, 2010-2014



¹ Age-adjusted to the 2000 U.S. standard population.

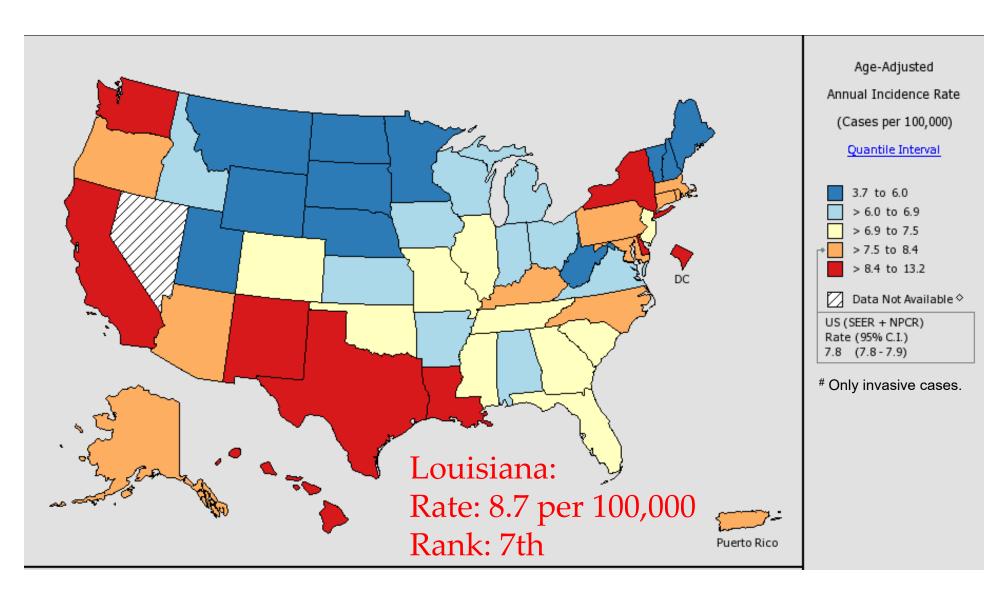


² U.S. Incidence data source:18 SEER registries.

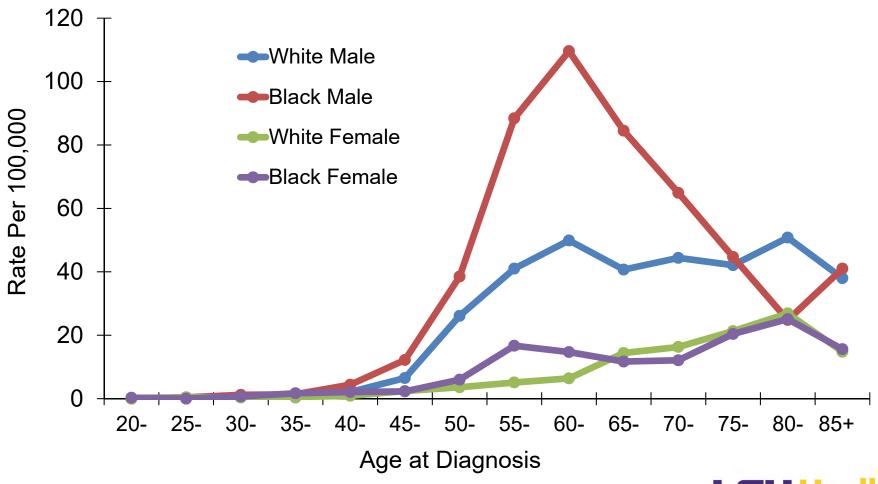
^{↓↑}Rate of Louisiana is significantly different from that of the U.S.

[#]Invasive cases only.

Incidence Rates* of Liver and Intrahepatic Bile Duct Cancer in the U.S., All Races, Both Sexes, 2010-2014



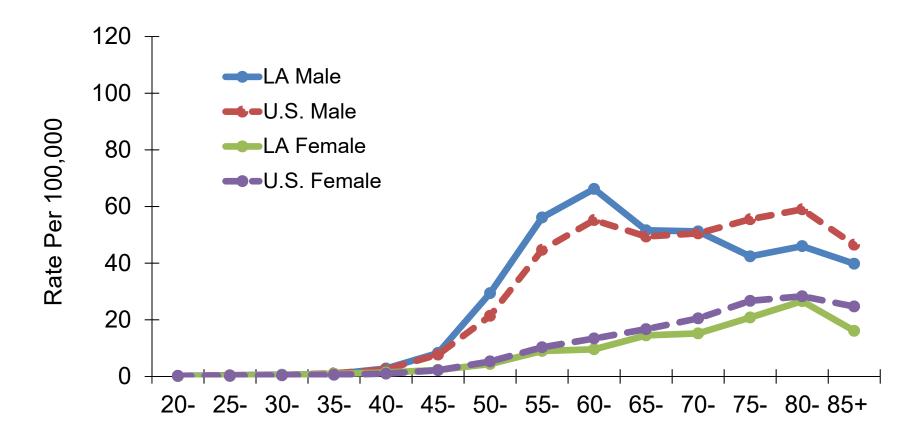
Liver and Intrahepatic Bile Duct Cancer: Age-Specific Incidence Rates # in Louisiana by Race and Gender, 2010-2014



#Invasive cases only.



