Preserving Justice: Defending Toxic Tort Litigation

Anthony Roisman*          Martha Judy†
Daniel Stein‡

*Dartmouth College
†Vermont Law School
‡Vermont Law School

Copyright ©2004 by the authors. Fordham Environmental Law Review is produced by The Berkeley Electronic Press (bepress). http://ir.lawnet.fordham.edu/elr
INTRODUCTION

One of the most remarkable characteristics of the American experiment in democracy is its ability to blend so many disparate people and ideas to create a fairly cohesive, albeit extremely flexible, society. In most nations of the world people of such disparate backgrounds and ethnic origins rarely inhabit the same territory. When such a blending is attempted, violence frequently results. America has been there and done that, and the nation has survived. Perhaps even more remarkable than America's tolerance of cultural and ethnic differences, is its ability to tolerate coexistent ideas and philosophies which are diametrically opposed and constantly competing for control of the public process. Of all the opposing ideas that permeate American society, none are more fundamentally different and more basic to our way of life than the idea of free enterprise on the one hand and government controlled benefits and proscriptions on the other. Although the pendulum swings between these two ideas, the arc of the swing remains relatively small. Likewise, the civil justice system in general and toxic tort litigation in particular swings between these poles, following a similar arc.

The civil justice system and the practice of trial-by-jury enhance free enterprise. The American civil justice system provides an independent forum with a long history of impartiality, a jury comprised of peers of the parties to the litigation, rules of procedure that assure

---

1. Mr. Roisman is Research Fellow in the Environmental Studies Department at Dartmouth College and a partner with National Legal Scholars Law Firm. Professor Martha Judy is an Associate Professor at Vermont Law School and began this project as Director of the Clinic for Environmental Law and Policy at Vermont Law School. Mr. Stein is a third year law student at Vermont Law School who worked on this article through the Clinic for Environmental Law and Policy.
equal access to information and equal rights to present arguments, and the right of appeal. The civil justice system and the practice of trial-by-jury are established and guaranteed by the federal constitution and by the constitutions of every state.

The civil justice system can be seen as part of our society's mechanism for allocating the risk of doing business among those who stand to profit from an enterprise, those users who benefit from an enterprise and those who may suffer ill effects due to an enterprise. Unlike government regulation with its sweeping, one-size-fits-all proscriptions, the civil justice system is designed to weigh and resolve the facts and circumstances of each individual case. This case-by-case system provides an extraordinarily fair process for the resolution of issues which may not be peaceably resolved in any other way.

In societies without such a system, issues such as whether the defendant's negligence caused the death of the plaintiff's child might be settled through acts of personal vengeance or where the number of similarly aggrieved persons reaches sufficient proportions, by jihads, tribal wars, and insurrections. The most remarkable aspect of the free enterprise civil justice system in America is that those who turn to it in search of justice have chosen these peaceful, public and independent means, rather than violence, to redress the most severe injuries and the most outrageous injustices. Thus, it is quite surprising that those interests in America with the most to lose in the event that the public should turn to "vigilante justice" are in the forefront of efforts to severely curtail public access to the civil justice system. Abolishing or curtailing litigation opportunities does not reduce the number of persons who perceive they have been wronged, but only the number of options available to them in responding to that perceived wrong.

Nonetheless, there is a concerted effort, which has been building for at least twenty years, to limit access to the justice system for civil wrongs. Going under the misnomer of "tort reform," this effort seeks to restrict monetary recovery for damages, eliminate or severely restrict punitive damages, add costly pre-filing reviews for claims, increase the burden a plaintiff must carry in order to prevail in the case, and shift the cost of litigation to the losing party (essentially barring from court those without adequate resources to bear the risk of losing), to mention only a few of the "reforms" being proposed. One of the most popular targets of "tort reformists" is toxic tort litigation, where the severity of the injuries caused by exposure
to toxic substances and the large number of people who may be impacted by such exposures, often leads to very large recoveries.

Many companies that are or may someday be defendants in toxic tort litigation have mounted a substantial effort to "reform" the tort law to curtail such litigation. This is understandable, regardless of the merits of the effort, because toxic tort litigation significantly impacts corporate defendants. It causes substantial financial impacts when they lose and can create negative public perceptions which are difficult to change, even when they prevail.²

These efforts to curtail toxic tort litigation focus on the perceived ineffectiveness of the civil justice system in handling such cases. But is the system truly in need of reform? Since, at root, these attacks argue that toxic tort litigation ought to be significantly curtailed because it fails to achieve any socially important goals, the purpose of this article is to evaluate the effectiveness of toxic tort litigation in achieving two goals: compensation of persons injured by exposure to toxic substances and products, and creation of an economic incentive for producers to reduce the frequency and severity of such exposures. If toxic tort litigation is meeting these goals, its retention as a viable cause of action is essential. If not, it is indeed in need of reform.

In evaluating the current state of toxic tort litigation, it is important to compare it to other options and not merely to an unattainable ideal "perfect justice system". As Winston Churchill said, in commenting on the effectiveness of the democratic system of government: "[d]emocracy is the worst form of Government except all those other forms that have been tried . . . ."³ Absent a better system to address the claims of persons injured by involuntary exposure to toxic substances, the current "flawed" system should be repaired, not abandoned.

². As discussed below, although toxic tort litigation may have a substantial impact on those who are sued, just as the toxic exposures have a significant impact on those who are exposed, the number of toxic tort cases is actually quite small. In and of themselves, the cases do not appear to warrant the kind of sweeping overhauls which are proposed in the name of toxic tort "reform."

Before considering alternatives and probing the compensation and deterrence capabilities of the toxic tort system, this article begins with an overview, including a brief discussion of that ever popular first-year-of-law-school question, “what is a tort?” and particular to this article, “what is a toxic tort?” Common causes of action for toxic torts are also summarized. The next section explores impediments to plaintiffs’ recovery for injuries resulting from toxic torts, particularly those torts for which identification of the cause of the harm is difficult due to the latency period between exposure and manifestation of injury. In addition to this latency problem, medical causation, statutes of limitations, bankruptcy, transaction costs and the effects of recent Supreme Court cases addressing the role of scientific evidence in the court are also considered. The article then turns to the fundamental questions of whether the toxic tort litigation system provides appropriate compensation to deserving plaintiffs and whether it deters defendants (and potential defendants) from further actions that may cause harm. The role of the jury system in resolving disputes and the role of risk shifting are fundamental principals that underscore the answers to these two questions. The article concludes with some suggestions to improve the toxic tort litigation system.

I. TOXIC TORTS: AN OVERVIEW

A. What is a Toxic Tort?

In its simplest form a toxic tort is a wrongful injury caused by the toxic properties of a substance or product, but many commentators do not agree on any narrower definition or even whether the definition can be narrowed.4 Toxic torts may be a type of products liabil-

4. Compare J.D. LEE & BARRY LINDAHL, MODERN TORT LAW: LIABILITY AND LITIGATION § 28:1 (2d ed. 2002) (discussing “Hazardous Substance Litigation” as litigation involving “substances or mixtures of substances that present a danger to the public health or safety, including a substance that is toxic, corrosive, or flammable, or that is an irritant or that generates pressure through decomposition, heat or other means”), with LAWRENCE G. CETRULO, TOXIC TORTS LITIGATION GUIDE § 1.2 (1st ed. 2002) (claiming “there is no pressing need for a ‘dictionary’ definition. ‘Toxic torts’ is not a term
PRESERVING JUSTICE

ity, or may be its own subset of law distinctly different from all other types of traditional torts. For purposes of this article, a toxic tort is a case arising under the civil law process by which individuals, who have been exposed to a toxic substance or product which they believe has caused them injury which was not manifest until long after that exposure, seek redress for their injuries from those who are allegedly liable for causing their exposure.

A number of factors are common to the type of “toxic tort” cases discussed in this article. These factors include: 1) potentially large numbers of known or unknown plaintiffs, who have been 2) exposed to harmful substances or products 3) which create difficulty in establishing causation, because of 4) the latency between exposure to the substance and manifestation of adverse impacts, and 5) potentially numerous defendants, which are typically implicated in exposure in markedly different ways, thus 6) creating difficulty in assessing the relative culpability of the defendants, which can lead to 7) multiple, complex, and costly cases; 8) all of which highlights the need to balance society’s wish to protect and compensate victims with its wish to preserve business, investment and economic development.

Toxic tort cases and laws are a relatively new and unique subset of modern tort law that has developed over the last fifty plus years, of art, but is, rather, one of convenience. . . . Toxic torts has become a catch-all phrase loosely applied to any potential lawsuit involving a substance unfamiliar to the lay public which is suspected of causing some insidious disease process or which is thought to be potentially carcinogenic.

5. See LEE & LINDAHL, supra note 4, § 28:1. “Although hazardous substance litigation is a species of products liability, the cases present difficult and unusual problems of their own....” Id.

