Disease Clusters in Arkansas

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.

Arkansas 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: Prairie Grove, Washington County
DISEASE: Testicular cancer
In 2001, the Arkansas Department of Health identified a cluster of testicular cancer from 1997 to 2001; three of the cases were in 14-year-old boys. Though no cause was identified, the town of 2,500 people lies near a now-closed nuclear reactor, a low-level radioactive landfill, a poultry plant, and a manufacturer of poultry feed containing arsenic. Local residents were concerned that the poultry factories were contributing to the high rates of cancer and other health problems because arsenic-contaminated chicken manure was used as fertilizer and spread on fields beside schools and homes in Prairie Grove. In 2004, residents sued one of the poultry farms and the poultry feed manufacturer for spreading the contaminated manure throughout Prairie Grove. However, the court did not rule in favor of the residents and the true cause of the cluster has never been determined.