Liver and Intrahepatic Bile Duct Cancer: Age-Specific Incidence Rates # by Gender, 2010-2014

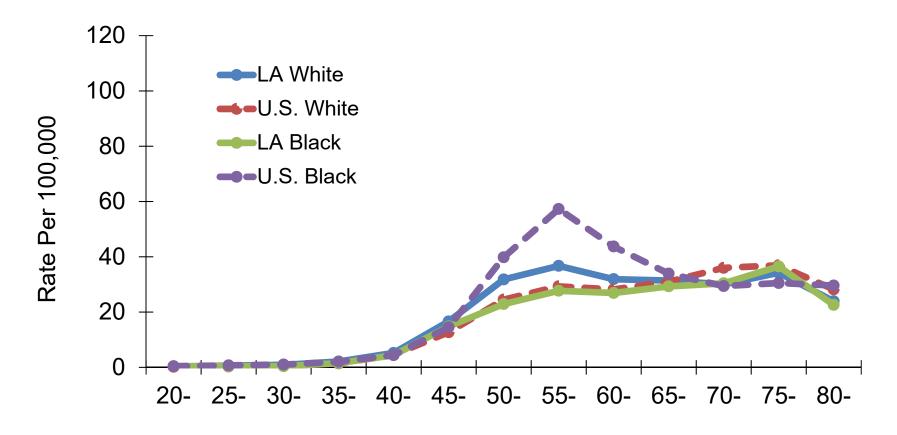


Age at Diagnosis

#Invasive cases only.
U.S. data source:18 SEER registries.



Liver and Intrahepatic Bile Duct Cancer: Age-Specific Incidence Rates # by Race, 2010-2014