6. See CETRULO, supra note 4, § 1:4, at 1-10 (claiming “[m]ass torts, in general, and toxic torts, in particular, are ‘quite different’ from simple tort cases - cases with two or three parties suing over a readily-identifiable harm in a well defined area of the law in which neither product identification nor causation is likely to be at issue.”).


8. LEE & LINDAHL, supra note 4, § 28:3; see also, CETRULO, supra note 4, § 1:2, at 1-2.
alongside our rising use of toxic substances and products.\textsuperscript{9} Toxic tort litigation is a dynamic, evolving field of law\textsuperscript{10} which advances with the technological and scientific understanding of the health impacts of toxic substances and products.\textsuperscript{11} Some toxic tort cases can involve exposures to substances or products which have always been known to be hazardous or are defined as hazardous in statutes and regulated by the state and/or federal government. Other cases involve exposure to substances or products that were once believed safe for use or consumption but were ultimately found to cause injury through examination of the adverse health effects suffered by those exposed to the substances in the past.

Toxic tort cases can be brought in state and/or federal courts under different theories of liability and recovery.\textsuperscript{12} The relevant law in-

\textsuperscript{9} See Gen. Elec. Co. v. Joiner, 522 U.S. 136, 148 (1997) (Breyer, J., concurring) (stating that “modern life, including good health as well as economic well-being, depends upon the use of artificial or manufactured substances, such as chemicals.”); see also LEE \& LINDAHL, supra note 4, § 28:1 (stating that “[a]ccording to one source, there are approximately 5,000,000 organic chemicals and 500,000 inorganic substances used today, with another 10,000 new chemicals synthesized in the research labs each year, of which 1,000 enter commerce.”).

\textsuperscript{10} See CETRULO, supra note 4, at iii (claiming “[t]he evolving law of toxic torts has been and will continue to be at the forefront of the phenomenon of industry-wide litigation.”).

\textsuperscript{11} See Martin v. Reynolds Metals Co. 342 P.2d 790, 793 (Or. Sup. Ct. 1959). In recognizing the claim of trespass from invisible fluoride compounds released by defendant’s aluminum reduction plant, the court stated, “[i]t is quite possible that in an earlier day when science had not yet peered into the molecular and atomic world of small particles, the courts could not fit an invasion through unseen physical instrumentalities into the requirement that a trespass can result only from \textit{direct} invasion. But in the atomic age even the undereducated know the great and awful force contained in the atom and what it can do....” \textit{Id.}

\textsuperscript{12} See CETRULO, supra note 4, § 2:1, at 2-2 (claiming “The assertion of ‘non-traditional’ theories of liability and damages has resulted in profound changes in the practice of tort and warranty-based personal-injury litigation and has produced a large volume of case law with marked jurisdictional differences....”).
cludes state and federal common law principles, state statutory laws and some federal statutes. The variety of causes of action, legal principles, available damages, venue and jurisdictional issues make it impossible to find universal rules that can apply to all factual situations in every jurisdiction. An analysis of toxic torts is therefore inherently difficult due to the lack of nationwide uniformity in answering the question of what is, and what is not, a "toxic tort." This unpredictability is a natural outgrowth of our federal system, which allows each state to develop its own legal principles, subject to the minimal guarantees of the federal constitution.

B. Toxic Torts: Causes of Action

The typical toxic tort case involves one or more fairly traditional cause of action: negligence, nuisance, trespass and strict liability. While some cases may involve more novel theories including breach of warranty, failure to warn and design defect, these are much less common and rarely represent the core issues which drive the decision in the type of toxic tort cases we are examining in this article.

Negligence is the most commonly pled cause of action in toxic tort cases. Negligence claims arise from conduct which is alleged to "fall below the standard established by law for the protection of others against unreasonable risk of harm." In toxic tort cases where negligence is alleged, the plaintiff must show by a preponderance of the evidence the traditional negligence elements of 1) duty - estab-

13. See LEE & LINDAHL, supra note 4, at § 28:5.
15. See CETRULO, supra note 4, § 2:2, at 2-3.
16. Id.
17. Id.
lishing the relevant standard of care; 2) breach of duty; 3) proximate cause; and 4) damages. Because of the complex nature of toxic tort cases, the establishment of all the elements of negligence is often difficult for a plaintiff. Consequently, negligence is, in some ways, the traditional tort theory that plaintiffs least prefer. However, it is in the context of a negligence claim that the plaintiff is able to expose the defendant's conduct to the jury, often revealing a shocking lack of concern, on the part of the defendant, for the welfare of the community living closest to the source of the toxic release.

Negligence *per se* may apply when the claim is based on behavior that falls below the minimal standard of conduct required by statutes or regulations. A negligence *per se* claim must establish:

1) [t]he existence of a statute or ordinance; 2) [t]hat the statute or ordinance was intended to protect the class of persons which includes the party; 3) [t]hat the protection is directed toward the type of harm which has in fact occurred as a result of a violation; and 4) [t]hat the violation

---

18. *Id.*; see also Elam v. Alcolac Inc., 765 S.W.2d 42, 204 (Mo. Ct. App. 1988).

19. See *Elam*, 765 S.W.2d at 174 (claiming “thus, the logical model of a single definable cause and a direct, immediate and observable [and hence, determinate] effect that suffices to prove cause in fact in the traditional tort cause of action does not suit the toxic tort *explanandum*”).

20. See, e.g., *Potter v. Firestone Tire & Rubber Co.*, 863 P.2d 795 (Cal. 1993), a successful negligence case brought against Firestone Tire and Rubber Co., for improperly disposing of hazardous waste at a nearby landfill. Through the litigation plaintiffs, who were nearby residents of the landfill and exposed to contaminants through their drinking water, discovered that Firestone was the source of the contamination from hazardous waste that it disposed of at a nearby landfill. The landfill was neither adequately permitted nor designed for accepting such wastes and although Firestone knew of the condition and had made assurances to the disposal company that it would not dispose of toxic liquid wastes at the facility, the company disguised the waste in containers and sent them for disposal because the measure, it was thought, would save the company money.

of the ordinance or statute was a proximate cause of the injury complained of.” 22

In strict liability there is no need to prove fault of the defendant.23 A succinct description of strict liability can be found in the Restatement (Second) of Torts. Under the Restatement, strict liability can be imposed in two situations:24 abnormally dangerous activities25 and products liability.26 In either case, the imposition of strict liability makes it easier for a plaintiff to prove their case and be compensated for their injuries. This is especially true in toxic tort cases where the nature of the injuries and the hazardous properties of substances and products may be particularly suited for use of strict liability theories.

For the theory of strict liability for abnormally dangerous activities, the Restatement provides that, “[o]ne who carries on an abnormally dangerous activity is subject to liability for harm to the person, land or chattels of another resulting from the activity, although he

2004]

PRESERVING JUSTICE

199

22. Id.

23. Id. § 2:6; see, e.g., Sterling v. Velsicol Chem. Corp., 647 F. Supp. 303, 306 (W.D. Tenn. 1986). In Sterling the plaintiffs “argued Velsicol should be held responsible for damages, without regard to fault, on the theory of strict liability.” Id.

24. See CETRULO, supra note 4, at § 2:6 (claiming that “[t]he term ‘strict liability’ actually encompasses two separate tort theories.”).


26. See RESTATEMENT (THIRD) OF TORTS: PROD. LIAB. §§ 1, 2 (1998). The concept of strict products liability originally provided in section 402A of the Restatement (Second) of Torts has most recently changed and comments to the changes indicate that “‘strict products liability’ is a term of art that reflects the judgment that products liability is a discrete area of tort law which borrows from both negligence and warranty. See RESTATEMENT (SECOND) OF TORTS (1979). It is not fully congruent with classical tort or contract law. Rather than perpetuating confusion spawned by existing doctrinal categories, §§ 1 and 2 define the liability for each form of defect in terms directly addressing the various kinds of defects. As long as these functional criteria are met, courts may utilize the terminology of negligence, strict liability, or the implied warranty of merchantability, or simply define liability in the terms set forth in the black letter.” See RESTATEMENT (THIRD) OF TORTS: PROD. LIAB. § 1 cmt. a (1998).
has exercised the utmost care to prevent the harm."27 Additionally, "[t]his strict liability is limited to the kind of harm, the possibility of which makes the activity abnormally dangerous."28 To determine whether an activity is abnormally dangerous, section 520 provides guidance for its implementation. Section 520 provides several factors to consider, which include:

(a) existence of a high degree of risk of some harm to the person, land or chattels of others;
(b) likelihood that the harm that results from it will be great;
(c) inability to eliminate the risk by the exercise of reasonable care;
(d) extent to which the activity is not a matter of common usage;
(e) inappropriateness of the activity to the place where it is carried on; and
(f) extent to which its value to the community is outweighed by its dangerous attributes.29

Nuisance and trespass are causes of actions available to plaintiffs whose property has been damaged by hazardous substances. Such claims can include personal injury suffered as a result of the invasion of the property or property interest of the plaintiff. These are also strict liability torts and do not require a showing of negligence. A nuisance is a "harm, injury, inconvenience or annoyance."30 A nuisance claim alleges either interference with the use and enjoyment of one's property, a private nuisance,31 or interference with public rights under a public nuisance theory.32 In this way, nuisance torts are categorized into either public or private claims.33 Although the two claims are different, there can be substantial overlap when a

