

**Phantom Risk: Scientific Inference and the Law**  
K.R. Foster, D.E. Bernstein, P.W. Huber (Editors)  
MIT Press, Cambridge, MA, 1993; 457 pp.;  
US\$39.95 (Hardcover)

Phantom risk is defined in this book as cause-and-effect relationships whose very existence is unproven or unprovable. It deals basically with the problems of scientific ambiguity and the havoc this creates in a court of law. The chapters examine the scientific evidence behind several environmental health issues that aroused public controversy and litigation. The issues and contaminants discussed include the carcinogenic effects of low-intensity magnetic fields, asbestos and trauma; the toxicology and epidemiology of polychlorinated biphenyls (PCBs), trichloroethane, and dioxin; birth defects caused by bendectin and spermicides; miscarriages from the use of video display terminals; and the public health effects of radionuclide fallout from the Fernald plant (Ohio) and the Three Mile Island Nuclear Accident (Pennsylvania). The articles on misconceptions about environmental pollution and cancer (by B.N. Ames and L.S. Gold) and multiple chemical sensitivities (by M.I. Luster et al.) also deserve mention. The final

chapter discusses how the legal impacts and disputes about phantom risks can be reduced.

The main strength of the book is in focusing attention on the scientific ambiguity and the differences in 'expert' opinion in inferring cause-effect relationships in toxic tort litigation. It offers several useful suggestions on ways to improve the quality of scientific evidence (more probative and less prejudicial) that is presented in court. 'Phantom Risk' is very readable, reasonably priced and provides many useful insights on how the American legal system treats the scientific evidence. I strongly recommend it to any scientific expert who has been called upon to testify in a court of law.

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