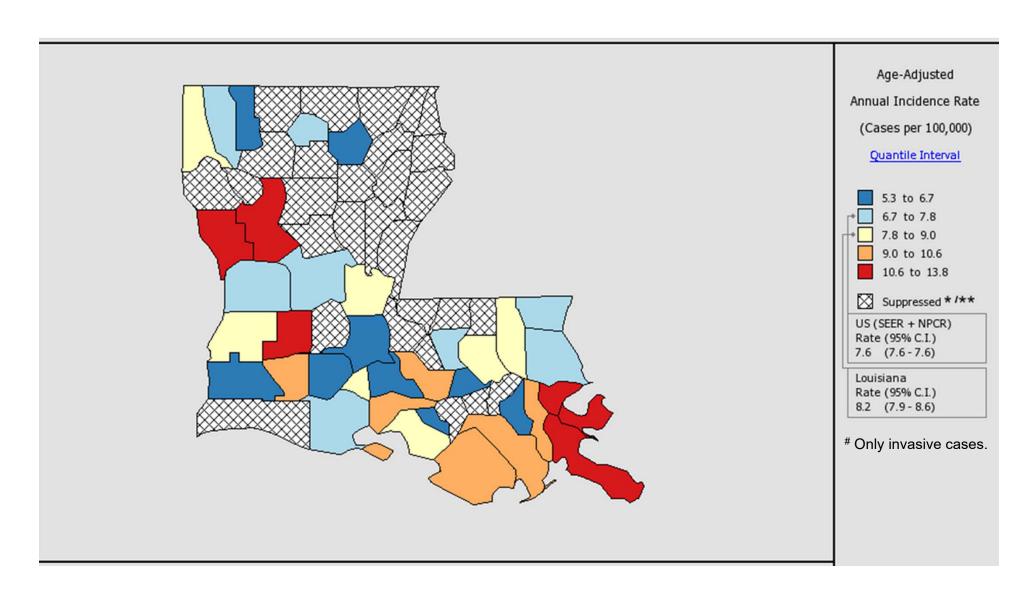


Age at Diagnosis

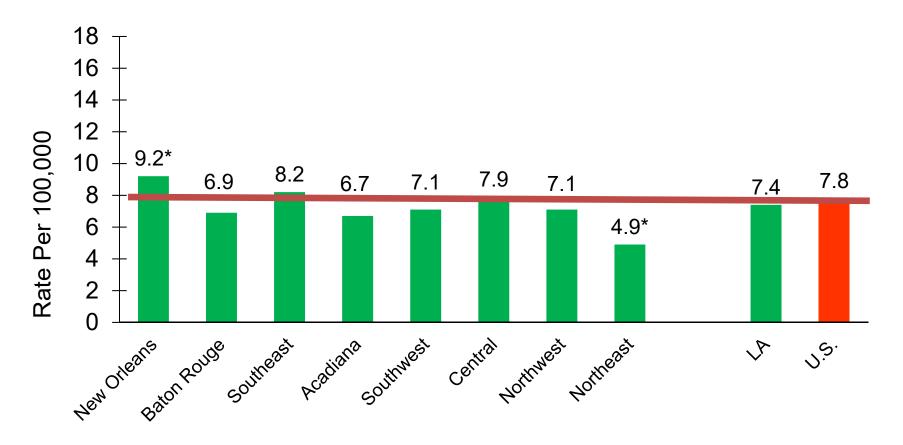
#Invasive cases only.
U.S. data source:18 SEER registries.



Incidence Rates # of Liver and Intrahepatic Bile Duct Cancer in the Louisiana, All Races, Both Sexes, 2010-2014



Liver and Intrahepatic Bile Duct Cancer Incidence Rates^{#,1,2} by Region³: Louisiana, Whites, 2010-2014



[#] Only invasive cases.



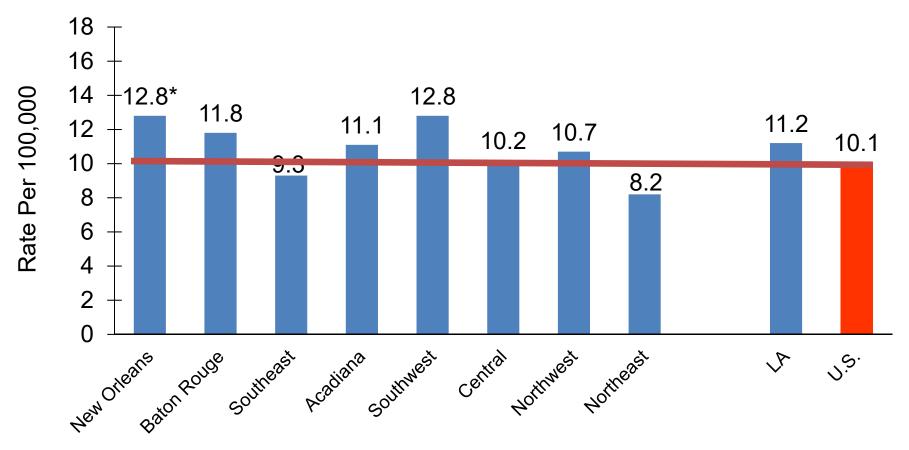
¹ Age-adjusted to the 2000 U.S. standard population.

² Data source for U.S. was the 18 SEER registries.

³LTR Regions

^{*} Incidence rate of regions/Louisiana is significantly different from that of the U.S.

Liver and Intrahepatic Bile Duct Cancer Incidence Rates #,1,2 by Region³: Louisiana, Blacks, 2010-2014



[#] Only invasive cases.



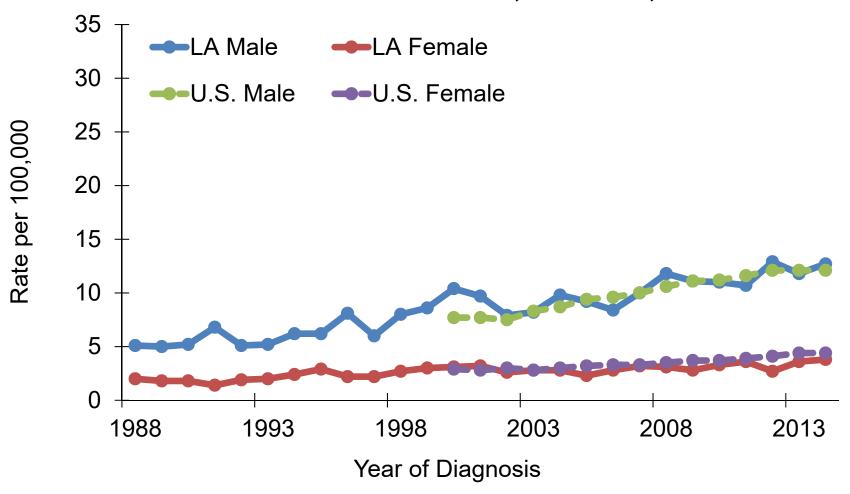
¹ Age-adjusted to the 2000 U.S. standard population.

² Data source for U.S. was the 18 SEER registries.

³LTR Regions

^{*} Incidence rate of regions/Louisiana is significantly different from that of the U.S.