28. Id. § 519(2).
29. Id. § 520.
31. See DOMINICK VETRI, TORT LAW AND PRACTICE, § 9.02, at 902 (2nd ed. 2002).
32. See id.
33. See id.
public nuisance also interferes with a private right to use and enjoy one’s land.\(^\text{34}\)

Private nuisances are "a nontrespassory invasion of another’s interest in the private use and enjoyment of land."\(^\text{35}\) In a private nuisance action:

- liability [extends] only to those who have property rights and privileges in respect to the use and enjoyment of the land affected, including (a) possessors of the land, (b) owners of easements and profits in the land, and (c) owners of nonpossessory estates in the land that are detrimentally affected by interferences with its use and enjoyment.\(^\text{36}\)

Additionally, "[t]here is liability for a nuisance only to those to whom it causes significant harm, of a kind that would be suffered by a normal person in the community or by property in normal condition and used for a normal purpose."\(^\text{37}\)

Public nuisances are "an unreasonable interference with a right common to the general public."\(^\text{38}\) Some examples of public nuisances include instances where:

- the conduct involves a significant interference with the public health, the public safety, the public peace, the public comfort or the public convenience, or [where] the conduct is proscribed by a statute, ordinance or administrative regulation, or [where] the conduct is of a continuing nature or has produced a permanent or long-lasting effect, and, as the actor knows or has reason to know, has a significant effect upon the public right.\(^\text{39}\)

Depending on the circumstances of a particular case, public nuisances can be brought by either private citizens\(^\text{40}\) or by a state’s attorney general.\(^\text{41}\)

\(^{34}\) See id.
\(^{35}\) RESTATEMENT (SECOND) OF TORTS § 821D (1979).
\(^{36}\) Id. § 821E.
\(^{37}\) Id. § 821F.
\(^{38}\) Id. § 821B(1).
\(^{39}\) Id., at § 821B(2).
\(^{40}\) See CETRULO, supra note 4, at § 2:19. "A private action for public nuisance is appropriate if the plaintiff suffers special damages not suffered by the general public from the interference with the public right." Id.
Similar to, but distinctly different from nuisance, is the claim of trespass.\textsuperscript{42} Liability in trespass can occur:

irrespective of whether [a person] causes harm to any legally protected interest of the other, if [that person] intentionally (a) enters land in the possession of the other, or causes a thing or a third person to do so, or (b) remains on the land, or (c) fails to remove from the land a thing which he is under a duty to remove.\textsuperscript{43}

A trespass claim alleges "the interference with the exclusive right of possession of another."\textsuperscript{44}

Trespass is a form of strict liability because it does not require the elements of fault or willfulness.\textsuperscript{45} Trespass has evolved over the years to include situations where hazardous or noxious substances are found to have physically contacted another's real property.\textsuperscript{46} Trespass in the toxic torts world is significantly different from traditional trespass claims because the physical invasion is often invisible to the naked eye.\textsuperscript{47}

Irrespective of the nature of the cause of action alleged, at root all toxic tort cases require the same basic evidence. A toxic substance must be released from some product or property, the plaintiff and/or his property must be exposed to the toxic substance in some way, and that exposure must be a substantial cause of a present injury which plaintiff has suffered for which damages are recoverable. Of all these elements the two which have proven the most troublesome are exposure and causation.

\textsuperscript{41} See id. (stating "[p]ublic nuisance falls into the category of minor criminal offenses and normally can be prosecuted only by the government.").

\textsuperscript{42} At common law what is now called a nuisance was known as "trespass on the case."

\textsuperscript{43} \textsc{Restatement (Second) of Torts} § 158 (1979).

\textsuperscript{44} See Vetri, supra note 31, at § 9.01, at 899.

\textsuperscript{45} See id.


\textsuperscript{47} See id.
II. IMPEDIMENTS TO SUCCESSFUL TOXIC TORT LITIGATION

It is a wonder that the toxic tort system stirs such animosity among defendants when the hurdles plaintiffs must overcome to recover for their injuries are so significant. Exposure and causation are especially difficult to prove in the types of toxic torts discussed in this article. Among the reasons for this difficulty are the long latency periods between exposure and the manifestation of injury; lack of monitoring and health tracking that could yield data useful in proving causation; the Supreme Court’s recent rulings on the admissibility of expert testimony; and statutes of limitations.

There is often a significant time lag between toxic exposure and the time when symptoms become manifest. This latency period makes the exposure analysis inherently difficult because it necessarily requires reconstructing events over long periods of time. This reconstruction process is made more difficult by the fact that the persons responsible for the toxic releases often do not keep a record of their releases. Even today, when more comprehensive monitoring is required, the level of monitoring still falls far short of the kind of individualized exposure information often needed by plaintiffs in this kind of litigation. Rather, exposures are estimated using established techniques for reconstructing past exposures from current available information. This is an expensive process and, although the techniques for conducting such analyses are well accepted among engineers and government agencies, they are sometimes not so convincing to the factfinder.

Medical causation is even more difficult to prove. As noted at the outset of this article, the toxic tort cases under discussion are those where the adverse health outcome is not uniquely related to the toxic substance exposure. Thus, there are many possible causes of the adverse health effect experienced by the plaintiff, and it is difficult to directly implicate the toxic substance involved. A common defense is therefore, that the plaintiff has not demonstrated that the exposure was a cause, much less the cause, of the adverse health effect because there is no evidence that a greater majority of those exposed have experienced the adverse health effect than would have absent such exposure. This line of argument presents the ethical and evidentiary quandary of having to wait for a “statistically significant” number of people to show injury.

Responding to this need for statistical significance is made more difficult by the fact that many of the adverse health outcomes associated with exposure to toxic substances, such as auto-immune dis-
ease, neuro-toxic defects, immune system deficiencies and the like are not routinely tracked by health professionals. It is thus difficult to establish an incidence rate for these diseases, to which the incidence in the exposed population can be compared. Even for diseases for which records are kept, such as cancer or birth defects, the legal system presents problems. An inherent ethical problem exists in the legal system requirement that enough people to affect an epidemiological study suffer a severe injury from an exposure before any action can be taken to compensate victims of such exposure and to discourage the continued use of the toxic substance or product. Addressing this very concern, a federal court held:

Product liability law, especially as it relates to relatively new products or those with a relatively rare yet significant danger, would be rendered next to meaningless if a plaintiff could prove he was injured by a product only after a "statistically significant" number of other people were also injured. A civilized legal system does not require that much human sacrifice before it can intervene.48

Nonetheless, even where courts adopt this more enlightened reasoning, the task of marshaling the available scientific literature and demonstrating that it is more probable than not that an exposure to a toxic substance was one of the causes of a plaintiff's illness is both daunting and expensive.

In 1993 the Supreme Court raised yet another hurdle in the path of the toxic-tort plaintiff when it held in Daubert v. Merrell Dow49 that federal district court judges must act as "gatekeepers" of all scientific expert testimony and assure that the testimony is both relevant and scientifically reliable. The Court was quite explicit in its direction to federal judges that "[i]n a case involving scientific evidence, evidentiary reliability will be based upon scientific validity."50 This directive was reiterated a few years later in Kumho Tire v. Carmichael51 in which the Supreme Court not only extended the "gatekeeping" obligation to all expert opinions, not just scientific opinion,

50. Id. at 590 n.9 (emphasis in original).
but clearly instructed the federal judiciary not to create its own scientific or technical standards.

The objective of that [Daubert] requirement is to ensure the reliability and relevancy of expert testimony. It is to make certain that an expert, whether basing testimony upon professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field.\(^5\)

Notwithstanding these clear instructions, federal courts and some state courts, which have adopted the federal interpretation of the Daubert decision, have increasingly become embroiled in the scientific and technical merits of the expert opinions offered in toxic tort cases. Some have even openly declared that in their courtrooms, regardless of the standards in the relevant field of the testifying expert, the expert must develop his opinion using a methodology of which the court approves.\(^5\)

These departures from the proper scope of judicial scrutiny of expert opinion for purposes of admissibility have become so extreme and widespread that scientists and legal scholars have raised objections. A recent study by a group of distinguished and independent scientists concluded:

\[\text{In the aftermath of Daubert, not only are many legitimate scientists and their work being barred from the courtroom, but also plaintiffs are being denied their day in court, unfairly in our view. Much of the evidence that forms the basis of a plaintiff's case, from the safety of drugs and consumer products to whether pollution has caused harm, is based on science. In many cases, pre-}\]

\(^52\). \textit{Id.} at 152.

