# **Counting and Calculating**

# **How Does Math Matter When You're Fighting Pollution?**

Steve Dickens

In the United States, we like to say we live in a free country. However, these days, laws that protect "freedom" are sometimes aimed more at protecting the freedom of big industries to pollute. Industries that discharge toxic substances don't have to prove that those substances are safe. If residents suspect a problem, we have to prove that the toxic substances are unsafe. In many communities, people are using data and statistics to make their case.

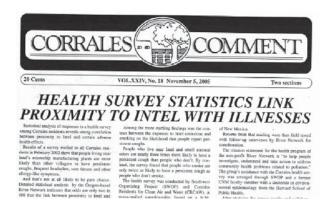
#### "A handful of crazies"

In the 1990s, residents in Corrales, NM, began to have symptoms like fainting, rashes, seizures, and irritations of the nose, throat and lungs. Then there were miscarriages and birth defects. Some people blamed the Intel plant located 100 yards uphill.

But Intel supporters wanted to ignore residents' concerns. The *Albuquerque Journal* quoted a state representative who said only a "handful of crazies" had complaints. So, Corrales Residents for Clean Air and Water reached out to River Network, a national environmental organization, and the Southwest Organizing Project, a regional community organizing group, for help. Together,

### So You Want to Conduct a Study?

Environmental organizations, public health schools, and local departments of health can be helpful resources. Before you start, check out "Is a Health Study the Answer for Your Community?" by Madeleine Scammell and Greg Howard. (Contact mks@bu.edu for a copy.) And before you start paying for air, soil, or water tests, talk to an environmental organization with experience in monitoring.



they designed and conducted two health surveys to show there were a number of real problems.

## **Data Supports Residents' Case**

The survey results clearly demonstrated two things: 1) over 55% of Corrales residents surveyed reported that they smelled obnoxious odors; and 2) those who lived close to Intel and reported smelling obnoxious odors had significantly more health problems than those lived farther away from Intel or did not smell obnoxious odors.

The study had to be carefully designed so that other factors like smoking, drinking, or a history of working around toxic chemicals did not affect the findings.

The data were presented in hearings set up to review Intel's air quality permit. In the end, Intel agreed to reduce their emissions.

The results of this research produced data that helped the community make its case. Sometimes survey results do not support a community group's case. Before starting a health study, make a careful plan and talk it through with others who have experience doing health surveys.

Steve Dickens is the Health and Environment Director at River Network <a href="www.rivernetwork.org">www.rivernetwork.org</a>.