Liver and Intrahepatic Bile Duct Cancer: Trends of Incidence Rates #,1,2, Whites, 1988-2014



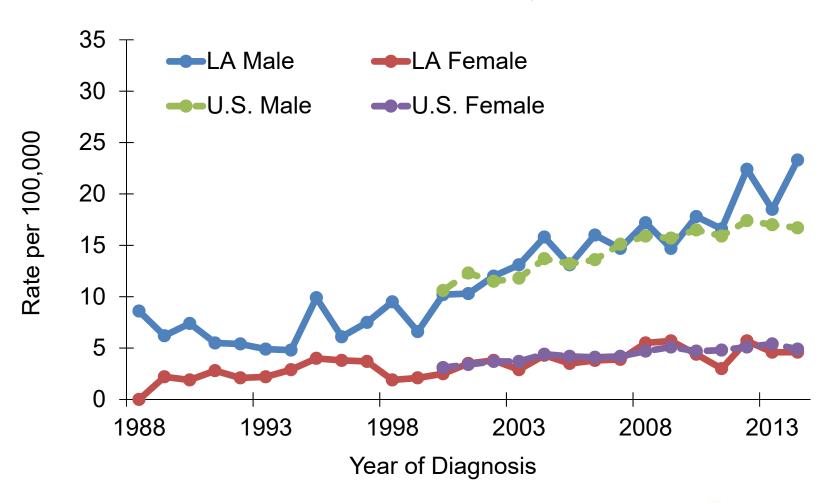
[#]Invasive cases only.



¹ Age-adjusted to the 2000 U.S. standard population.

² US data source: 18 SEER registries.

Liver and Intrahepatic Bile Duct Cancer: Trend of Incidence Rates^{#,1,2},Blacks 1988-2014



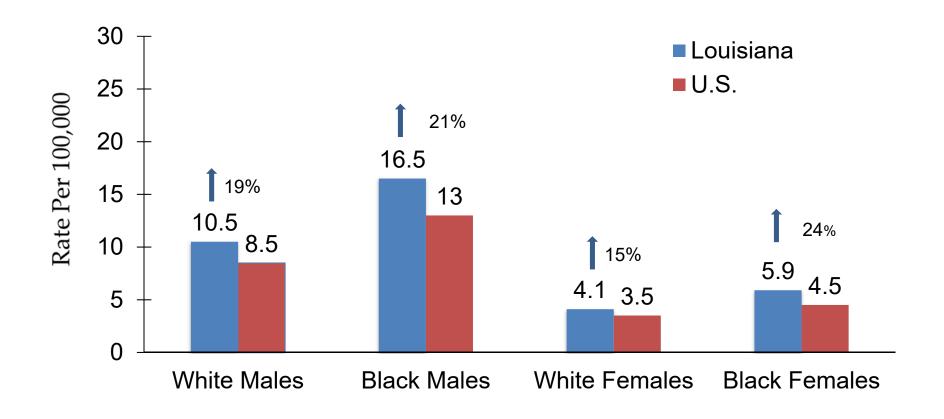
#Invasive cases only.



¹ Age-adjusted to the 2000 U.S. standard population.

² US data source: 18 SEER registries.

Liver and Intrahepatic Bile Duct Cancer: Mortality Rates^{1,2}, 2010-2014



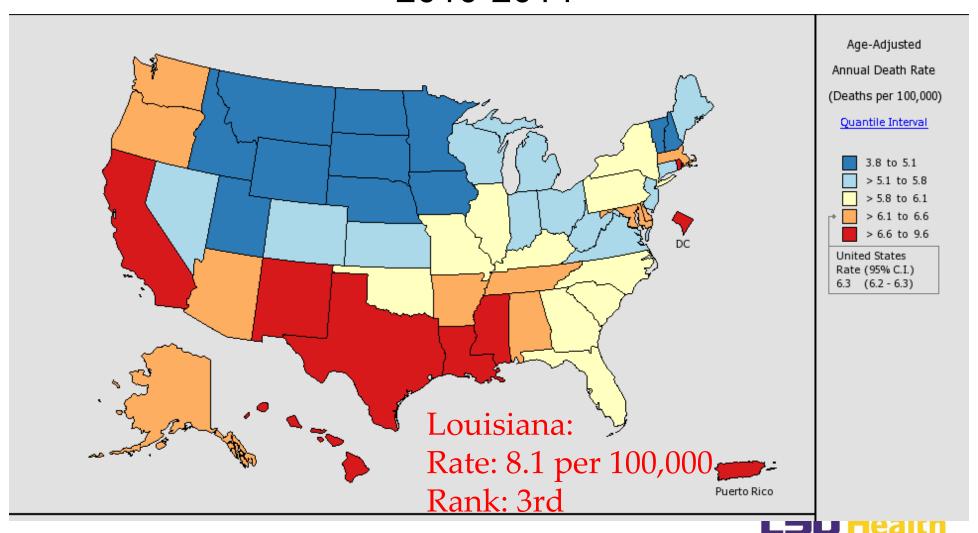
¹ Age-adjusted to the 2000 U.S. standard population.