\(^53\). \textit{See} Magistrini v. One-Hour Martinizing, 180 F. Supp. 2d 584, at 604 n.25 (D. N.J. 2002), \textit{aff'd}, 2003 WL 21467223 (3d Cir. June 25, 2003), \textit{reh'g petition pending} (stating, "[t]here must be some objective way to put a value on what the study says or shows. To be sure, \textit{even if some sciences don't require it, this Court does,}" the District Court rejected the carefully formulated opinion of one of the nation's most distinguished and well-recognized experts on the hazards of perchloroethylene (a widely used dry-cleaning solvent) and objected to the fact that he did not create a table which ranked each relevant study.)) (emphasis added).
trial "Daubert hearings" exclude so much of the evidence upon which plaintiffs intend to rely that a given case cannot proceed. 54

Other leading legal and scientific scholars have reached similar conclusions. 55

Another impediment to plaintiff's success in a toxic tort suit is that in certain states, the statute of limitation runs from the date of exposure without any discovery rule. Application of 42 U.S.C. § 9658, which imposes a federal discovery rule on all cases involving releases of hazardous substances from a facility (all terms of art as defined in Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) 56) will solve this problem for those cases which meet the CERCLA definitions. 57 In cases that do not meet the CERCLA definitions, the plaintiff faces the burden of having to prove his case as a condition of filing it, and must scramble to assemble the evidence necessary to prove his case as the statute of limitations runs.

These hurdles in proving a toxic tort case have had at least two undesirable results. First, persons who have suffered less than catastrophic injuries are unlikely to be fairly compensated through such litigation because the cost of pursuing and proving their claim is likely to exceed the potential recovery. Thus, these victims rarely file claims. Second, in response to this problem, many potential toxic exposure personal injury cases are turned into indiscriminate


55. See, e.g. Jerome P. Kassirer & Joe S. Cecil, Inconsistency in Evidentiary Standards for Medical Testimony: Disorder in the Courts, 288 JAMA 1382, 1383-84 (2002) (finding that courts are creating standards for expert testimony which exceed the standards of the experts' professions and concluding "this practice is not faithful to the mandate of the Supreme Court . . . [and] [c]ourts are being misled if they think they are representing medical practice").


57. See O'Connor v. Boeing N. Am., 311 F.3d 1139 (9th Cir. 2002) (discussing the two-prong test for application of the discovery rule).
mass or class action cases where all plaintiffs are lumped together.\footnote{58} The result may be a large total settlement recovery, where those class members with the least injuries receive a high percentage of their potential claim—and often more than they legitimately deserve—and those with the most serious injuries receive a much smaller fraction of their real damages. This dilution of claims is inevitable once all persons exposed or potentially exposed are lumped into a single mass or class action. The defendants will never settle without getting a release from all claimants, even those with weak claims, and the court will not approve the settlement without an assurance that all claimants will get some compensation. Although the economic problems of a single injured person may be solved by filing a carefully crafted mass tort action representing only persons with significant provable injuries, the substantial economic costs of determining the viability of such a case remains an impediment to a large number of legitimate claims.

In sum, persons who have been injured by exposure to a toxic substance or product, but whose injury is not manifest until many years after the exposure, have substantial hurdles to overcome in order to prevail in court. It is perhaps a measure of the extent to which toxic exposures have occurred and the extent to which such claims could be made that, notwithstanding these considerable barriers, defendants continue to fight to make it even more difficult for the toxic tort plaintiff to prevail. Since that fight is premised on the argument that toxic tort litigation is misused by undeserving plaintiffs and, moreover, fails to effectively deter those whose activities may ex-

\footnote{58. A mass action is where numerous individual plaintiffs have their individual claims filed as part of a single case. A class action is where several people deemed representative of a much larger class of people, file suit on their behalf and on behalf of all others similarly situated. In the latter case there are several steps required to obtain court approval of the class action format but in practice class actions and mass actions may be pursued similarly. In both types of case a group of representative plaintiffs may be selected to have their cases pursued through discovery and trial with the results of the trial resolving some, but usually not all, of the issues in dispute. Most such cases never reach trial but are resolved either on pre-trial motions by defendants or, if that fails, by a global settlement for all plaintiffs.}
pose others to toxic substances or products, we turn now to those two questions.

III. TOXIC TORT LITIGATION AND VICTIM COMPENSATION

A. How Well does Toxic Tort Litigation Compensate Exposure Victims?

The difficulties built into toxic tort litigation also affect how well toxic tort litigation compensates victims. Plaintiffs face huge hurdles in proving exposure and causation when the toxics involved have long latency periods. The Supreme Court has made it more difficult for plaintiffs to get expert testimony in front of the fact-finder, and short statutes of limitations further complicate the plaintiff's task. Despite these impediments, toxic tort litigation fills some of the gaps in other compensation programs. Moreover, as is discussed in this section, lawsuits can better compensate victims of toxic exposure than the alternatives proposed by critics. As will be discussed in the following section, toxic tort litigation plays a fundamental role in preventing future harms. But before addressing these strengths of the toxic tort system, we address the concerns raised by both plaintiffs and defendants regarding inequities in damage awards, bankruptcy and transaction costs.

Critics of toxic tort litigation have focused on its perceived failure at providing equitable compensation to victims. The civil justice system does not compensate every deserving plaintiff, and due to differences between juries, particularly among different regions of the country, similar injuries may yield recoveries that vary dramatically. But these variations are inherent in any dispersed system such as ours, and also reflect the diversity in attitudes among different parts of the country.

Critics also note that, under the current system, those who sue first among a large group of injured persons sometimes get recoveries large enough to force the defendant companies into bankruptcy. When this happens subsequent plaintiffs, who sue later due to the later development of their injuries from prior exposures, may not get full compensation or, in some instances, any recovery at all. Bankruptcy plays a significant role in toxic tort litigation. Its role is so significant that some critics argue that "bankruptcy limits the ability
of any liability system to actually implement the damage awards required by [tort] theory."59 Filing for bankruptcy allows a company facing significant but also unresolved obligations from tort liability to limit that liability with certainty and finality.60

Critics claim that a closer look at bankruptcy reveals how it clashes with the tort system and how it may be the stronger of the two.61 Under Chapter 762 of the bankruptcy code, the debtor's assets are distributed equitably to existing creditors.63 A Chapter 7 filing results in the dissolution of the corporation and the discharge of all creditor claims, which includes tort claims both known and unknown at the time of bankruptcy.64

Current tort claimants suffer in Chapter 7 liquidation because in that process the assets of the firm are distributed to all creditors, but only plaintiffs who have already won judgments are included in this distribution. Further, even among the tort claimants included as creditors, full recovery of their claim is unlikely. Future tort claimants suffer even more in Chapter 7 liquidation because liquidation dissolves the business entity and completely distributes its assets, leaving nothing for future tort claimants to claim against. On the other hand, the tort victim may take some solace in knowing that the corporation that destroyed his life has itself been destroyed in bankruptcy.

60. CETRULO, supra note 4, at § 9:1.
61. See Lonnie T. Kishiyama, Countering Corporate Evasion of Environmental Obligations Through Bankruptcy, VT. J. OF THE ENVT. (2003), at http://www.vje.org/roscoe/roscoe03.html (claiming that "[t]he primary conflict between environmental laws, . . . and the Bankruptcy Act lies in their competing objectives." This principle is also the same in the context of tort liability and bankruptcy, where tort imposes liability which directly conflicts with "the goal of the Bankruptcy Act to allow debtors to reorganize for a "fresh start" by relieving them of liability." (citing James D. Barnette, The Treatment of Environmental Matters in Bankruptcy Cases, 11 BANK. DEV. J. 85, 87 (1994/1995)).
63. Id.
64. See CETRULO, supra note 4, at § 9:2.
Chapter 11 reorganization is a much different process with different goals from those of Chapter 7 liquidation. Under Chapter 11, also known as a "fresh start" or "clean slate," the goal is to help rehabilitate a business entity by allowing it to continue as a going concern, free from the pressures of pre-existing debt, while also treating creditors equitably. The goals may be different but, like Chapter 7, Chapter 11 also impedes victims' full recovery by making it more difficult to sue the reorganized entity. Claimants with a secured judgment may ultimately be awarded only a small portion of their damages after other creditors with higher priority under bankruptcy law have been paid.

The stake of future plaintiffs, those who did not file a claim prior to the company's bankruptcy, is very uncertain under Chapter 11. Nonetheless, a future claimant fares much better when seeking recovery from a Chapter 11 reorganized entity than under a Chapter 7 liquidation because there is at least a small chance of recovery of a small portion of their damages. Under Chapter 11, future claims can be handled in one of two ways. A bankruptcy judge may appoint a representative for future claims, and set aside some assets in a bankruptcy trust from which those plaintiffs can recover. Alternatively, the bankruptcy judge may permit future claims to be asserted directly against the reorganized entity. This latter option is not commonly taken, because it conflicts with the idea of capping liability to ensure the survival of the entity after reorganization.

