

Stop disease clusters.
Protect people.
Control toxic chemicals.

Disease Clusters in Missouri

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.

Missouri has suffered from at least one confirmed disease cluster. 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: Herculaneum,
Jefferson County**
**DISEASE: Amyotrophic Lateral
Sclerosis (ALS)**

In 2007, the Missouri Department of Health and Senior Services (MDHSS) identified a cluster of Amyotrophic Lateral Sclerosis cases, a nervous system disorder also known as Lou Gehrig’s disease, around a lead smelter in Herculaneum. The MDHSS stated that the lead contamination in Herculaneum presented “a clear and present risk to public health”. MDHSS worked with the Missouri Department of Natural Resources on a settlement that resulted in the purchase of 160 homes by the company that operated the lead smelter due to lead contamination in 2002. The MDHSS reported that the lead smelter also produced pollutants such as zinc, lead, copper, chromium, and cadmium as part of the manufacturing process. Also, slag from the smelter has long been dumped in an enormous pile near the Mississippi River.



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