Disease Clusters in Florida

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.

Florida 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.

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.
LOCATION: **Loxahatchee (Acreage), Palm Beach County**  
**DISEASE: Brain cancer**  
The Florida Department of Health has confirmed a pediatric brain cancer cluster in a rural community called The Acreage. A community group has counted 18 children with brain cancer and 3 children with brain cysts since 1996. Some residents have blamed Pratt & Whitney, the rocket and jet engine company located nearby, which has been responsible for leaks and spills of chemicals, such as solvents and pesticides on its 7,000 acres for the last 30 years.

LOCATION: **Immokalee, Collier County**  
**DISEASE: Birth defects**  
In 2004, the National Institute of Occupational and Safety and Health and state health officials in North Carolina and Florida identified three women employed by AgMart who gave birth to children with birth defects during a seven week period. All six parents worked on the same tomato fields in North Carolina and Florida. Exposure to pesticides was a suspected cause. In 2005, the North Carolina Department of Agriculture and Consumer Services alleged that Ag Mart had 369 pesticide violations. These violations included (1) the use of six pesticides classified by the Environmental Protection Agency as among the most dangerous to workers and (2) applying a dangerous pesticide three times more often than allowed by law.

LOCATION: **Tallevast, Manatee County**  
**DISEASE: Cancer**  
In 2008, the Agency for Toxic Substances and Disease Registry determined that prior long-term use of groundwater for drinking and other household purposes in Tallevast, Florida was a public health hazard. Residents who drank the most highly contaminated groundwater every day for 42 years were more at risk for developing kidney cancer, liver cancer, leukemia, and lymphoma. From 1962 to 1996, the American Beryllium Company manufactured machine parts in the community. During the manufacturing process, cancer-causing solvents such as trichloroethylene were improperly disposed of, resulting in groundwater contamination.