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**Harms from Exposure to Toxic Substances:
The Limits of Liability Law**

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Harms from Exposure to Toxic Substances: The Limits of Liability Law

Robert L. Rabin*

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I. INTRODUCTION

In the early 1980s, there was great optimism about the prospects for a dawning era of toxic harms litigation, arising out of a heightened sensitivity to public health and safety concerns. This new sensitivity had been manifested in the preceding decade through a whirlwind of political activity, highlighted by such landmark Congressional legislation as the Clean Air Act, the Federal Water Pollution Control Act, and the Occupational Safety and Health Act, and by the establishment of the Environmental Protection Agency.¹ Along parallel lines, a singularly proactive judicial framework for strict products liability emerged in the mid-1960s from a series of California Supreme Court cases and the promulgation of the Restatement (Second) of Torts, section 402A.² To some, the stage seemed set for ushering in a new era.

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1. See Robert L. Rabin, *Federal Regulation in Historical Perspective*, 38 STAN. L. REV. 1189, 1278-95 (1986).

2. RESTATEMENT (SECOND) OF TORTS § 402A (1965); see also KENNETH S. ABRAHAM, *THE LIABILITY CENTURY: INSURANCE AND TORT LAW FROM THE PROGRESSIVE ERA TO 9/11*, at 140-49 (2008).

In this brief overview, I will begin by highlighting some of the key early developments in the toxic tort domain and the contemporaneous critical literature in the 1980s.³ In particular, I will focus on the singular types of claims that were pursued—such as emotional distress (cancerphobia), probabilistic recovery for future harm, and medical monitoring—and the contemporaneous efforts to aggregate claims by reference to class actions. I will then offer some thoughts on the mixed success realized in the ensuing years, focusing on the limitations imposed on the new types of claims by the institutional structure of tort law, but at the same time noting the expansive themes in more traditional types of claims—such as duty to warn—as well as in aggregation strategies of a less formal character.⁴ In concluding, I will briefly address the question of comparative institutional competence: Do more conventional regulatory strategies for controlling risks associated with toxic exposures offer greater promise as policy options?⁵

II. 1980S: OUTSIZED EXPECTATIONS?

As the magnitude of the public health effects generated by asbestos exposure became evident, the courts struggled to keep pace with the claims for victim compensation. As early as 1973, a widely-noted decision by the Fifth Circuit Court of Appeals affirming an asbestos plaintiff's award, *Borel v. Fibreboard Paper Products Corp.*,⁶ relied on the Restatement (Second) of Torts, section 402A as a touchstone to define a manufacturer's responsibility to warn about product risks in very expansive terms.⁷ To the *Borel* court, a product manufacturer was to be held "to the knowledge and skill of an expert."⁸ The manufacturer's duty was to test, inspect, and keep current—to research and experiment "commensurate with the dangers involved."⁹

Borel cannot, in itself, explain the quantum leap in asbestos filings that occurred in the succeeding decade: during the 1980s, filings in federal courts alone rose from fewer than 1,000 in the entire decade of the 1970s to 10,000 between 1980 and 1984.¹⁰ But the case undoubtedly contributed to a shift in tactics on the part of asbestos manufacturers from stonewalling to settling

3. See *infra* Part II.

4. See *infra* Part V.

5. See *infra* Part VI.

6. 493 F.2d 1076 (5th Cir. 1973).

7. *Id.* at 1087.

8. *Id.* at 1089.

9. *Id.* at 1090.

