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 2014.¹

• 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.¹

• 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 2017.²

1. Data source: NCI state cancer profile.
Colon and Rectal Cancer: Age-Specific Incidence Rates#, Louisiana, 2010-2014

#Invasive cases only.
Colon and Rectal Cancer: Age-Specific Incidence Rates* by Gender, 2010-2014

*Invasive cases only.
U.S. data source: 18 SEER registries.
Colon and Rectal Cancer: Age-Specific Incidence Rates# by Race, 2010-2014

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

LSU Health
NEW ORLEANS
Louisiana Tumor Registry
Colon and Rectal Cancer: Incidence Rates#,1,2, 2010-2014

# Invasive cases only.

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.

<table>
<thead>
<tr>
<th></th>
<th>White Male</th>
<th>White Female</th>
<th>Black Male</th>
<th>Black Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Louisiana</td>
<td>52.5</td>
<td>38.2</td>
<td>66.7</td>
<td>50.4</td>
</tr>
<tr>
<td>U.S.</td>
<td>45.0</td>
<td>34.5</td>
<td>56.4</td>
<td>43.2</td>
</tr>
</tbody>
</table>

17% increase in Louisiana compared to the U.S.
Incidence Rates of Colon and Rectal Cancer in the U.S., All Races, Both Sexes, 2010-2014

# Only invasive cases.
Colon and Rectal Cancer Incidence\textsuperscript{#,1,2,}, by Region\textsuperscript{3}: Louisiana, Whites, 2010-2014

<table>
<thead>
<tr>
<th>Region</th>
<th>Rate per 100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Orleans</td>
<td>43.1*</td>
</tr>
<tr>
<td>Baton Rouge</td>
<td>42.1*</td>
</tr>
<tr>
<td>Southeast</td>
<td>40.1</td>
</tr>
<tr>
<td>Acadiana</td>
<td>52.4*</td>
</tr>
<tr>
<td>Southwest</td>
<td>48.3*</td>
</tr>
<tr>
<td>Central</td>
<td>49.6*</td>
</tr>
<tr>
<td>Northwest</td>
<td>41.6</td>
</tr>
<tr>
<td>Northeast</td>
<td>44.6*</td>
</tr>
<tr>
<td>LA</td>
<td>44.6*</td>
</tr>
<tr>
<td>U.S.</td>
<td>39.3</td>
</tr>
</tbody>
</table>

\textsuperscript{# Invasive cases only.}
\textsuperscript{1 Age-adjusted to the 2000 U.S. standard population.}
\textsuperscript{2 Data source for U.S. was the 18 SEER registries.}
\textsuperscript{3 See Appendix A.}

* Incidence rate of regions/Louisiana is significantly different from that of U.S.
Colon and Rectal Cancer Incidence*,1,2, by Region3: Louisiana, Blacks, 2010-2014

* Invasive cases only.
1 Age-adjusted to the 2000 U.S. standard population.
2 Data source for U.S. was the 18 SEER registries.
3 See Appendix A.

* Incidence rate of regions/Louisiana is significantly different from that of U.S.
Colon and Rectal Cancer: Trends of Incidence Rates#, 1, 2, Whites, 1988-2014

# Invasive cases only.
1 Age-adjusted to the 2000 U.S. standard population.
2 U.S. data source: 18 SEER registries.
Colon and Rectal Cancer:
Trend of Incidence Rates#,1,2, Blacks 1988-2014

# Invasive cases only.
1 Age-adjusted to the 2000 U.S. standard population.
2 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

<table>
<thead>
<tr>
<th></th>
<th>White Male</th>
<th>White Female</th>
<th>Black Male</th>
<th>Black Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Louisiana Rate</td>
<td>19.5</td>
<td>13%</td>
<td>29.5</td>
<td>19.1</td>
</tr>
<tr>
<td>U.S. Rate</td>
<td>17.2</td>
<td>12%</td>
<td>25.3</td>
<td>16.5</td>
</tr>
</tbody>
</table>

<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
Colon and Rectal Cancer: Trends of Mortality Rates\textsuperscript{1,2}, Whites, 1988-2014

\textsuperscript{1} Age-adjusted to the 2000 U.S. standard population.
\textsuperscript{2} Data source: National Center of Health Statistics (NCHS).
Colon and Rectal Cancer: Trends of Mortality Rates\textsuperscript{1,2}, Blacks, 1988-2014

1 Age-adjusted to the 2000 U.S. standard population.
2 Data source: National Center of Health Statistics (NCHS).
Colon and Rectal Cancer: Louisiana 1988-2014: Trends of Incidence# and Mortality Rates by Gender

Annual average percent change (APC) were calculated using weighted least squares method.
* APC significantly different from zero.
#Invasive cases only.
Colon and Rectal Cancer: Louisiana 1988-2014
Trends of Incidence# and Mortality Rates by Race

Annual average percent change (APC) were calculated using weighted least squares method.
* APC significantly different from zero.
# Invasive cases only.
Colon and Rectal Cancer#: Louisiana
5-Year Relative Survival by Stage¹, White Males, 2007-2013

Only invasive cases.
¹ The stage distribution is based on Summary Stage 2000.
Colon and Rectal Cancer#: Louisiana
5-Year Relative Survival by Stage¹, White Females, 2007-2013

#Only invasive cases.
¹ The stage distribution is based on Summary Stage 2000.
Colon and Rectal Cancer#: Louisiana
5-Year Relative Survival by Stage¹, Black Males, 2007-2013

Percent of Cases by Stage

- In Situ: 87.1%
- Localized: 80.8%
- Regional: 60.1%
- Distant: 11.2%
- Unstaged: 3%

#Only invasive cases.
¹ The stage distribution is based on Summary Stage 2000.
Colon and Rectal Cancer#: Louisiana 5-Year Relative Survival by Stage1, Black Females, 2007-2013

#Only invasive cases.
1 The stage distribution is based on Summary Stage 2000.
# Appendix A. Regions of the Louisiana Tumor Registry

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

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

Surveillance, Epidemiology, and End Results (SEER) Program

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:**

• **Cancer Facts & Figures:**
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

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  • Pathology laboratories
  • Physician offices and clinics
  • Hospice programs and nursing homes
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  (http://louisianatumorregistry.lsuhsc.edu/regionalregistries.html)
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• Coroners’ offices
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