The automatic stay mechanism under 11 U.S.C. § 362 affects toxic tort cases on several levels. Once invoked, the stay prevents tort cases from being brought or from proceeding further if they are active, and prevents collection on judgments already issued. The stay can benefit some toxic tort claimants because it prevents the distribution of the bankrupt corporation's assets to other creditors or previ-

66. See CETRULO, supra note 4, at § 9:4.
68. Id. at 400-05.
69. See CETRULO, supra note 4, at § 9:4.
ous judgment holders, preserving those assets so that plaintiffs who previously filed might be compensated.\textsuperscript{70}

Once a bankruptcy petition is filed and the automatic stay begins, the authority and jurisdiction of the bankruptcy court is expansive and often limits full recovery for toxic tort claimants. The bankruptcy court has the authority to relieve a debtor from tort liability by: 1) bringing all tort claims against the debtor, no matter where filed, under the jurisdiction of the bankruptcy court; 2) allowing the court to estimate the value of unproven claims; and 3) permitting the court to discharge all pending tort claims as part of the settlement of the bankrupt estate.\textsuperscript{71} Additional powers of the court which can impede recovery for toxic tort litigants are: “the power to appoint legal representatives for future claimants;\textsuperscript{72} the power to bar all punitive damages claims against the debtor’s estate;\textsuperscript{73} the power to enjoin future suits against other entities other than the debtor if those suits will impede the reorganization process;\textsuperscript{74} the power to dispose of property free and clear of third party interests and to channel claims to the

\begin{flushright}
\textsuperscript{71} See Cetrulo, supra note 4, at § 9:1 (citing 11 U.S.C. 502(a), 727(a) (1985)).
\textsuperscript{72} See Cetrulo, supra note 4, at § 9:3 (citing In re A.H. Robins Co., Inc., 880 F.2d 694 (4th Cir. 1989)).
\textsuperscript{73} Cetrulo, supra note 4, at § 9:3 (citing Matter of GAC Corp., 681 F.2d 1295 (11th Cir. 1982)).
\textsuperscript{74} Cetrulo, supra note 4, at § 9:3 (citing In re Johns-Manville Corp., 801 F.2d 60 (2nd Cir. 1986)).
\end{flushright}
proceeds of settlement funds,\textsuperscript{75} and the power to retain jurisdiction over funds set up in reorganization plans.\textsuperscript{76}

These broad powers of the bankruptcy court to control the outcomes of not only current but also future toxic tort claims make bankruptcy a significant concept in the recovery process for toxic tort injuries.

The claim is also made that toxic tort litigation is unable adequately to compensate all deserving victims because transaction costs – i.e. the cost of litigation – often exceed the recoveries. Thus, it is argued, since victims get so little of the money that such litigation generates, the system should be abandoned. This argument usually unfairly includes plaintiffs' attorneys' fees in the calculation of transaction costs. The cost of an attorney to pursue the plaintiffs' claim is no more a transaction cost than the cost of the medical treatment the plaintiff had to undergo. Both are expenses necessitated by the defendant's conduct. If the defendant were to offer to fairly resolve the problems caused by his release of toxic substances, the plaintiff would have no need to retain counsel to represent him in such negotiations.

In recent years some defendants, mindful of the fact that bad things can happen to good companies, have been pro-active in responding to toxic releases by immediately offering compensation to third parties who have been affected by the release of a toxic substance. While these offers have not included compensation for persons with latent injuries caused by toxic exposures, they have demonstrated that if the defendant steps forward early in the process its conduct can reduce the plaintiffs’ transaction costs. Thus, the real focus of transaction costs should be on the defendant who directly incurs costs in resisting the claims and thereby compels the plaintiffs to incur substantial costs.

Empirical evidence showing how well the toxic tort system is compensating victims is hard to come by. The findings of one RAND study, conducted in 1987, are frequently cited.\textsuperscript{77} The study presents calculations of litigation costs and compensation in the tort

\textsuperscript{75} Cetrulo, supra note 4, at § 9:3 (citing Kane v Johns-Manville Corp., 843 F2d 636 (2nd Cir. 1988)).

\textsuperscript{76} Cetrulo, supra note 4, at § 9:3 (citing MacArthur Co. v Johns-Manville Corp., 837 F.2d 89 (2d Cir. 1988)).

system in general and toxic tort cases in particular. Significantly, the author found it "difficult to make any judgment about these costs without having some comparable data for other systems of compensation and deterrence and without having better data on how well that tort system itself satisfies its compensation and deterrence function – none of which is currently available." In comparing the available data, the study found that "in asbestos worker injury litigation, plaintiffs receive about 37%" of total expenditures in net compensation, a low figure the study attributes to higher transaction costs associated with toxic tort cases. This statistic is frequently cited by critics of toxic tort litigation. What is ignored is that about half of the other 63 percent of transaction costs are attributable to the defense of the litigation by asbestos companies and their insurance carriers.

The history of asbestos litigation is a lesson in the costs of intransigence. In the early days of asbestos litigation, like the early days of tobacco litigation, defendants successfully resisted claims. Even after it became obvious to the world that both asbestos and tobacco claims had merit, defendants continued to resist the claims. That intransigence is the principal cause of the high transaction costs and not the toxic tort litigation system.

78. Id. at 492.
79. What is also ignored is that while the large number of asbestos law suits has become a lightning rod for critics of toxic torts (cases have grown from 20,000 in 1982 to 200,000 in 2003 according to the Statement of Dennis Archer, then President-Elect of the ABA during Congressional Hearings on March 5, 2003), the larger number of asbestos victims should be the focus of public policy concern. With the notable exception of tobacco, no single toxic substance has killed or maimed as many Americans as asbestos and unlike smokers, no one claims that asbestos victims voluntarily accepted the risks associated with asbestos exposure. Nonetheless, the political climate has been so poisoned by asbestos companies, insurance companies and tort "reformers" that this year Congress is likely to pass legislation to nationalize all asbestos litigation and create a single compensation system for all asbestos claims. It is hard to see how advocates of free enterprise can call this a victory and difficult to imagine a similar compensation system will be pressed for victims of all other toxic exposures. For those victims, tort "reform" with reduced recoveries and higher costs for the victims is the remedy of choice.
B. Remedies Suggested by the Critics

Critics are quick to point to problems with toxic tort litigation, even arguing the system is unfair to claimants. These arguments are, at best, disingenuous, since the "solutions" offered by these critics demonstrate no concern for the welfare of those who have legitimate claims, and most often seem designed to either restrict compensation to the victims or deprive their lawyers of their fairly negotiated fees. As already noted, there is no point in comparing the effectiveness of toxic tort litigation as a means to compensate victims against some hypothetical "perfect" system that no critic has yet to propose.

The reason critics are not proposing a "better" system is that most proposals argue simply for dismantling the current system. The United States does not have a single system for compensating victims, but combines several different methods, systems and programs to provide compensation. Those institutions include public and private insurance as well as tort liability in a patchwork of safety nets. This patchwork provides "a collection of different compensation programs, with gaps between and overlaps among them, leaving many victims uncompensated and some actually over-compensated."

If toxic tort liability is ripped from the safety net, what would this leave for victims of exposure to toxic substances? Absent the civil justice system, a victim of toxic exposure has very limited relief available. Rarely will it have been possible for the persons directly injured to carry insurance that could have protected them from the adverse effects of the exposure. Even health insurance, which does not cover many Americans who due to their economic condition end up living or working in places where toxic exposure is more likely.

81. Id.
82. See id. at 76.
83. See id. at 78.
84. See RICHARD HOFRICHTER, TOXIC STRUGGLES: THE THEORY AND PRACTICE OF ENVIRONMENTAL JUSTICE 2 (Richard Hofrichter ed., 2d ed. 2002) (claiming "[t]he uneven distribution of resources and development that characterizes U.S. society finds a strong parallel in the distribution of ecological hazards, particularly among under
does not fully compensate those who do carry it. At most, medical insurance only addresses medical costs and not lost wages, pain and suffering and the loss of quality of life which toxic exposures may cause. Unemployment compensation, disability compensation, workers’ compensation and similar worker-based risk sharing programs are woefully inadequate even for those who suffer an injury from a workplace exposure. The compensation levels are too low,85

represented, disenfranchised populations - African Americans, Latino Americans, Native Americans, Asian Americans, the poor, and women . . . . Not coincidentally, these same populations typically receive inadequate public-health and social services and live in economically underdeveloped areas with high unemployment.”).


There is no fixed definition of “compensation” systems. The term alludes generally to concepts for the replacement of tort liability in certain contexts with a statutory substitute. The pioneering model was workers’ compensation. Proposals along these lines usually share two characteristics: their criteria for compensability do not purport to require that culpability be found on the part of the injurer, although culpability may have limited secondary significance in the context of certain definitional issues; and the measure of damages permitted is less than that traditionally provided in tort, for example, by restrictions on the availability of damages for non-economic losses, or perhaps, for losses for which payments are available from collateral sources. The “compensation” notion is broad enough to cover both “liability” (or “third-person”) and “nonliability” (or “first-person”) systems, that is, both systems in which compensatory payments are made by or on behalf of injurers--for example, workers’ compensation – and those where the payments are made by others, such as a state agency, or by the injured person’s own insurer, as in the case of “no-fault” motoring insurance.

