Stomach Cancer*

- In 2010-2014, Louisiana was ranked 10th in the nation for stomach cancer incidence rates and 5th for death rates.\(^1\)

- About 420 new stomach cancer cases are expected to be diagnosed and about 190 persons are expected to die of this cancer in Louisiana in 2017.\(^2\)

\(^1\)Data source: State Cancer Profiles
\(^2\)Data source: American Cancer Society, Cancer Facts & Figures 2017
Stomach Cancer: Incidence Rates#, 1, Louisiana vs. US, 2 2010-2014

#Invasive cases only.
1 Age-adjusted to the 2000 U.S. standard population.
2 Incidence data source: 18 SEER registries.
↓↑Rate of Louisiana is significantly different from that of the U.S.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Louisiana</th>
<th>U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Male</td>
<td>8.5</td>
<td>9.0</td>
</tr>
<tr>
<td>Black Male</td>
<td>17.0</td>
<td>13.6</td>
</tr>
<tr>
<td>White Female</td>
<td>3.7</td>
<td>4.5</td>
</tr>
<tr>
<td>Black Female</td>
<td>8.5</td>
<td>7.8</td>
</tr>
</tbody>
</table>
Incidence Rates\# of Stomach Cancer in the U.S., All Races, Both Sexes, 2010-2014

Louisiana:
Rate: 7.6 per 100,000
Rank: 10th

\# Only invasive cases.
Stomach Cancer: Age-Specific Incidence Rates #, Louisiana, 2010-2014

#Invasive cases only.

Rate Per 100,000

Age at Diagnosis

White Male
Black Male
White Female
Black Female

LSU Health
NEW ORLEANS
Louisiana Tumor Registry
Stomach Cancer: Age-Specific Incidence Rates by Gender, 2010-2014

Invasive cases only.
U.S. data source: 18 SEER registries.
Stomach Cancer: Age-Specific Incidence Rates by Race, 2010-2014

Rate Per 100,000

Age at Diagnosis

LA White
U.S. White
LA Black
U.S. Black

#Invasive cases only.
U.S. data source: 18 SEER registries.
Incidence Rates # of Stomach Cancer in Louisiana, All Races, Both Sexes, 2010-2014

Age-Adjusted Annual Incidence Rate (Cases per 100,000)

Quantile Interval

- 5.5 to 6.3
- > 6.3 to 7.0
- > 7.0 to 8.1
- > 8.1 to 9.6
- > 9.6 to 14.2

Suppressed * ***

US (SEER + NPCR) Rate (95% C.I.)
6.7 (6.6 - 6.7)

Louisiana Rate (95% C.I.)
7.6 (7.2 - 7.9)

# Only invasive cases.
Stomach Cancer Incidence\(^\#,1,2\) by Region\(^3\): 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>6.6</td>
</tr>
<tr>
<td>Baton Rouge</td>
<td>4.8(^*)</td>
</tr>
<tr>
<td>Southeast</td>
<td>6.7</td>
</tr>
<tr>
<td>Acadiana</td>
<td>5.3(^*)</td>
</tr>
<tr>
<td>Southwest</td>
<td>5.9</td>
</tr>
<tr>
<td>Central</td>
<td>6.3</td>
</tr>
<tr>
<td>Northwest</td>
<td>5.9</td>
</tr>
<tr>
<td>Northeast</td>
<td>6.2</td>
</tr>
<tr>
<td>LA</td>
<td>5.9</td>
</tr>
<tr>
<td>U.S.</td>
<td>6.5</td>
</tr>
</tbody>
</table>

\(^\#\) Only invasive cases.

\(^1\) Age-adjusted to the 2000 U.S. standard population.

\(^2\) Data source for U.S. was the 18 SEER registries.

\(^3\) LTR Regions

\(^\ast\) Incidence rate of regions/Louisiana is significantly different from that of the U.S.
Stomach Cancer Incidence\(^\#,1,2\) by Region\(^3\): Louisiana, Blacks, 2010-2014