10. See Paul D. Carrington, *Asbestos Lessons: The Consequences of Asbestos Litigation*, 26 REV. LITIG. 583, 589 (2007). The early 1980s typically saw about 5,000 claims per year. See STEPHEN J. CARROLL ET AL., RAND INST. FOR CIVIL JUSTICE, ASBESTOS LITIGATION 72 (2005), available at http://www.rand.org/pubs/monographs/2005/RAND_MG162.pdf. In the late 1980s and early 1990s, the annual rate of new claims grew to roughly 25,000 claims per year. *Id.*

claims as they arose.¹¹

In another landmark of the period, the widely-publicized claims of Vietnam War veterans for compensation from exposure to Agent Orange were being litigated in an Eastern District of New York courtroom before Judge Jack Weinstein.¹² Despite the enormous variety of exposures and disease claims brought by the many thousands of claimants, Judge Weinstein approved—indeed instigated—a class settlement.¹³ In his opinion supporting the settlement, the judge resorted to bold language, suggesting that statistical evidence of risk based on epidemiological studies would suffice to support proportionate damage awards to individual members of the class—further encouraging the emerging toxics tort plaintiffs bar to think that a new era was dawning.¹⁴

On the doctrinal side, *Borel* soon appeared to be an opening salvo in the continuing impulse to expand products liability law along new frontiers. In the landmark case of *Sindell v. Abbott Laboratories*,¹⁵ the much-publicized claims arising out of the miscarriage preventative DES—ingested by pregnant mothers whose grown daughters now had contracted cervical cancer—came before the California Supreme Court. DES posed a causation dilemma triggered by the long passage of time from ingestion to disease and the inability to distinguish among pills produced by a large number of drug companies. The court addressed the dilemma in a forthright fashion, adopting a novel market share approach to liability that constituted a singular departure from the traditional but-for test of causal responsibility.¹⁶

At roughly the same time, the New Jersey Supreme Court articulated its understanding of the implications of strict products liability for failure to warn litigation in *Beshada v. Johns-Manville Products Corp.*,¹⁷ in which it took the position that the defendant asbestos manufacturer could be held responsible for failure to warn of risks associated with the product even if it had no knowledge of those risks at time of distribution.¹⁸ The question posed by the new strict liability regime, according to the court, was whether *ex post* the product was in fact defective—not whether the manufacturer

11. See PAUL BRODEUR, *OUTRAGEOUS MISCONDUCT: THE ASBESTOS INDUSTRY ON TRIAL* 211 (1985).

12. *In re "Agent Orange" Prod. Liab. Litig.*, 597 F. Supp. 740 (E.D.N.Y. 1984), *aff'd*, 818 F.2d 145 (2d Cir. 1987).

13. See *id.* at 862. For a case study of the Agent Orange litigation, see PETER H. SCHUCK, *AGENT ORANGE ON TRIAL: MASS TOXIC DISASTERS IN THE COURTS* (enlarged ed. 1987).

14. *In re "Agent Orange"*, 597 F. Supp. at 838, 842.

15. 607 P.2d 924 (Cal. 1980).

16. *Id.* at 937–38.

17. 447 A.2d 539 (N.J. 1982).

18. See *id.* at 546.

knew or should have known of the risks *ex ante*.¹⁹

These leading instances of the tenor of the times, as proactive courts—particularly the California and New Jersey Supreme Courts—worked out the implications of enterprise liability for product defects, animated a critical literature proposing still more striking departures from the traditional boundaries of interpersonal responsibility in tort.²⁰ In this vein, Glen Robinson argued that, “[a]s long as liability is proportionate to the risks created by a defendant, there is no reason why the *Sindell* liability rule cannot be applied to cases involving multiple and *different* risk-creating activities.”²¹ He posited a victim who has contracted cancer and three events that contributed to the risk of his developing cancer: the victim worked as an asbestos installer for twenty years; then he worked ten years at a chemical plant where he was exposed to chemical wastes; and, correspondingly, he took medication that created a risk of cancer. Robinson suggested that if the estimates of these three contributions to cancer were 60/20/20, each contributor might be held liable according to those percentages under a modest extension of *Sindell*.