_Id._
often the benefits run out before the injured worker has recovered and in the case of workers’ compensation, the standard of proof required to qualify for compensation is often impossible to meet and inconsistent with sound scientific principles.

In summary, without the toxic tort system there is no universal health care program to cover victims’ medical costs. If the toxic exposure injury occurred someplace other than at work, there is no mechanism to compensate the victim for lost wages. Finally, without the toxic tort system, there is no relief for the drastic alteration in the life of the victim – disability, pain, loss of the normal joys of life and loss of companionship of loved ones.


Even though many employers and insurers insisted that benefit costs had reached crisis levels by the early 1990s, labor groups and other representatives of injured workers often argued that benefits remained insufficient to prevent destitution and despair for many workers. Both benefits and coverage have remained well below recommendations for minimum adequacy set unanimously by the 1972 National Commission, and progress toward those goals has slowed since the early 1980s. In 1992, maximum temporary disability benefits in about 40% of U.S. jurisdictions were less than 100% of the average weekly wage. In 1994, permanent total disability benefits were not actually permanent but were limited by duration or age in eleven states. A 1989 study by the RAND Institute for Civil Justice found that injured workers recovered a lower percentage of their accident costs than all accident victims (54.1%), and that workers’ compensation only compensated about 30% of the costs of long-term disabilities from work accidents. Injured workers often face denials and delays of apparently legitimate claims, high litigation costs, discrimination, and harassment by employers and coworkers.” (citations omitted.

Id.

IV. HOW WELL DOES TOXIC TORT LITIGATION DETER TOXIC TORTS?

Toxic tort litigation should be evaluated as to whether it successfully shifts all the costs generated by a substance or product back onto those who have benefited from its manufacture or use, and not with regard to whether the risk shifting is involuntary, the recovery is too high, or may result in the bankruptcy of the defendant. If the real cost of producing or using a substance or product is so high when properly allocated that no business can successfully survive, the solution is not to force innocent parties to continue to absorb those costs but to stop manufacturing or using the product and develop a safer alternative. How could a civilized society reach a different conclusion?

The civil justice system in general and toxic tort litigation in particular complement the free market by allocating the risk of various socially useful activities among those who create the risk and those who consume the goods or services which create the risk. To further explore this idea, it is important to first understand the concept of risk.

A common definition of risk is "the chance of injury, damage, or loss."\textsuperscript{88} Black's Law Dictionary defines risk in general as "the element of uncertainty in an undertaking. Risk may be moral, physical or economic."\textsuperscript{89} In modern society, a certain degree of risk is associated with nearly everything we do (even doing nothing has a certain degree of risk to it). It must be remembered that "risk is not entirely undesirable,"\textsuperscript{90} and that there are many ways to handle undesirable risks, including: insurance; "contracts that allocate risks regarding future price, supply, and safety of goods and services; ... diversify[ing] investments; ... spend[ing] money on safety; and ... engag[ing] in any number of other actions that manage risk."\textsuperscript{91}

Risk can also be understood as "the probability that a person will experience an adverse effect from some activity or exposure."[And]

\begin{flushright}
 \hfill 89. \textit{BLACK'S LAW DICTIONARY} (5th ed. 1979).
 \hfill 91. \textit{Id.}
\end{flushright}
risk assessment is the process of quantifying and evaluating risk."92 By quantifying and evaluating risk, a person or company can better decide what course of action to follow. A toxic substance risk assessment identifies an exposure hazard, the level of exposure likely to occur, and the level of risk of injury from the estimated exposure.93 Based on such an assessment, a company can take appropriate steps to reduce risk. But, safety precautions are normally taken "only to the extent that their benefits exceed the costs."94

Often there is a continuum of risk choices, such as allowable level of exposure to toxic chemicals. As long as the incremental benefits of increased safety exceed the incremental costs, more tightening of the regulation or the imposition of liability on the firm is desirable. Regulation or litigation is stringent, however, when firms are pushed to enact measures whose incremental costs outweigh incremental benefits."95

The common law has long recognized the principle of risk allocation and has, as suggested above, distinguished between those injured by a substance or product who gain benefit from it and those who do not. For example, warning labels in fulfillment of the manufacturer's duty to warn can insulate the manufacturer from suit by a user of the product who suffers injury as a result of one of the risks for which a warning has been given.96 But a third party, who neither

92. KENNETH R. FOSTER ET AL., PHANTOM RISK 2 (David Bernstein & Peter Huber eds. 1993).
93. Id. at 3.
95. Id. at 4-5.

A product is defective when, at the time of sale or distribution, it contains a manufacturing defect, is defective in design, or is defective because of inadequate instructions or warnings. A product: (c) ...is defective because of inadequate instructions or warnings when the foreseeable risks of harm posed by the product could have been reduced or avoided by the provision of reasonable instructions or warnings by the seller or other distributor, or a predecessor in the commercial chain of distribution, and the omission of the instructions or warnings renders the product not reasonably safe.
bought nor used the product but was injured by it, retains the right to sue the manufacturer for the injury, regardless of the warning.\textsuperscript{97}

It is widely believed that risk allocation decisions made by a jury are usually irrational and do not appropriately reallocate the cost of injurious substances or products. Many believe that juries cannot fully understand the complex issues that arise in many of these cases, that juries are generally biased against corporate defendants and towards the "little guy" plaintiffs, and that juries are swayed by the passions that persuasive plaintiff trial lawyers can arouse.

Criticisms such as these are almost always supported, not by credible data, but by the most questionable of anecdotal evidence. The annual "Stella Awards," named for the plaintiff in the McDonald's coffee scalding case and purportedly "honoring" the "the most frivo-

\textit{Id.}\textsuperscript{97.} \textit{See id.} § 2 cmt. i.

\textbf{Inadequate instructions or warnings.} Commercial product sellers must provide reasonable instructions and warnings about risks of injury posed by products. Instructions inform persons how to use and consume products safely. Warnings alert users and consumers to the existence and nature of product risks so that they can prevent harm either by appropriate conduct during use or consumption or by choosing not to use or consume. In most instances the instructions and warnings will originate with the manufacturer, but sellers down the chain of distribution must warn when doing so is feasible and reasonably necessary. In any event, sellers down the chain are liable if the instructions and warnings provided by predecessors in the chain are inadequate... . Depending on the circumstances, Subsection (c) may require that instructions and warnings be given not only to purchasers, users, and consumers, but also to others who a reasonable seller should know will be in a position to reduce or avoid the risk of harm. There is no general rule as to whether one supplying a product for the use of others through an intermediary has a duty to warn the ultimate product user directly or may rely on the intermediary to relay warnings. The standard is one of reasonableness in the circumstances. Among the factors to be considered are the gravity of the risks posed by the product, the likelihood that the intermediary will convey the information to the ultimate user, and the feasibility and effectiveness of giving a warning directly to the user. (emphasis added).

\textit{Id.}
luous successful lawsuits in the United States," exemplify how much of the enthusiasm for tort reform has been driven by anecdotes, many of which, like many of the "Stella Award" honorees, are mythical. Thus, when questions are raised about the alleged inability of juries to understand and decide issues of complex science, it is important to look to available data and avoid anecdotes. A wealth of empirical evidence supports the view that juries are excellent at resolving disputes, even complex disputes involving parties with widely disparate resources.

Risk shifting is an essential part of the free enterprise system and is common in contexts other than that of litigation. For example, insurance companies help people spread risks by charging premiums to certain groups, who then spread or share the risk of injury among


themselves. When manufacturers buy liability insurance, the cost of that insurance is added to the cost of the goods sold and thus passed on to those who benefit from the product or substance. But importantly, as discussed above, these same alternative mechanisms rarely provide full recovery to victims of toxic torts.

Insurance and other mechanisms for shifting risk are born of liability. Without liability there would be no need to shift risks. These mechanisms work reasonably well to soften and, in some cases, protect corporations from, liability. The problem is that without liability, as in most trust fund and other government-run programs to pay for injuries to innocent victims, these mechanisms fail to change the behavior of the producers of toxic substances or products. This is partly because the costs of these programs are known and are passed onto the consumer. Consequently these more predictable forms of shifting risk may fail to deter companies from continuing harmful practices.

If one group enjoys the benefits while another absorbs the risks it is unlikely that risk creators will see any need to reduce the risk, particularly if such risk reduction will diminish their benefit. Many years ago Amory Lovins, in discussing the risks of nuclear power, suggested that those who believed that it carried a risk of only one death in ten million people should be required to imagine that the one was their child. Even such a theoretically small risk would seem very large from this new perspective. This shows why it is extremely important to try to the fullest extent possible to place the risk of any conduct on the same person who benefits from the conduct so they can better decide (1) whether the benefits exceed the risks and (2) the extent to which taking steps to control the risks will be incrementally beneficial.

Thus, the issue in tort litigation is how can those who currently bear the risk of the defendant’s conduct shift their costs, and to whom should those costs be shifted? Should it be the person for whose benefit the toxic substance or product was produced, the person who manufactured and sold the product, the general public and/or any combination of these groups?

