

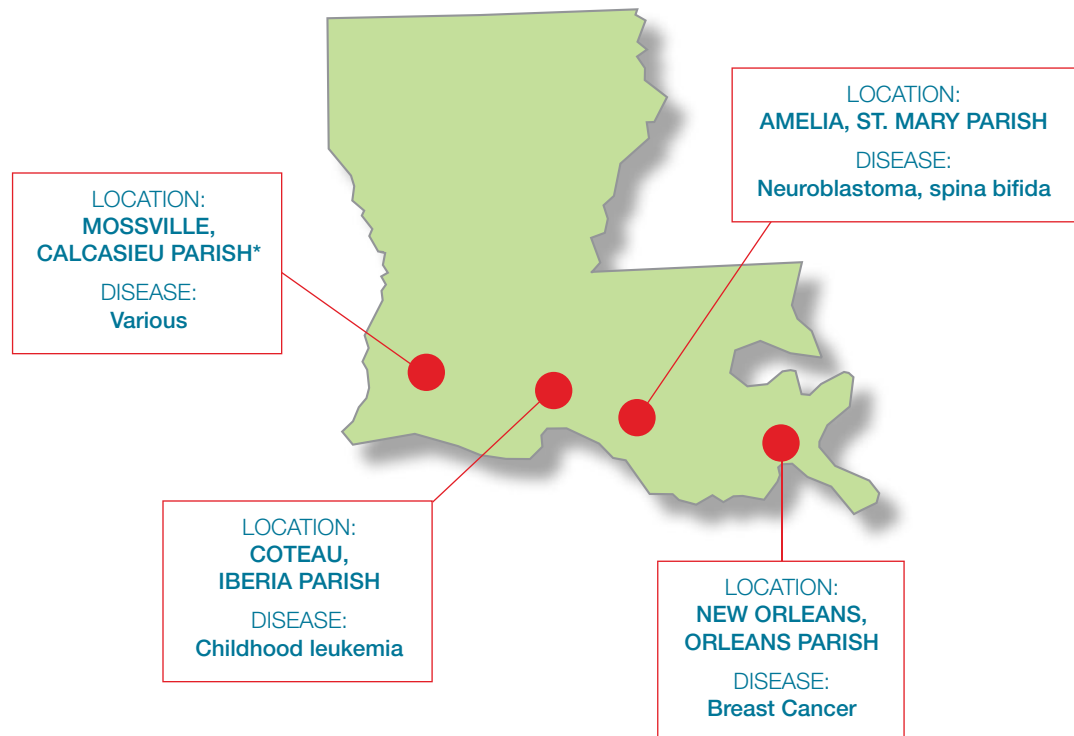
Stop disease clusters.
Protect people.
Control toxic chemicals.

Disease Clusters in Louisiana

An unusually large number of people sickened by a disease in a certain place and time is known as a 'disease cluster'. Clusters of cancer, birth defects, and other chronic illnesses have sometimes been linked to chemicals or other toxic pollutants in local communities, although these links can be controversial. There is a need for better documentation and investigation of disease clusters to identify and address possible causes. Meanwhile, toxic chemicals should be identified and controlled through reform of the Toxic Substances Control Act, so these chemicals don't pollute communities and sicken people.

Investigations of disease clusters are complex, expensive, and often inconclusive, partly due to limitations in scientific tools for investigating cause-and-effect in small populations. Preventing pollution is the best way to avoid creating additional disease clusters. Strategies for prevention include: (1) Directing and funding federal agencies to swiftly assist state and local officials, and investigate community concerns about potential disease clusters and their causes; (2) Reducing or eliminating toxic releases into air, water, soil and food through stronger environmental controls and tough enforcement of those requirements; and (3) Requiring chemical manufacturers to ensure the safety of their products.

Louisiana has suffered from at least three confirmed disease clusters, two of which afflicted children. Although environmental contaminants are implicated, experts have been unable to pinpoint an exact cause. Regardless of the cause, disease clusters can devastate communities with anxiety and emotional and financial difficulties including high medical costs and lowered property values, as well as the tremendous burden of the disease itself.



LOCATION: New Orleans, Orleans Parish

DISEASE: Breast cancer

A cluster of breast cancer in an urban census tract at the Agricultural Street Landfill Superfund Site was identified by the Agency for Toxic Substances and Disease Registry (ATSDR) in 2003. The contaminated landfill was in operation between 1909 and 1962 and was the area's main dump for both residential and industrial waste. In 1976, the landfill was covered with a light layer of soil and sand, and redeveloped for residential use. Residents in the area began to discover trash only a few inches below the soil surface and in 1993 the site was designated as a hazardous waste site (Superfund). According to ATSDR, the site and the neighborhood is contaminated with metals, polyaromatic hydrocarbons (PAHs), volatile organic compounds, and pesticides. There is evidence that PAHs can increase the risk of developing breast cancer.

LOCATION: Amelia, St. Mary Parish

DISEASE: Neuroblastoma

Over the period of 1986 through 1987, a cluster of neuroblastoma, a type of brain cancer, was identified by researchers at Louisiana State University Medical School. City government and state health officials petitioned the Agency for Toxic Substances and Disease Registry to conduct a public health assessment of Marine Shale Processor (MSP) due to regulatory scrutiny and public concern over MSP's operations. In 1994, ATSDR concluded that there was evidence to suggest that adverse health outcomes in the community could be related to environmental exposures. However, there was insufficient data to link a hazardous waste incinerator at MSP to adverse health outcomes in the community. In 2006, MSP and its owner paid the state government a settlement of \$7 million for the closure and remediation of the site.

LOCATION: Coteau, Iberia Parish

DISEASE: Childhood leukemia

State health officials confirmed a cluster of childhood leukemia in the tiny community of Coteau after four children were diagnosed with leukemia. In 2000, the Louisiana Office of Public Health began conducting a case-control study of 40 children diagnosed with leukemia between 1983 and 1997 in the four-parish area of Lafayette, Vermilion, St. Martin, and Iberia to identify risk factors associated with childhood leukemia in the area. Due to the small size of the study, state epidemiologists were not able to make any clear conclusions about environmental factors that may have caused the cluster of leukemia.

*** LOCATION: Mossville, Calcasieu Parish**

DISEASE: Various

A health survey by researchers at the University of Texas Medical Branch at Galveston in 1998 found that 91 percent of Mossville residents suffered from health problems, including a high incidence of ear, nose, and throat illnesses, central nervous system disturbances, cardiovascular problems, and increased skin, digestive, immune, and endocrine disorders.

Calcasieu Parish is the site of a large number of companies that produce petroleum-based chemicals, chlorinated hydrocarbon solvents, and other organic chemicals. In 1998, the Agency for Toxic Substances and Disease Registry (ATSDR) tested for dioxin in the blood of 28 Mossville residents and reported elevated levels.

The existence of a cluster was not confirmed by the ATSDR, however they only focused on cancer rates in the community and did not look at other health problems, including those investigated by the University of Texas researchers. The illnesses identified in Mossville are not tracked in any disease surveillance program, highlighting how difficult it is to identify clusters of these types of diseases, since there is no existing information against which to compare.