In a similar vein, Richard Delgado proposed an extension of liability from “indeterminate defendants,” as in *Sindell*, to “indeterminate plaintiffs”—recognizing recovery for plaintiffs exposed to a variety of toxics culminating in a single disease condition.²²

And on a grander scale, David Rosenberg, in a much-noted article, spelled out a “public law” version of tort for mass toxics and products cases: envisioning a radically restructured approach that would have relied on class action treatment of mass toxic tort claims, probabilistic determination of causation, proportionate allocation of liability among defendants, supervised funding of scheduled damages, and other restructuring strategies, aimed at breaking the mold (and overcoming the systemic limits) of traditional bi-party tort processes.²³

As might be expected, there were voices of dissent, sharply questioning the institutional competence of courts (and juries, in particular) to regulate industry through “public law litigation.” In a sharply-leveled attack on Rosenberg’s public law vision of tort, Peter Huber forcefully asserted the incapacity of juries both to understand the complexities of, and to overcome

19. *Id.* *Beshada* ignited a firestorm of criticism and was soon limited to its facts. See Feldman v. Lederle Labs., 479 A.2d 374, 384 (N.J. 1984).

20. The judicial conception of enterprise liability in fact had its roots in the much earlier concurring opinion of Justice Traynor in *Escola v. Coca Cola Bottling Co.*, 150 P.2d 436, 440 (Cal. 1944).

21. Glen Robinson, *Multiple Causation in Tort Law: Reflections on the DES Cases*, 68 VA. L. REV. 713, 750 (1982) (emphasis in original).

22. Richard Delgado, *Beyond Sindell: Relaxation of Cause-in-Fact Rules for Indeterminate Plaintiffs*, 70 CALIF. L. REV. 881 (1982).

23. See David Rosenberg, *The Causal Connection in Mass Exposure Cases: A “Public Law” Vision of the Tort System*, 97 HARV. L. REV. 849 (1984).

inherent biases against, new and complex technologies for addressing what he termed “public risks.”²⁴

Moreover, no matter how encouraging the signals sent by asbestos, Agent Orange, and other mass tort cases like Dalkon Shield (the failed intrauterine device that sent A.H. Robins into bankruptcy),²⁵ there were notable litigation failures in the courthouse as well, such as the Bendectin litigation involving an anti-nausea pregnancy drug allegedly associated with infant birth defects.²⁶

Nonetheless, withering attacks on the tort system, such as Huber’s, did little to dim the enthusiasm of a plaintiffs’ bar committed to a proactive stance in expanding the boundaries of liability for toxic harms. In singular fashion, toxic tort claims probed the boundaries of the duty/breach/causation/damages framework of liability rules and the corresponding process limitations on aggregation of tort claims.

III. TAKING STOCK: WHAT ARE THE SINGULAR TYPES OF CLAIMS THAT HAVE ARISEN?

As the asbestos litigation matured, a distinct pattern of claims began to emerge—entirely apart from more straightforward actions for the physical disabilities associated with asbestosis, lung cancer, and mesothelioma. Plaintiffs sued for the emotional distress associated with the fear of contracting cancer from exposure to asbestos—so-called cancerphobia claims.²⁷ These exposure-generated claims, in turn, spilled over to a wide variety of other toxic exposures in which the victim sought damages for the anguish of anticipating (and living with) the prospect of a long-latency disease coming to fruition.²⁸ A leading example is toxic exposure through

24. See Peter Huber, *Safety and the Second Best: The Hazards of Public Risk Management in the Courts*, 85 COLUM. L. REV. 277 (1985). But see Clayton P. Gillette & James E. Krier, *Risk, Courts, and Agencies*, 138 U. PA. L. REV. 1027 (1990) (responding directly to the Huber critique).

25. For discussion of the Dalkon Shield cases, see Deborah R. Hensler & Mark A. Peterson, *Understanding Mass Personal Injury Litigation: A Socio-Legal Analysis*, 59 BROOK. L. REV. 961 (1993).

26. For discussion of the Bendectin litigation, see MICHAEL D. GREEN, *BENDECTIN AND BIRTH DEFECTS: THE CHALLENGES OF MASS TOXIC SUBSTANCES LITIGATION* (1996). The scorecard on mass toxic tort cases in this early period is well-described in Deborah R. Hensler, *Has the Fat Lady Sung? The Future of Mass Toxic Torts*, 26 REV. LITIG. 883, 894–904 (2007) [hereinafter, Hensler, *Has the Fat Lady Sung?*].