² Data source: National Center of Health Statistics (NCHS).

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

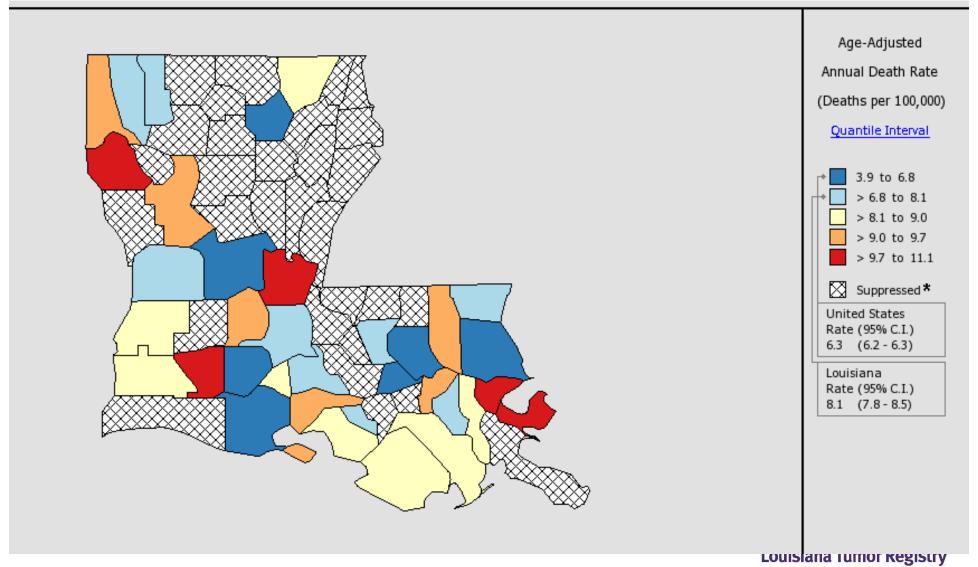
Mortality Rates of Liver and Intrahepatic Bile Duct Cancer in the U.S., All Races, Both Sexes, 2010-2014



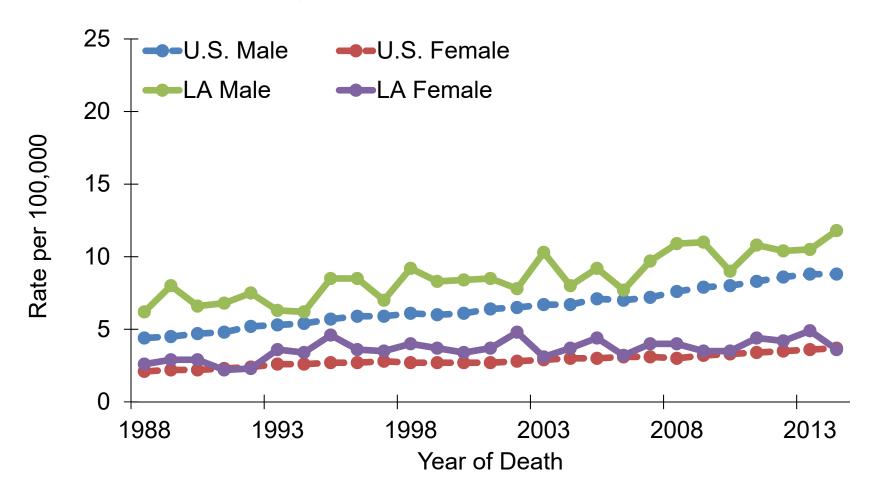
NEW ORLEANS

Louisiana Tumor Registry

Mortality Rates of Liver and Intrahepatic Bile Duct Cancer in the Louisiana, All Races, Both Sexes, 2010-2014



Liver and Intrahepatic Bile Duct Cancer: Trends of Mortality Rates^{1,2}, Whites, 1988-2014