Through successful litigation, a toxic-exposure victim either compels the manufacturer or user of the toxic substance or product to pay the real economic cost of its production or use, or distributes that cost among those who benefit from its manufacture or use. The higher the awards and/or the more likely they are to be followed by subsequent awards, the more likely the defendants will be to try to
avoid further liability. In other words, risk shifting creates deter-
rence.

Even so, critics question whether litigation really deters the con-
duct which creates the toxic tort. They make several arguments. 
First, they claim, "the imposition of liability in the long-latency toxic 
tort cases that have increasingly become the focus of controversy 
within the tort liability system is unlikely to achieve the goals of cor-
rective justice and optimal deterrence." The critics claim that, 
because of this time lag, the actual wrongdoers are probably not 
around and are unlikely to be the ones who eventually pay the dam-
ages. If tort sanctions are frequently not assessed against the prin-
cipally negligent actor until after they are gone, the threat of liability 
is too weak to cause them to change their behavior. Thus, critics 
conclude, the latency and uncertainty associated with toxic tort cases 
causes companies to undervalue the potential tort claims against 
them, and therefore the threat of tort liability is not likely to deter 
unsafe behavior.

Despite its convincing ring, this argument does not hold up. The 
insurance companies who write general liability policies evidently 
do not subscribe to it. They recognize that the risk of future claims 
must be reflected in higher premiums; some have even begun includ-
ing "pollution exclusion" clauses in their policies to avoid paying for 
toxic tort liability. For the companies themselves, while current 
management may expect not to be held liable when their conduct 
produces toxic tort litigation twenty years in the future, boards of 
directors, shareholders, banks and others who have a longer view of 
the health of the corporation are unlikely to tolerate management 
creating financial time bombs by failing to be sensitive to the dan-
gers of using and disposing of toxic substances and products.

101. Kenneth S. Abraham & Lance Liebman, Private Insurance, 
Social Insurance, and Tort Reform: Toward a New Vision of Com-
pensation for Illness and Injury, 93 COLUM. L. REV. 75, 86-87 
(1993).
102. See id. at 75, 87.
103. PETER A. BELL & JEFFREY O'CONNELL, ACCIDENTAL JUSTICE: 
THE DILEMMAS OF TORT LAW 79 (Yale Univ. Press 1997).
104. See Richard B. Stewart, Crisis In Tort Law? The Institutional 
Perspective, 54 UNIV. CHI. L. REV. 184, 193 (1987) (stating in the 
context of discussing workers' comp that "[e]mployers have strong 
incentives to manage workplace practices so as to reduce workers'
addition, due diligence reviews, conducted as part of the pre-purchase process for a corporation, routinely look at potential liability. It is unlikely that a corporation's management would knowingly create a problem that could torpedo any eventual sale of the company by ignoring future tort liability their current conduct might be creating. In recent years better defense lawyers have begun to counsel their clients on ways to select less dangerous chemicals and to more safely handle and dispose of these chemicals. Government regulations, many born out of toxic tort crises like Love Canal, also create incentives for safer conduct.

A second argument says that because insurance spreads the risk among many companies and puts a fixed and predictable cost on the consequences of negligent handling of toxic substances and products, the threat of toxic tort litigation is an empty one, creating no incentive for potential defendants to alter their behavior. However, even these critics recognize that roughly one third of the commercial market is self-insured, a fact which raises doubts as to whether liability insurance actually undermines the deterrent effect of toxic tort litigation, since self-insured companies are more likely to be risk-averse than those insured through commercial plans. Moreover, those companies with commercial insurance certainly have incentives to try to improve safety and thereby lower their premiums. Finally, insurance companies have a long history, in areas such as fire insurance and increasingly in the area of use and disposal of toxics, of working with their potential clients to make sure they meet certain standards of conduct before writing insurance to cover certain liabilities.

contribution to risk. The riskier the job, the more an employer must pay for workers' compensation liability insurance, and the higher the wage he must offer to attract workers.

105. Interviews and information from a few distinguished defense lawyers, see infra note 120, are the basis for these observations. See the conclusion infra for a further discussion.


107. BELL & O'CONNEL, supra note 103, at 78.

108. Id. at 80.

109. Id.
V. SOME POSSIBLE ALTERATIONS TO TOXIC TORT LITIGATION THAT PRESERVE ITS GOALS

Although we find no persuasive argument that toxic tort litigation should be limited, or access to the litigation option for toxic-exposure victims should be narrowed, there are problems with the current system. Some problems, like the difficulty of proving an exposure alleged to have occurred at a time when no adequate monitoring existed and the difficulty of proving causation, are the result of extra-legal factors. Other problems, like the prevalence of frivolous lawsuits and high transaction costs, arise within the legal system. What follows is a discussion of some possible solutions to these problems.

A. Difficulty of Proving Exposure and Causation

If the law required companies that use and dispose of toxics to conduct comprehensive monitoring of all individuals who might be exposed to such toxins through accidental or planned releases, at the very least future litigation based on exposures after implementation of such a law would not have to rely upon expensive computerized reconstructions of toxic exposures. Similarly, if the law mandated that companies that manufacture, use and/or dispose of toxics create a fund to be used by independent scientists, such as the Environmental Protection Agency, National Academy of Sciences, the National Institutes of Health, the Agency for Toxic Substances Disease Registry and the National Institute for Occupational Safety and Health, to conduct comprehensive retrospective exposure analyses and epidemiologic studies of all the populations which have been exposed, the doubt over who was exposed and which diseases were caused by such exposure would be substantially reduced.

Changes could be made to the tort litigation system that could make it easier for exposure victims to prove their case. Thus, for example, the law could say that anyone exposed to a toxic substance or product at a level exceeding some Environmental Protection Agency baseline,110 whose subsequent health problem has been found, in any published, peer-reviewed study, to have a higher incidence among those exposed to such substance, is presumed to have

110. For example, the level that the Agency has set for allowable trichlorethylene contamination in drinking water, 5 parts per billion.
suffered that adverse health effect as a result of such exposure. A defendant could then attempt to rebut that presumption with whatever scientific evidence it could muster and the jury would decide whether the defendant overcame the presumption. Another approach could be to alter the legal standard for causation to be no more stringent than the standard of scientific proof of safety of the substance or product in force at the time of the original manufacture, use, disposal or release of the toxic product or substance. This would eliminate the need for evidence with the high level of scientific certainty that courts often now demand in toxic tort cases.

Easing the plaintiff’s burden in toxic tort litigation might have the beneficial result of increasing the deterrent effect of the litigation threat. The more likely a defendant is to lose such a case and the larger the likely recovery from such litigation, the more incentive companies will have to act to avoid such litigation. Such a policy might over-deter. However, if the choice is between under-deterrence and more toxic tort injuries on the one hand, and over-deterrence and a margin of safety on the other, a strong argument could be made in favor of the latter since there is no real social utility to spreading the risk of any activity to others beyond those who directly benefit from that activity. Over-deterrence would keep the risk where it belongs.

It is important to note that, for such sweeping changes to be made, our society would have to first make a policy decision. We would have to decide that a looser system, that may mistakenly compensate some whose injuries were not caused by toxic exposure, is better than a system so “tight” as to risk denying compensation to some who deserve it but have difficulty proving their cases.

B. Bankruptcy

Critics argue that current bankruptcy law impedes the full compensation of plaintiffs severely enough to justify an overhaul of toxic tort litigation. But surely it would be more appropriate, if the problem is as serious as some critics claim, to overhaul the bankruptcy laws to give greater priority to persons exposed to toxic substances and other innocent victims of corporate misconduct, since it is likely that that misconduct contributed to the corporate profits that in turn attracted the business creditors whose interests are currently given priority. Such a shift in priority would create a substantial incentive among those creditors to investigate the toxic substance use, handling and disposal practices of a company before risking their
money. In addition, if the corporation is going to pursue the less draconian form of bankruptcy offered by Chapter 11, addressing the claims of past and future victims of its corporate misdeeds is arguably a fair price that the company should have to pay for corporate survival. If it cannot pay that price, then Chapter 7 provides a process which at least assures the innocent victims that the wrong-doer paid the ultimate price for its actions.

Note that not just exposure victims, but shareholders, business creditors and others who have participated in the business are also less than fully compensated when a toxic-tort defendant company chooses or is forced into bankruptcy. The shareholders and business creditors often face the loss of at least some and sometimes all of their investment. No one suggests that this is a reason to overhaul the rules for investing in corporations, loaning them money or selling them goods or service on credit. It may, however, be yet another indication that the toxic-tort litigation system does need reform.

C. Frivolous Claims

Critics complain that many toxic tort suits are essentially frivolous. These cases, they argue, require substantial expenditure of resources before they can be disposed of by summary judgment. Frivolous claims thus drive up the cost of litigation for both sides. One oft-proposed solution would be to require a plaintiff to demonstrate, as a precondition to proceeding with the lawsuit, that he has a good faith basis for his claim. Such an approach might be acceptable if modified as follows.