27. See, e.g., *Metro-N. Commuter R.R. v. Buckley*, 521 U.S. 424 (1997) (a widely-noted FELA case). Negligent infliction of emotional distress claims had already been recognized, but only for the narrow scenario of “near-miss” (fright) cases. See, e.g., *Falzone v. Busch*, 214 A.2d 12 (N.J. 1965).

28. In fact, these claims were not limited exclusively to toxic substance exposures. See Hensler & Peterson, *supra* note 25, at 989–98.

drinking water in cases like *Potter v. Firestone Tire & Rubber Co.*,²⁹ where defendant's dumping of toxic wastes into a landfill near its plant allegedly exposed plaintiffs to carcinogens over an extended period of time.

A related set of claims, again most closely associated with the asbestos litigation, involved probabilistic claims for future harm—a concrete instance of claims for probabilistic recovery postulated in the scholarship referred to above.³⁰ In the context of asbestos claims, these actions arose quite naturally: asbestosis, a lung-scarring disease closely associated with exposure to asbestos, is sometimes a pathway to contraction of lung cancer; hence victims of the former brought probabilistic claims for present recovery in anticipation of the enhanced prospect of developing lung cancer later.³¹

It follows virtually inexorably from these related theories of recovery, centering on the prospect of serious future harm, that a corresponding set of claims would arise seeking early warning—in particular, claims for medical monitoring. Once again, many of the early cases involved asbestos exposure—but by no means all. Claims for medical monitoring ran the gamut; here, too, toxic intrusions into drinking water systems served as a particularly fertile field.³²

Apart from substantive theories, plaintiffs attempted to build on the early success in Agent Orange, and creative judicial efforts in asbestos, to aggregate claims either formally under class action provisions such as Rule 23 of the Federal Rules of Civil Procedure, or in clusters as consolidated claims.³³ Class action treatment of tort claims was not exclusively associated with the new mass toxics litigation; in a more traditional vein, it had served as a vehicle for aggregating claims in commercial aircraft crashes and large-scale fires or structural collapses.³⁴ But the novelty of mass toxic claims was the diversity of injuries and exposures—a far cry from the relatively straightforward tragedy of mass deaths in a plane crash.

29. 863 P.2d 795 (Cal. 1993).

30. See generally Rosenberg, *supra* note 23.

31. These claims were for latent possibility of physical injury rather than emotional distress over the prospect of such injury, although the two causes of action were often brought in tandem.

32. See, e.g., *Ayers v. Township of Jackson*, 525 A.2d 287 (N.J. 1987) (asbestos exposure); *In re Paoli R.R. Yard PCB Litig.*, 916 F.2d 829 (3d Cir. 1990), *cert. denied*, 499 U.S. 961 (1991) (ingestion of toxic chemicals).

33. For a discussion of creative judicial management techniques, see Linda S. Mullenix, *Beyond Consolidation: Postaggregative Procedure in Asbestos Mass Tort Litigation*, 32 WM. & MARY L. REV. 475 (1991). For an example of such techniques, see *Cimino v. Raymark Indus., Inc.*, 751 F. Supp. 649 (E.D. Tex. 1990). Judge Parker's multi-phase class action certification in *Cimino* was subsequently reversed by the Fifth Circuit. *Cimino v. Raymark Indus., Inc.*, 151 F.3d 297 (5th Cir. 1998). For a discussion of *Cimino*, see JEAN MACCHIAROLI EGGEN, TOXIC TORTS: IN A NUTSHELL 425–28 (4th ed. 2010). Consider also informal means of dispute resolution resorted to at the time: claims facilities. See Paul D. Carrington, *Asbestos Lessons: The Unattended Consequences of Asbestos Litigation*, 26 REV. LITIG. 583, 598–605 (2008).

