



By Carolyn Raffensperger

## When The Law Of Tort Causes Harm

**P**resident Bush and Attorney General John Ashcroft have argued that they need military tribunals to prosecute terrorists. This suggests either that the criminal justice system isn't suited for a certain class of crimes or that it is broken.

The same argument can be made about toxic torts and many other environmental cases: the system is either unsuited for them or fundamentally broken. That's a severe charge, I realize. Over the course of this year, I will lay out why I believe this is indeed the case and propose solutions. The point of this inquiry will be on what it would take to make the courts a vital part of the infrastructure for protecting public health and the environment.

I mean to ask how the courts can promote justice, punish wrongdoing, and use their power to prevent future tortious behavior. I will use science as a way into these questions, since it is at the core of many of these cases, either directly in issues such as causation or indirectly because so much of environmental law is based on science. During the course of this investigation, I will examine issues from science masters to protective orders to the education of judges.

In this issue, I start with how the legal profession has come to handle toxic torts, and how the system is on the verge of enshrining a misguided approach. Eight years ago, the Supreme Court changed the way scientific evidence can be used in a trial in its decision in *Daubert v. Merrell Dow Pharmaceuticals*. The result of *Daubert*,

which makes the judge the gatekeeper for scientific evidence, has been to introduce certain procedural changes that have unduly slanted toxic tort rulings toward defendants.

Unfortunately, some of those changes are being codified by the American Law Institute into its restatement of the law of torts, the third revision of which is under way. As most lawyers know, ALI's restatements are used by lawyers and judges as a synthesis of the current state of the art. The recent draft of the *Restatement of the Law Third, Torts*, contains several misinterpretations of science having to do with the treatment of proof of causation in toxic substances cases. They are in Section 28, comment c.

Toxic torts require three elements to prove agent-disease causation: exposure, general causation, and specific causation. The two contentious issues in the *Restatement* are general and specific causation.

An example of misinterpretation is this claim from the draft: "When epidemiological evidence exists, it is, all other things being equal, the most probative evidence of general causation. When a substantial body of epidemiological evidence exists that tends to exonerate the alleged agent, other evidence of causation is far less persuasive."

Epidemiological studies are indeed probative when they show a positive effect. In those cases, they are helpful in proving general causation — that a substance can cause a disease in people — and the studies should be admissible. However, the reverse is not true. The absence of epidemiological evidence cannot be used as part of an argument to exonerate a suspected toxic chemical, including studies that show little or no effect. These are studies of *populations*, which are notoriously difficult and may or not pick up a disease caused by a chemical. They are not studies of individual humans or animals (*in vivo*) or on tissues in the lab (*in vitro*), where cause and effect are much more readily discernible.

Another mistake in the draft *Restatement* in the area of general causation is the following: "The vast majority of toxic agents cause a single disease or a series of biologically related diseases."

There is *no* evidence for this claim. In fact, increasingly, science points in the other direction: toxic agents — dioxin, vinyl chloride, and DDT are examples — can cause a variety of health problems. Lead, which is primarily considered a neurotoxin, can also injure red blood cells and the kidneys.

In addressing the problem of specific causation — causation in an individual, such as a plaintiff — the draft makes another error. It says, "Courts generally permit juries to infer specific causation from a group study when the study finds that exposure to the agent causes a doubling in the incidence of disease in a group exposed to the agent compared to a group that was not exposed."

The requirement that a study indicate a doubling of disease from the causative agent has no scientific basis. Epidemiologists do not ignore studies that show less than doubling. Such a study might be designed poorly, be based on too small a sample, or suffer from some other statistical problem. It does not prove that the disease was not caused by the agent. So, for instance, a plaintiff should be able to demonstrate specific causation if she was more likely than not to be one in three (rather than one out of two) who was affected.

The doubling rule is meant to give judges a bright line. However, establishing nonscientific bright lines to help judges presume they are incapable of making those decisions themselves.

The drafters of the *Restatement* have two choices. One would be to eliminate Section 28, comment c, altogether. Judges have tended not to make causation decisions on their own but, instead, have concentrated on assessing the admissibility of expert witnesses — a major problem area (it's the one addressed by *Daubert*) which this *Restatement* explicitly avoids. Or they can rewrite this comment and remedy the scientific errors that are being promulgated as legal rules. Bad science codified makes bad law.

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