

BOOK REVIEWS

S. Lewis, B. Keating, D. Russel: *Inconclusive by Design: Waste, Fraud and Abuse in Federal Environmental Research*, Environmental Health Network: Harvey, LA and National Toxics Campaign Fund: Boston, MA, May 1992.

Forty million Americans live in close proximity to one or more of the country's 32,645 hazardous waste sites identified by the EPA. Millions of Americans labor in work places that use or produce thousands of chemicals and other substances which lab tests have proved cause cancer in animals. In "the age of chemicals," roughly from the beginning of the Cold War to the present, the incidence of cancer in the U.S. has risen by 42 percent. These data would lead one to expect that the Center for Disease Control (CDC) and the Agency for Toxic Substance and Disease Registry (ATSDR) would pin down, in increasingly more precise ways, the exact connections between work and living environments saturated with chemicals and the incidence of cancer. As documented in the Environmental Health Network's and the National Toxic Campaign Fund's *Inconclusive by Design*, a devastating critique of CDC and ATSDR, the work of these two agencies has had the opposite result: they have taught us little more about environmental cancers today than we knew a decade or two ago.

This book demonstrates that the CDC and ATSDR, "instead of ensuring a margin of safety and recommending measures to end public exposures to toxics...have routinely funded and conducted studies of the effects of toxic pollution on public health which are *intentionally inconclusive*." In the hands of government officials and polluters, CDC/ATSDR studies have misled citizens into believing that further measures to prevent toxic exposures are unnecessary, in this way systematically violating the norms of good public health policy. *Inconclusive by Design* shows that taxpayer's money is wasted in "predictably meaningless studies" as a result of research design flaws. "Out of 108 studies by CDC following cancer clusters over 22 years, none revealed any clear cause." In 950 Health Assessment studies by ATSDR, the same result was obtained.

Many reasons are adduced in this valuable book to explain the near total ineffectiveness of the work of CDC and ATSDR in the field of

environmental cancer. Blood and urine tests are subcontracted to "agencies in a deceptive manner that most assuredly would not find contaminants present." CDC and ATSDR assessments are "often incomplete, and of limited usefulness. Many of the assessments were so weak that they did not even provide enough information to reasonably determine whether further study was merited." ATSDR failed to contact local residents and workers in the course of making its assessments. And when the studies did detect a health risk, ATSDR often failed to inform local residents.

Probing deeper, the authors of *Inconclusive by Design* show that the rules of statistical significance work poorly when sample populations are small. "Environmental epidemiology can work, but only where there are large exposed populations or tightly controlled laboratory experiments." But these latter conditions are rarely met. "The methodology used in this study," the authors write of one incident, "is not capable of either proving or disproving a causal relationship between any specific exposure and any disease." Added to poor methodology is the systematic dismissal of requests made by local doctors to study particular cases and the unresponsiveness toward communities with higher than expected cancer rates. The sickest populations in the targeted communities are not sufficiently involved or studied; testing techniques inappropriate to the type of exposure are often used; contracting out to researchers who are known to be biased against the hypothesized correlation between toxic pollution and disease is common; and studying the wrong types of illness is also common. These are typical practices, not exceptions to the rule.

Why the bad methodology, the indifference to local doctors and citizens, including victims, and, in general, the incredible resistance to linking environmental conditions and cancer? There seem to be two reasons. First, the function of CDC and ATSDR seems to be to reassure affected populations and to contain their worries, especially during times of environmental emergency. Symbolic politics stands in for real politics. CDC and ATSDR "feel as if public hysteria is the most feared thing, rather than the actual serious health effects....So they are always minimizing the effects," according to a senior staff scientist at Jackson Laboratory in Bar Harbor, Maine. Second, as the authors of this work write about ex-CDC Director, Dr. Houk: "[He] is less concerned with health and more concerned with reducing environmental compliance, costs to business such as paper mills and incinerators which produce dioxin as a byproduct of their operations." The work of CDC and ATSDR thus has the effect of calming the fears of potentially effected populations and keeping business costs low — exactly what

one would expect of a capitalist state that must fulfill the contradictory functions of political legitimation and capitalist accumulation.

The authors of *Inconclusive by Design* are free with their recommendations for reform. "Prudent public policy demands that a margin of safety be provided regarding potential health risks from exposures to hazardous waste sites." Universities and public health advocacy organizations should be doing the empirical studies, not the CDC or ATSDR themselves. A much larger emphasis should be placed on pollution prevention and especially those problems connected with "patterns of environmental health victimization, such as poverty and unemployment." Besides a more precautionary approach, action thresholds should be developed; the use of biological markers should be encouraged; studies which are inconclusive by design should be ended; CDC's environmental health role should be eliminated. Second and third opinions should be sought; public involvement should be more aggressively developed; and new rules for selecting health study contractors should be drawn up. Over a dozen reasonable recommendations for reform are made.

CDC and ATSDR have lost their credibility: communities are beginning to turn the agencies away, rather than permit them to conduct more studies assessing the extent of the contemporary health crisis posed by toxics. More communities have become aware of the sordid record of CDC and ATSDR, whose work is causing more not less harm to countless communities. ATSDR, for example, has no plans to revisit the vast majority of the 950 communities which it has studied in the past. "The communities may be condemned to live with the agency's sloppy and deceptive studies," write the compilers of *Inconclusive by Design*.

Thanks to the National Toxics Campaign Fund and the Environmental Health Network, which supported the study under review, the work of CDC and ATSDR is exposed for the sham that it is. One path and one path only can force the relevant government agencies to truly deal with environmental cancers and other diseases, according to the authors. This is political organizing and agitation, or the development of a social movement which casts a cold eye on both the real problems of public health and also the organization, methods, and purpose of CDC and ATSDR. It is impossible to underestimate the value of *Inconclusive by Design* in terms of stepping up the struggle for community and worker power over the conditions of life and work, especially with respect to the use and disposal of toxics. — Laura Corradi