34. See Hensler, *Has the Fat Lady Sung?*, *supra* note 26, at 895; see generally JAMES S. KAKALIK ET AL., RAND INST. FOR CIVIL JUSTICE, COSTS AND COMPENSATION PAID IN AVIATION ACCIDENT LITIGATION (1988), available at <http://www.rand.org/pubs/reports/2007/R3421.pdf>.

What was singular about these claims? Not the mass-disaster character itself; as just mentioned, victims had sought mass tort recovery in other settings on earlier occasions. But the harms suffered in these earlier instances of mass tragedy involved relatively straightforward assessment of damages: most often, both the identification and the quantum of recoverable damages was uncontested. Bodies were there for the counting; causal uncertainty, if it existed at all, was not enshrouded in scientific uncertainty. The *leitmotif* of the harm was immediate disabling death or injury. By contrast, the paradigmatic mass toxics case was characterized by long latency between exposure and manifestation of disease, generating claims that posed causal uncertainty and unease about unleashing a flood of litigation.

IV. SCORECARD ON SUCCESS

If the early 1980s appeared in some quarters to be the launching pad of a new era of expansive responsibility in tort, a more grounded reality soon set in. While the tort system proved to be accommodating to enlarging the boundaries of claims that fit within the products liability makeover of the mid-1960s—a robust responsibility for duty to warn and a recognition of design defect claims—there was a chillier reception to recasting tort to address long latency, scientific uncertainty, and mass harm in the toxics arena.³⁵

Thus, the newly recognized negligent infliction of emotional distress tort (NIED) remained within the restricted parameters of “near miss” scenarios; that is, claims by those within the zone of danger of physical harm.³⁶ Of course, a more creative reading of “zone of danger” might very well have extended recovery to the victim of a toxic exposure living in fear of cancer. Indeed, a respectable argument can be made that it is perverse to recognize the tort claim of an individual traumatized by almost being hit by a negligent driver (a fleeting moment of terror?), but to deny recovery to an individual living with a long-term prospect of contracting cancer due to a defendant’s wrongful conduct.

This diversity of treatment of NIED claims has floodgates written all over it.³⁷ While near-miss victims might, in theory, line up in large numbers

35. I proceed with a thumbnail sketch of developments rather than a full-scale treatment of the topic.

36. See *Falzone v. Busch*, 214 A.2d 12 (N.J. 1965) (discussing the history and evolution of the near miss doctrine); see also Robert L. Rabin, *Emotional Distress in Tort Law: Themes of Constraint*, 44 WAKE FOREST L. REV. 1197, 1200 (2009).

37. See generally Rabin, *supra* note 36.

claiming actionable trauma, the reality is that these claims would almost invariably be regarded as *de minimis*—and hence never see the light of day. By contrast, liability for a heightened long-term risk of cancer from high-level ingestion or exposure to toxic pollutants could potentially generate claims en masse that would be extremely difficult to cabin.³⁸

Similarly, probabilistic claims for present recovery of prospective future harm have not fared well. Under the “two disease rule,” these cases have been dispatched, often in tandem with related emotional distress claims.³⁹ The rule dictates present recovery for any lesser disease condition attributable to defendant’s conduct, but recovery only later for the “pathway” disease (and attendant emotional distress) when it is manifested. Again, floodgates concerns play a central role here, particularly evident in the case of asbestos-related diseases where recourse to this probabilistic claim fit the etiology of exposure: lung-scarring asbestosis, which was sometimes the harbinger of later-developing lung cancer.⁴⁰

But more is at stake than floodgate concerns here. In contrast to emotional distress claims, efforts at probabilistic present recovery for future harm are premised on a robust vision of scientific certainty that frequently rests on an unstable foundation of the existing state of scientific knowledge. Indeed, it is just this judicial skepticism about the precision of probabilistic data that has undermined not just the claims for present recovery for future harm, but the broader theoretical underpinnings for probabilistic recovery. Advocates of probabilistic recovery have pointed out the paradox in granting full recovery across-the-board to a class of exposed victims that includes both the unlucky carriers of baseline population risk along with exposure-based victims of defendant’s conduct.⁴¹ But the courts fall back on the traditional rough justice of the “more probable than not” burden of proof as a conservative bastion against the daunting task of a more fine-tuned probabilistic reliance on the latest risk data available.

