

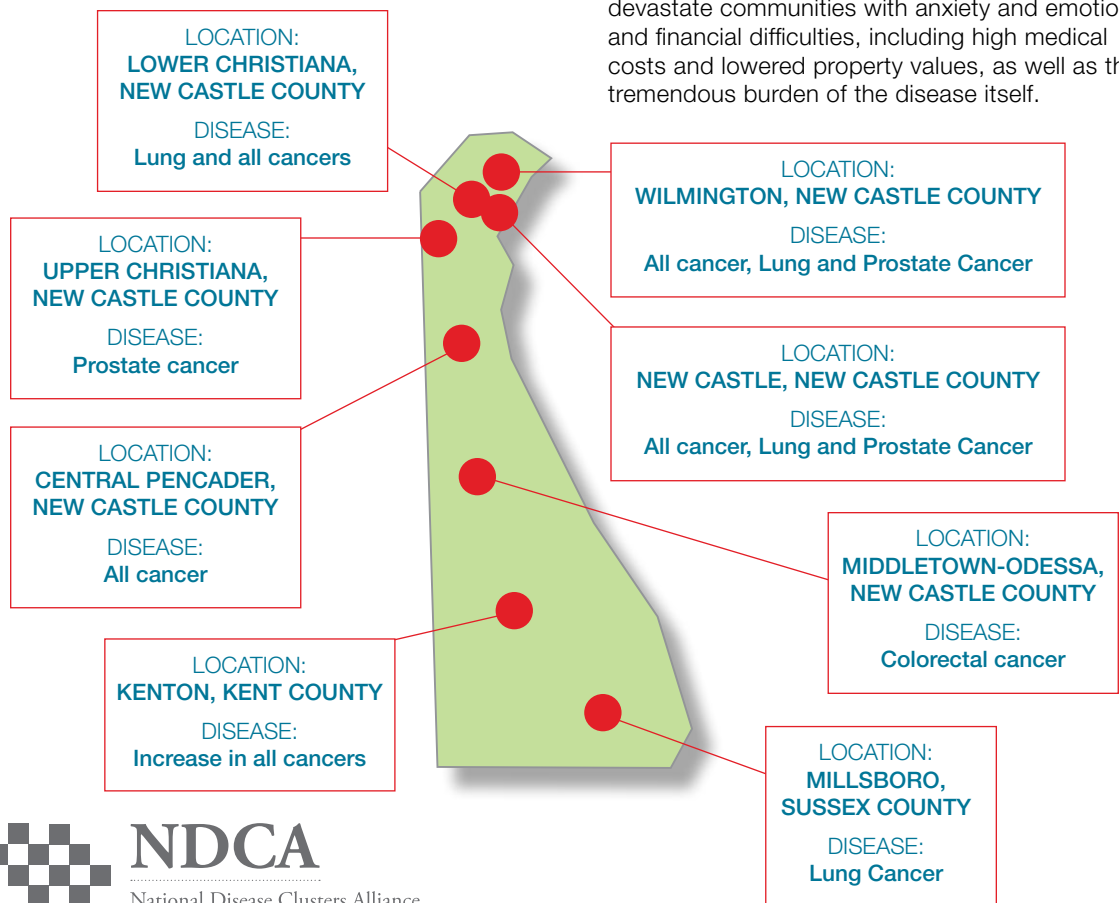
**Stop disease clusters.  
Protect people.  
Control toxic chemicals.**

# Disease Clusters in Delaware

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.

In 2008, the Delaware Department of Health and Social Services published a unique report which identified eight cancer clusters in the state. This was the result of a sub-county level analysis of cancer registry data from the years 2000 through 2004. The analysis was limited to four types of cancer and all cancer cases only. This process is unique in that Delaware is required to release publicly the information from its cancer registry and only one of the clusters was brought to the attention of the state by concerned residents. Although environmental contaminants are often suspected and sometimes implicated, in this instance the investigation did not attempt to determine the cause of the disease clusters. 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.



[www.nrdc.org](http://www.nrdc.org)



**NDCA**

National Disease Clusters Alliance

[www.clusteralliance.org](http://www.clusteralliance.org)

**LOCATION: Lower Christiana, New Castle County**

**DISEASE: Lung and all cancers**

State officials found that Lower Christiana had higher rates of all cancers and also identified a cluster of lung cancer with rates above the state average from 2000-2004. The state investigation did not include research into possible environmental causes of the cluster.

**LOCATION: Upper Christiana, New Castle County**

**DISEASE: Prostate cancer**

A cluster of prostate cancer in Upper Christiana was confirmed by state officials who found rates of this cancer were 45 percent higher than the state average from 2000 to 2004. State officials did not look for an environmental link to the increase in prostate cancer.

**LOCATION: Central Pencader, New Castle County**

**DISEASE: All cancer**

State officials found that Central Pencader had a higher rate of all types of cancer compared to the state average from 2000 to 2004. State health officials did not investigate any specific environmental link to the increase in cancer rates.

**LOCATION: Middletown-Odessa, New Castle County**

**DISEASE: Colorectal cancer**

State health officials found that there was a cluster of colorectal cancer from 2000 to 2004 in Middletown-Odessa where rates were 45 percent higher than the state average. The state investigation did not include research into possible environmental causes of the cluster.

**LOCATION: Wilmington, New Castle County**

**DISEASE: All cancer, lung and prostate cancer**

State officials reported that from 2000 to 2004 there were elevated rates of all cancer and, in particular, identified a cluster of lung and prostate cancer with rates in the area higher than the state average. The state investigation did not include research into possible environmental causes of the clusters.

**LOCATION: New Castle, New Castle County**

**DISEASE: All cancer, lung and prostate cancer**

From 2000 to 2004, state health officials discovered that New Castle had above average rates of all cancers and specifically identified clusters of lung and prostate cancer with rates higher than the state average. The state investigation did not include research into possible environmental causes of the clusters.

**LOCATION: Kenton, Kent County**

**DISEASE: All cancer**

The state health department found a higher rate of all types of cancer in Kenton from 2000 to 2004. The state investigation did not include research into possible environmental causes of the cluster.

**LOCATION: Millsboro, Sussex County**

**DISEASE: Lung Cancer**

State officials identified a cluster of lung cancer in Millsboro from 2000-2004. The state investigation did not include research into possible environmental causes of the clusters. However, the state investigation into possible disease clusters was prompted by local residents who were concerned about contamination at the nearby coal ash landfill operated by the Indian River Power Plant. Elevated levels of arsenic, chromium, and thallium in groundwater have been reported to be above federal primary drinking water standards. Arsenic is associated with increased risk of lung cancer.