
IS THERE A 'CANCER CORRIDOR' IN LOUISIANA?

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Cancer mortality rates in South Louisiana are higher than the national averages, leading to the area's designation as a "cancer corridor". This study was conducted to assess whether incidence data substantiate the reputation derived from mortality statistics.

Age-adjusted cancer incidence rates for 1983-1987 were calculated for South Louisiana as a whole, for five regional divisions of it, and for the combined nine areas of the Surveillance, Epidemiology, and End Results (SEER) program. Significantly lower ($p < 0.0001$) incidence rates were found in South Louisiana among white females, black males, and black females for cancers of all sites combined; among women of both races for cancer of the breast; among men of both races for cancers of the colon and prostate; and among whites of both sexes for melanoma and rectal cancer. South Louisiana incidence rates were significantly higher than the SEER rates only for lung and larynx cancers in white males. The excess of lung cancer was statistically significant in four out of five regions while the laryngeal cancer excess was significant only in the New Orleans area.

The excessive mortality rates reported for South Louisiana are not the result of excessive incidence. These results indicate poorer cancer prognosis in this region, a phenomenon that deserves more scrutiny by the health profession.

High cancer incidence rates have been observed in New Orleans, Louisiana, since the Ten-City Surveys of 1937¹ and 1947.² Excess mortality rates for cancers of the oral cavity and the respiratory system in Louisiana, compared with the national averages, were first reported in the early 1930s.³ For the 1950s, 1960s, and 1970s, significantly higher mortality rates were observed for cancers of all sites combined among men in South Louisiana.⁴ This led to a general perception of a "cancer corridor", especially in the industrialized area along the lower Mississippi River.

The Louisiana Tumor Registry has collected cancer incidence data in the New Orleans area since 1974. In 1983 cancer was added to the list of reportable diseases in Louisiana, and tumor registry coverage was extended throughout the southern part of the state, which encompasses 35 of the 64 parishes (counties) and three fourths of the state's population. In 1988, the northern part of the state was also brought into the

tumor registry program; data on North Louisiana are not yet available.

Published reports on cancer incidence in Louisiana were limited to the New Orleans area until 1991, when incidence data for all South Louisiana from 1983 through 1986 became available.⁵ The present report examines the geographic distribution of cancer incidence in South Louisiana, from 1983 to 1987, using regional boundaries that reflect demographic and environmental profiles. Comparisons are made with the corresponding rates from the Surveillance, Epidemiology, and End Results (SEER) program of the National Cancer Institute.

METHODS

Calculation of Incidence Rates. Cancer incidence data for nine US cancer registries for the years 1983-1987 were obtained from the SEER program; those for Louisiana, from the Louisiana Tumor Registry (LTR).