The third piece in this triumvirate of freshly-minted toxic claims, medical monitoring, has played out in a more complicated fashion. Many states have, in fact, recognized medical monitoring claims—at times, corresponding with the rejection of emotional distress and probabilistic

38. This concern is emphasized in *Metro-N. Commuter R.R. v. Buckley*, 521 U.S. 424 (1999).

39. See *Simmons v. Pacor, Inc.*, 674 A.2d 232 (Pa. 1996); see also *In re Paoli R.R. Yard PCB Litig.*, 35 F.3d 717, 785 n.51 (3d Cir. 1994), cert. denied, 499 U.S. 961 (1991) (rejecting claims for increased fear and risk of disease).

40. See CARROLL ET AL., *supra* note 10, at 13–19 (discussing the increased likelihood of developing lung cancer after exposure to asbestos).

41. See Daniel A. Farber, *Toxic Causation*, 71 MINN. L. REV. 1219, 1243–51 (1987) (introducing the “most likely victim” theory as a means of addressing this paradox); see also Michael D. Green, *The Future of Proportional Liability: The Lessons of Toxic Substances Causation*, in *EXPLORING TORT LAW* 352, 359–62 (M. Stuart Madden ed., 2005) (discussing various commentators’ perspectives on probabilistic recovery).

future harm recovery in the same case.⁴² Contrary to these related claims, there is frequently less speculation involved in determining that an exposure has been sufficient to warrant preventive monitoring than in hypothesizing that the condition will in fact manifest itself. And there is a pecuniary anchor, out-of-pocket medical surveillance costs, that dispels some of the unease over the intangible nature of the emotional distress claim.

Nonetheless, medical monitoring has come to be hedged in with qualifiers. Some states only recognize the claims in tandem with physical injuries.⁴³ Many states are reluctant to allow traditional lump-sum awards, as contrasted to funded-as-incurred recovery.⁴⁴ There has been a dearth of enthusiasm for recognizing class action recovery.⁴⁵ In short, medical monitoring has been subjected to restrictions that were not necessarily anticipated at the outset.

But the full measure of the concerns that diluted the growth of tort responsibility for toxic harms has been registered on the procedural side—in particular, in the failure of the class action in the most-widely recognized of the toxic tort episodes. Here, virtually all of the judicial trepidations about boundaries converge: mass numbers of cases and choice of law issues signal caution regarding capacity for judicial management; diverse exposures and varying disease profiles raise concerns about the traditional protections afforded individual rights; and long latency poses vexing concerns about the treatment of futures plaintiffs. *Amchem Products, Inc. v. Windsor*⁴⁶ dashed all hopes for a structured, aggregate resolution of the asbestos controversy, and *Castano v. American Tobacco Co.*⁴⁷ played a similar role in the tobacco area.⁴⁸

42. See, e.g., *In re Paoli*, 35 F.3d at 785 (finding medical monitoring claims cognizable under Pennsylvania law while at the same time rejecting emotional distress and future harm claims).

43. A recent study reports that at least seventeen states have refused to recognize a medical monitoring cause of action absent a present physical injury. See D. Scott Aberson, Note, *A Fifty-State Survey of Medical Monitoring and the Approach the Minnesota Supreme Court Should Take When Confronted with the Issue*, 32 WM. MITCHELL L. REV. 1095, 1115–16 (2006) (listing states that do not recognize medical monitoring claims without a present physical injury).

44. See, e.g., *Potter v. Firestone Tire & Rubber Co.*, 863 P.2d 795, 825 n.28 (Cal. 1993) (rejecting lump-sum award in favor of a fund to pay medical monitoring claims as they accrue); *Burns v. Jaquays Mining Corp.*, 752 P.2d 28, 34 (Ariz. Ct. App. 1987) (rejecting lump-sum verdict, finding that such a verdict “cannot predict the amounts that actually will be expended for medical purposes”).