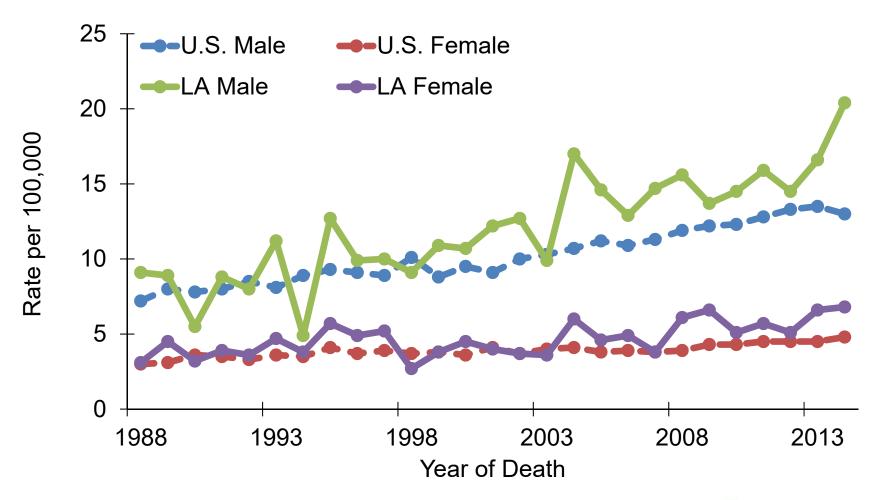


¹ Age-adjusted to the 2000 U.S. standard population.



² Data source: National Center of Health Statistics (NCHS).

Liver and Intrahepatic Bile Duct Cancer: Trends of Mortality Rates^{1,2}, Blacks,1988-2014

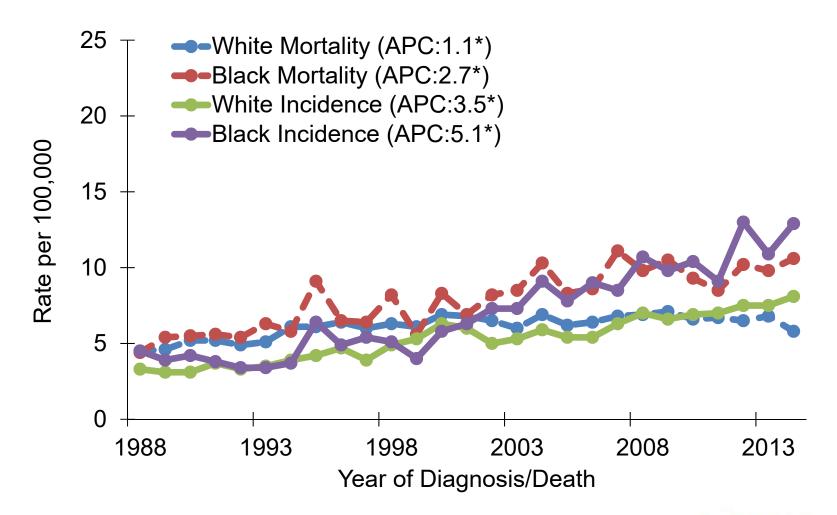


¹ Age-adjusted to the 2000 U.S. standard population.



² Data source: National Center of Health Statistics (NCHS).

Liver and Intrahepatic Bile Duct: Trends of Incidence# and Mortality Rates, by Race, Louisiana, 1988-2014

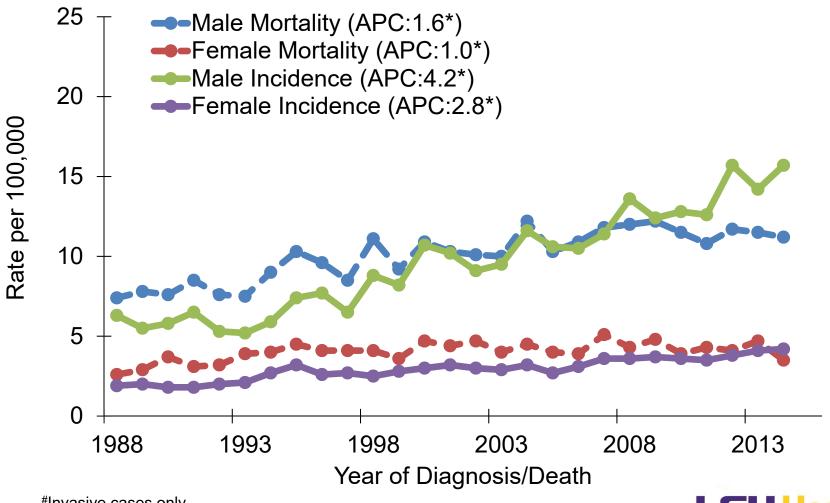


[#]Invasive cases only.