First, the plaintiff should not be required to prove anything which depends to any substantial extent on information to which plaintiff does not have access. Thus, if the release of the toxic substance is known to have occurred but the level of that release is knowable only by examining the operating records of defendant’s facility, the plaintiff should not be required to produce that information in order to be able to pursue his claim.

Second, once the plaintiff meets an appropriate burden of production, the defendant should have to produce similar evidence to support the bases asserted in its answer to the complaint, including its affirmative defenses, or be prohibited from defending the litigation, subject to the same caveat that it cannot be expected to prove anything which is uniquely within the knowledge of the plaintiff.

Third, the problem of the statute of limitations will have to be addressed. As described above, in a few states, the statute of limitation
runs from the date of exposure without any discovery rule. Application of 42 U.S.C. § 9658, which imposes a federal discovery rule on all cases involving releases of hazardous substances from a facility (all terms of art as defined in CERCLA\textsuperscript{111}) will solve this problem for those cases which meet the CERCLA definition and will effectively preempt more conservative state laws, including less liberal state discovery rules.\textsuperscript{112} However, even for cases that meet the CERCLA definition and certainly for others, it would be wrong to both require that plaintiffs be able to prove their case as a condition of filing it and at the same time allow the statute of limitations to run while the plaintiffs scramble to assemble the evidence necessary to do so. This dilemma was recognized by the United States Court of Appeals for the Ninth Circuit in a recent decision where it held:

> we reject an interpretation of the federal discovery rule that would commence limitations periods upon mere suspicion of the elements of a claim. Under the circumstances presented here, such a standard would result in 'the filing of preventative and often unnecessary claims, lodged simply to forestall the running of the statute of limitations.' McGraw v. United States, 281 F.3d 997, 1003 (9th Cir. 2002), amended by 298 F.3d 754 (9th Cir. 2002).\textsuperscript{113}

One solution would be to allow a plaintiff to file a bare-bones complaint that would toll the statute of limitations but would impose no discovery or other obligations on the defendant until plaintiff had met her burden of production. This could also be negotiated between plaintiff and defendant, with defendant waiving the statute of limitations in exchange for a commitment from plaintiff to produce its prima facie evidence on the key issue, for court review, prior to pursuing the litigation.

Several proposals have been advanced to address the high transaction costs of toxic tort litigation. Victims of toxic torts could certainly be better compensated at lower transaction costs if we were prepared to create a compensation system to award damages on the

\textsuperscript{111} 42 U.S.C. § 9601 (1980).
\textsuperscript{112} See O'Connor v. Boeing N. Amer., 311 F.3d 1139, 1149 (9th Cir. 2002) (finding that the Federal Discovery Rule, 42 U.S.C. § 9658, preempted California's discovery rule).
\textsuperscript{113} Id. at 1148 (quoting McGraw v. United States, 281 F.3d 997, 1003 (9th Cir. 2002), amended by 298 F.3d 754 (9th Cir. 2002)).
basis of exposure and injuries linked to such exposure, recognizing all medical costs, lost wages and (using the record of jury verdicts over the years) critical intangibles such as pain and suffering and loss of quality life. Such a "trust fund" proposal has been put forward in Congress with regard to asbestos litigation and has some support from members of both the defense and plaintiffs' bar.\textsuperscript{114} However, this willingness of defendants and plaintiffs to come together on the asbestos issue does not represent widespread support for an alternative to toxic tort litigation in general. Asbestos litigation is and always has been \textit{sui generis} given the massive number of plaintiffs and potential plaintiffs, the huge number of companies that have been implicated and the decades of non-stop civil warfare that has sapped the will-to-persevere of both plaintiffs and defendants. Still, if such a system were implemented for other toxic tort claims, attorneys' fees on both sides could be substantially reduced resulting in greater compensation of plaintiffs.

Such a trust fund compensation scheme would have to include major improvements over current workers' compensation systems, black lung programs and uranium miner compensation programs\textsuperscript{115} which have proven to be cumbersome, costly to administer, stingy towards plaintiffs and burdened by many of the same problems of proving exposure and causation as exist in current toxic tort litiga-


Even more importantly, as described above, most trust fund compensation systems lack the deterrence and risk-shifting components of litigation. These mechanisms treat all defendants similarly, in that "good actors" usually pay the same taxes or fees into these funds as the "bad actors." This means that fewer potential defendants may opt to be "good actors" and pay for precautions not otherwise required.  

D. Transaction Costs

Transaction costs are the unavoidable consequence of the ferocious litigation that defendants undertake in most toxic tort cases. Some of the controversy is inherent in the issues that surround toxic torts. Reasonable minds can, and do, differ on issues of exposure and causation. But, the controversies go far beyond those core issues, and consume millions of dollars of legal time and expert witnesses. Defendants have spent several millions of dollars in "goodwill" advertising to soften up the jury pool for an anticipated trial.  

It is not unusual for every possible legal strategy to be used by the defense either in the hopes that one might succeed or, at a minimum, that plaintiffs will lose their passion for the fight and be willing to settle for much less than their original demands. These "take no prisoners"

---

116. See Smothers v. Gresham Transfer, Inc., 23 P.3d 333 (Or. 2001). In order to recover under Oregon's workers' compensation law, a worker had to prove that exposure to a toxic substance at work was the "major contributing cause" of his injury. Id. at 362. The Oregon Supreme Court lifted the bar against civil litigation for workers who were denied recovery on that basis. Id. The Oregon legislature has now codified this principle. See OR. REV. STAT. 656.019 (2001).

117. One way to ameliorate this problem would be to base the premiums paid into the fund on the record of compensation paid as a result of the releases from the company. Thus, a company whose releases caused payments to be made would have to pay a much larger premium than other companies. This free market incentive should also be considered in setting premiums for medical malpractice liability and other liability coverage.

tactics make toxic tort litigation much more expensive and risky for plaintiffs and their counsel, thus requiring plaintiffs' counsel to keep their fees high\textsuperscript{119} to compensate them for the enormous risks involved in such litigation. If the defense were more measured, plaintiffs could reasonably expect that their attorneys' fees could at least be adjusted based on how early in the litigation the case were resolved.

If defense attorneys worked on a contingent basis (as do the plaintiff's attorneys), receiving a percentage of the money they saved their client as compared to their initial estimate of the real value of the plaintiffs' case, the increased incentives for settlement of these cases at a much earlier stage and at a much more equitable amount would reduce the overall transaction costs significantly, resulting in higher recoveries for the victims. A defendant with a realistic assessment of the plaintiffs' case, freed of the false slogans about all toxic tort claims being bogus, can reduce transaction costs enormously by entering into early and serious settlement discussions. Absent that unlikely revolution, transaction costs will remain high.

VI. CONCLUSION

As part of the preparation of this article we solicited the views of a number of legal practitioners representing plaintiffs, defendants and insurance companies. While the effort was decidedly un-scientific we were hopeful that by choosing prominent lawyers in toxic tort litigation we would at least get a flavor for the prevailing views. Regrettably only four lawyers responded, all defense counsel. However, what they lacked in numbers was more than made up for by their quality.\textsuperscript{120} Each of the four has extensive experience with toxic

\textsuperscript{119} Fees are usually at least 33 1/3 percent and sometimes 40 percent of any recovery.

\textsuperscript{120} The four lawyers who responded to our survey are
1) Peter Hsiao, Morrison and Foerster LLP, Los Angeles.
2) James A. Bruen, Farella Braun & Martel LLP, San Francisco.
3) Victor Schwartz, Shook, Hardy & Bacon LLP, Washington, DC.
4) Chris Buckley, Gibson Dunn & Crutcher, Washington DC.
tort litigation. While we have sought to integrate their ideas and concerns in this article they have not reviewed the article nor do they necessarily agree with any views expressed herein.

It is apparent that social scientists have much to do if we as a society are to properly evaluate the toxic tort system in particular and the civil justice system in general. Regrettably, much change has already occurred and more is about to occur in the civil justice system without the benefit of the hard facts that social scientists could gather. To take one example, how can we move ahead to limit damage awards as a “solution” to the so-called medical malpractice crisis when there is no reliable evidence that 1) there is a crisis; 2) that large damage awards are in any way responsible for any crisis that might exist; or 3) that the legislative proposals offered are the best way to actually reduce malpractice insurance premiums?

If the standards adopted by the United States Supreme Court in Daubert were applied to the “evidence” offered in the debate on civil justice reform, all such “evidence” would be excluded as scientifically unreliable. Studies could be undertaken of all the issues discussed in this article and many others, and those studies, not the anecdote of the day, could form the basis for reasoned decision-making. However, there is no indication that such a rational approach will be taken and every reason to believe the civil justice system, like the political process, will be auctioned off to the highest bidder. When the evidence of the gross error in shutting the courthouse door to legitimate claimants becomes manifest, it will be too late to do anything about it. Hopefully it is not too late to prevent the error.