

Stop disease clusters.  
Protect people.  
Control toxic chemicals.

# Disease Clusters in Michigan

Ongoing investigations are occurring in the state

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.

Michigan has experienced at least one confirmed disease cluster spanning several different counties, and another is under investigation. 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: Midland, Saginaw, and Bay Counties

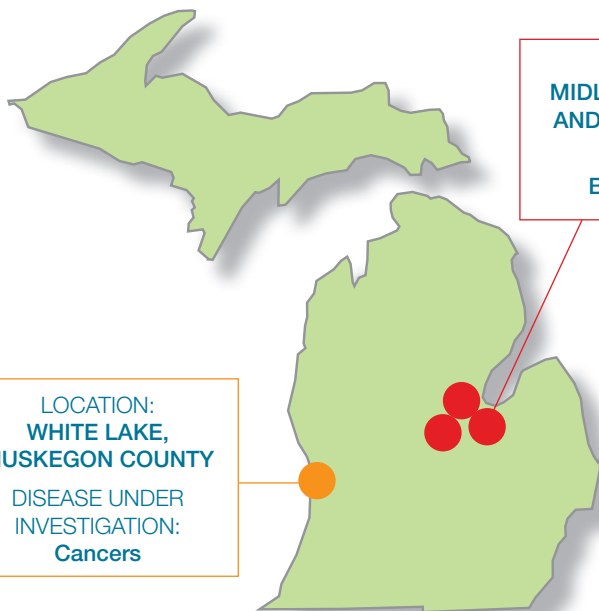
### DISEASE: Breast Cancer

Researchers found a cluster of breast cancer in Midland, Saginaw, and Bay counties between 1985 and 2002. High levels of dioxins and other contaminants in soil and higher-than average body burdens of dioxins in local residents, particularly those who lived in the region prior to 1980, have also been found in the city of Midland and the Tittabawassee and Saginaw River floodplains in Michigan. A 2008 study found increased breast cancer incidence was spatially associated with dioxin contamination. Researchers believed that the source of dioxins in the river came from industrial processes at the Dow Chemical Company Midland plant.

## LOCATION: White Lake, Muskegon County

### DISEASE UNDER INVESTIGATION: Cancers

Concerned residents are compiling information on the residential and occupational history of people with cancer in the White Lake area for review by the Muskegon County Health Department. Companies such as Hooker/Occidental Chemical, DuPont and the Whitehall Leather tannery have previously contaminated White Lake with heavy metals and volatile organic compounds.



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National Disease Clusters Alliance

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