^{*}Annual average percent change (APC) were calculated using weighted least squares method

Liver and Intrahepatic Bile Duct: Trends of Incidence # and Mortality Rates, by Gender, Louisiana, 1988-2014

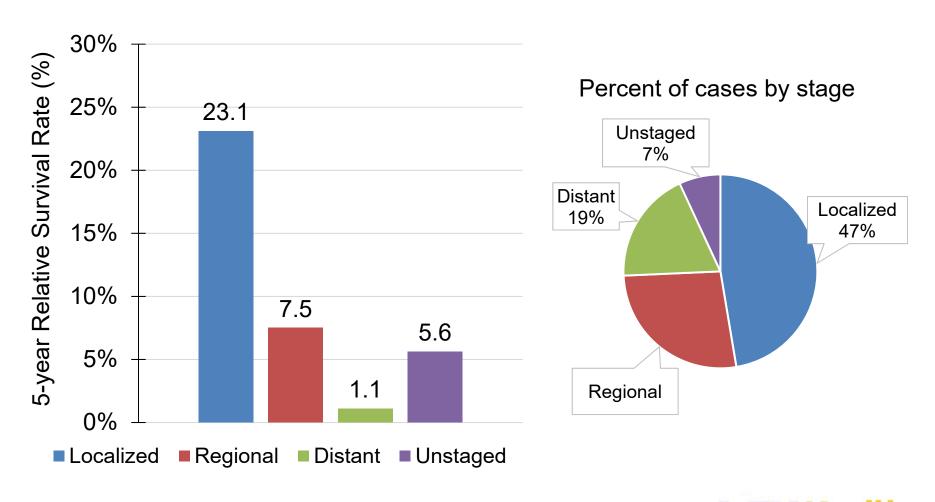


[#]Invasive cases only.



^{*}Annual average percent change (APC) were calculated using weighted least squares method

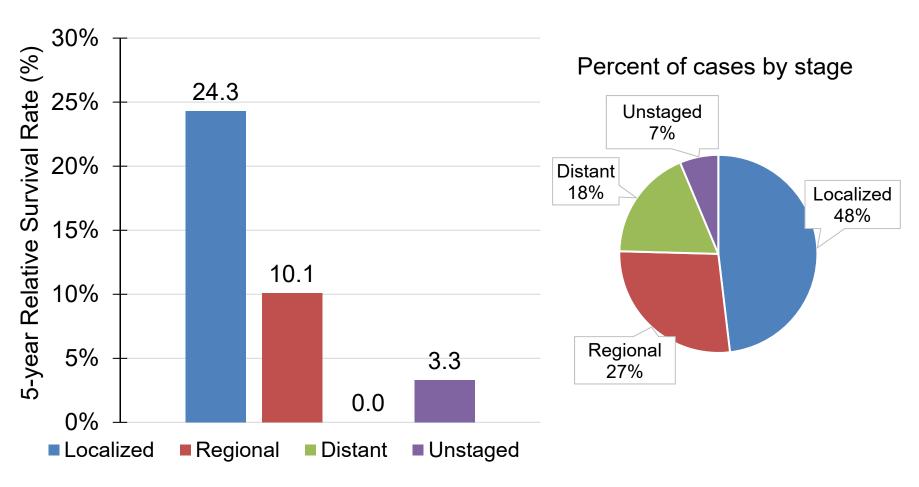
Liver and Intrahepatic Bile Duct Cancer*: Louisiana 5-Year Relative Survival by Stage¹, Both Sexes, All Races, 2007-2013





¹ The stage distribution is based on Summary Stage 2000.

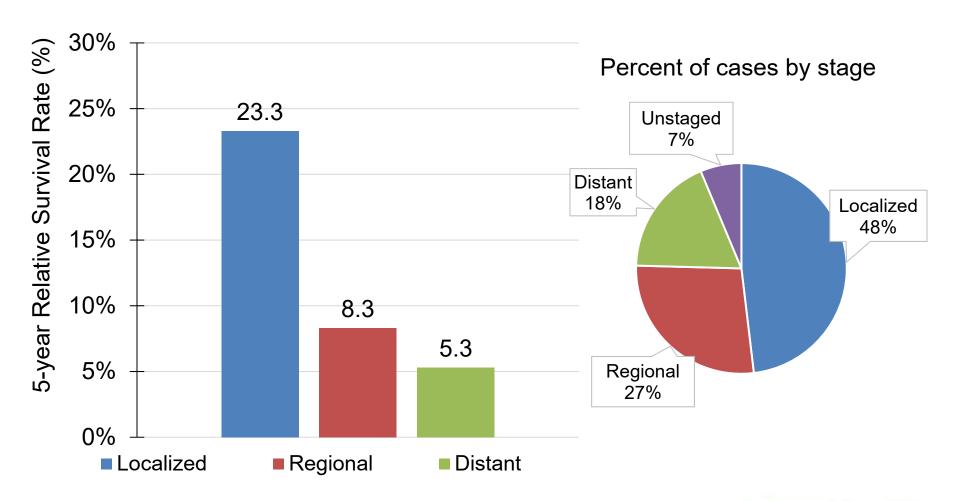
Liver and Intrahepatic Bile Duct Cancer[#]: Louisiana 5-Year Relative Survival by Stage¹, White Males, 2007-2013





¹ The stage distribution is based on Summary Stage 2000.