<table>
<thead>
<tr>
<th>Region</th>
<th>Rate Per 100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Orleans</td>
<td>10.8</td>
</tr>
<tr>
<td>Baton Rouge</td>
<td>13.0*</td>
</tr>
<tr>
<td>Southeast</td>
<td>14.3*</td>
</tr>
<tr>
<td>Acadiana</td>
<td>11.8</td>
</tr>
<tr>
<td>Southwest</td>
<td>9.9</td>
</tr>
<tr>
<td>Central</td>
<td>13.0</td>
</tr>
<tr>
<td>Northwest</td>
<td>12.8*</td>
</tr>
<tr>
<td>Northeast</td>
<td>10.7</td>
</tr>
<tr>
<td>LA</td>
<td>12.1</td>
</tr>
<tr>
<td>U.S.</td>
<td>10.2</td>
</tr>
</tbody>
</table>

\(^\#\) Only invasive cases.
\(^1\) Age-adjusted to the 2000 U.S. standard population.
\(^2\) Data source for U.S. was the 18 SEER registries.
\(^3\) LTR Regions

* Incidence rate of regions/Louisiana is significantly different from that of the U.S.
Stomach Cancer: Trends of Incidence Rates\textsuperscript{#,1,2}, Whites, 1988-2014

\textsuperscript{#}Invasive cases only.

\textsuperscript{1} Age-adjusted to the 2000 U.S. standard population.

\textsuperscript{2} U.S. data source: 18 SEER registries.
Stomach Cancer: Trends 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.
Stomach Cancer: Mortality Rates\textsuperscript{1}, Louisiana vs. US\textsuperscript{2}, 2010-2014

\begin{itemize}
  \item \textsuperscript{1} Age-adjusted to the 2000 U.S. standard population.
  \item \textsuperscript{2} Data source: National Center of Health Statistics (NCHS).
  \item \uparrow \downarrow Rate of Louisiana is significantly different from that of the U.S.
\end{itemize}
Mortality Rates of Stomach Cancer in the U.S., All Races, Both Sexes, 2010-2014

Louisiana:
Rate: 4.1 per 100,000
Rank: 5th
Stomach Cancer: Trends of Mortality Rates\textsuperscript{1,2}, Whites, 1988-2014

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

\begin{itemize}
\item \textsuperscript{1} Age-adjusted to the 2000 U.S. standard population.
\item \textsuperscript{2} Data source: National Center of Health Statistics (NCHS).
\end{itemize}
Stomach Cancer: 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.
Stomach Cancer: 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.
Stomach Cancer#: Louisiana
5-Year Relative Survival by Stage\(^1\), All Races, Both Sexes, 2007-2013

- Localized: 32%
- Regional: 28%
- Distant: 33%
- Unstaged: 7%

Percent of cases by stage:
- Localized: 32%
- Regional: 28%
- Distant: 33%
- Unstaged: 7%

# Only invasive cases.
\(^1\) The stage distribution is based on Derived Summary Stage 2000.
# Stomach Cancer#: Louisiana
5-Year Relative Survival by Stage\(^1\), White Males, 2007-2013

<table>
<thead>
<tr>
<th>Stage</th>
<th>5-Year Relative Survival Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Localized</td>
<td>50.4</td>
</tr>
<tr>
<td>Regional</td>
<td>19.6</td>
</tr>
<tr>
<td>Distant</td>
<td>21.7</td>
</tr>
<tr>
<td>Unstaged</td>
<td>4.3</td>
</tr>
</tbody>
</table>

\(\text{\# Only invasive cases.}\)

\(\text{\textsuperscript{1} The stage distribution is based on Derived Summary Stage 2000.}\)
Stomach Cancer#: Louisiana
5-Year Relative Survival by Stage\(^1\), White Females, 2007-2013

* Only invasive cases.

\(^1\) The stage distribution is based on Derived Summary Stage 2000.
Stomach Cancer#: Louisiana
5-Year Relative Survival by Stage¹, Black Males, 2007-2013

Percent of cases by stage
- Localized: 27%
- Regional: 28%
- Distant: 39%
- Unstaged: 6%

5-Year Relative survival rate (%)
- Localized: 41.3%
- Regional: 30.8%
- Distant: 13.8%
- Unstaged: 5.0%

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

Percent of cases by stage

- Localized: 33%
- Regional: 29%
- Distant: 29%
- Unstaged: 9%

5-Year Relative survival rate(%)

- Localized: 58.6%
- Regional: 19.3%
- Distant: 0.0%
- Unstaged: 34.6%

# Only invasive cases.
¹ The stage distribution is based on Derived 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


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.
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• 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](http://louisianatumorregistry.lsuhsc.edu/regionalregistries.html))
• School of Public Health, LSU Health Sciences Center–New Orleans
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• Coroners’ offices
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