Liver and Intrahepatic Bile Duct Cancer*: Louisiana 5-Year Relative Survival by Stage¹, White Females, 2007-2013

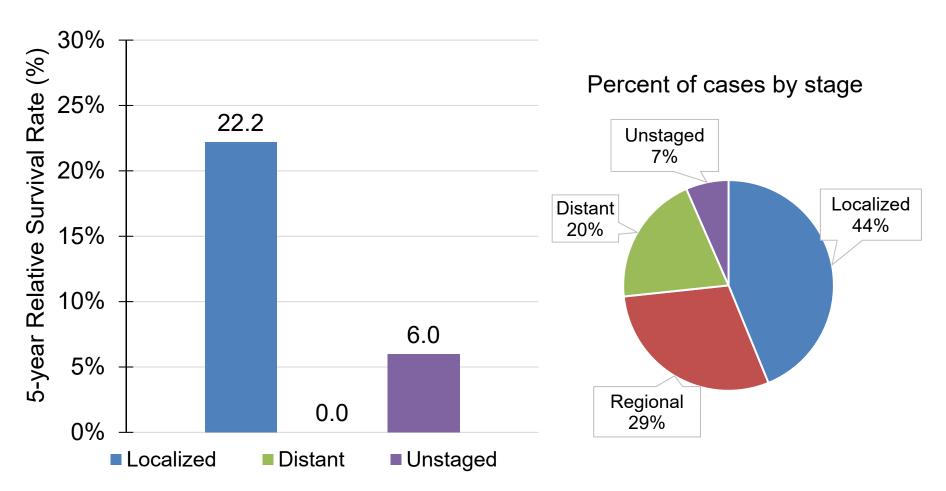




¹ The stage distribution is based on Summary Stage 2000.

^{*} The Unstaged 5-year relative survival could not be calculated.

Liver and Intrahepatic Bile Duct Cancer[#]: Louisiana 5-Year Relative Survival by Stage¹, Black Males, 2007-2013

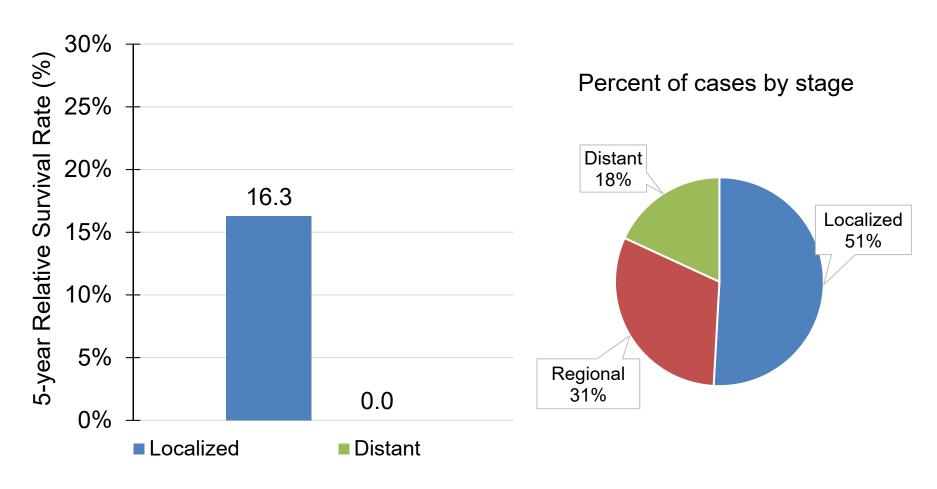




¹ The stage distribution is based on Summary Stage 2000.

^{*} The Regional 5-year relative survival could not be calculated.

Liver and Intrahepatic Bile Duct Cancer*: Louisiana 5-Year Relative Survival by Stage¹, Black Females, Louisiana, 2007-2013



¹ The stage distribution is based on Derived Summary Stage 2000.



^{*} The Unstaged 5-year relative survival could not be calculated due to lack of cases.

^{*} The Regional 5-year relative survival could not be calculated.

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 (http://louisianatumorregistry.lsuhsc.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.lsuhsc.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



Editors

Carla B. Rosales, MPH
Lauren Maniscalco, MPH
Meichin Hsieh, PhD, MSPH, CTR
Xiaocheng Wu, MD, MPH, CTR

Contributors

Brent Mumphrey, BS
Tina Lefante, MPH
Lisa Pareti, BS, RHIT, CTR
Yong Yi, PhD, MS



Questions?

Contact:
LTR-info@lsuhsc.edu
or
504-568-5757