45. See, e.g., *Lockheed Martin Corp. v. Superior Court*, 63 P.3d 913 (Cal. 2003).

46. 521 U.S. 591 (1997).

47. 84 F.3d 734 (5th Cir. 1996).

48. See also *Engle v. Liggett Group, Inc.*, 945 So. 2d 1246 (Fla. 2006) (tobacco case rejecting state-wide class action); see generally *In re Rhone-Poulenc Rhorer, Inc.*, 51 F.3d 1293 (7th Cir. 1995) (particularly influential case rejecting class certification of hemophiliacs infected with HIV).

But this is less than the full story. Interestingly, private efforts at resolution of mass tort episodes have proceeded undeterred.⁴⁹ Notably, notwithstanding *Amchem*, multi-billion dollar settlements have been negotiated in the Silicone breast implant, fen-phen, and Zyprexa litigation.⁵⁰ Entirely apart from formal class actions, the judicial forum has lent encouragement to securing “global peace” through the facilitating mechanism of multidistrict litigation panel assignments for resolution of pretrial issues, which has, in turn, served as a medium for encouraging mass settlements.⁵¹

Surveying the mass tort claims phenomenon in a detailed analysis of the settlement data through 2007, Deborah Hensler concluded that sounding the death knell on this litigation was misplaced:

Mass toxic tort litigation in the past and now is a mix of cases that fail to take off as mass torts, cases that are pursued and settled in aggregate form but for less than mega-amounts, and cases that impose significant costs on defendant corporations and allow mass tort plaintiff firms to take sizeable bundles of money to the bank.⁵²

These informal settlement efforts rest, by and large, on the doctrinal framework of products liability that has emerged since the mid-1960s, rather than the less successful efforts, discussed above, to create a new public law litigation model in the courtroom. Even as the public law vision of toxics litigation has faltered, traditional tort initiatives—with a decidedly public impact—have thrived. The duty to warn of potential toxic risks associated with a product, and related issues of causal connection, frequently lead to contested outcomes; consider, on that score, the jury verdicts: five for plaintiffs and eleven for the defendant (with two mistrials) in the Vioxx litigation prior to mass settlement.⁵³ But across the board, whether plaintiffs

supplied by blood-solids manufacturers).

49. See generally RICHARD A. NAGAREDA, *MASS TORTS IN A WORLD OF SETTLEMENT* (2007).

50. See Hensler, *Has the Fat Lady Sung?*, *supra* note 26, at 920.

51. Deborah R. Hensler, *The Role of Multi-Districting in Mass Tort Litigation: An Empirical Investigation*, 31 SETON HALL L. REV. 883, 890–92 (2001) [hereinafter, Hensler, *The Role of Multi-Districting*].

52. Hensler, *Has the Fat Lady Sung?*, *supra* note 26, at 920. Hensler wrote prior to the novel (and controversial) informal settlement of the Vioxx litigation. See Howard M. Erichson & Benjamin C. Zipursky, *Consent Versus Closure*, 96 CORNELL L. REV. (forthcoming 2011).

53. Press Release, Merck & Co., Inc., Merck Wins Product Liability Case in Florida Circuit Court (Oct. 5, 2007), available at http://www.merck.com/newsroom/news-release-archive/corporate/2007_1005.html; see also Hensler, *Has the Fat Lady Sung?*, *supra* note 26, at 919 (as of March 2007). In November 2007, Merck settled all Vioxx U.S. product liability claims, nearly 26,600 lawsuits with 47,000 plaintiff groups, for \$4.85 billion. David Voreacos & Jef Feeley, *Merck Vioxx Accord Lead Lawyers to Get \$315 Million*, BLOOMBERG BUS. WK. (Oct. 20, 2010, 11:24 AM EDT), <http://www.businessweek.com/news/2010-10-20/merck-vioxx-accord-lead-lawyers-to-get-315-million.html>; Press Release, Merck & Co., Inc., Merck Agreement to Resolve U.S. VIOXX Product Liability Lawsuits (Nov. 9, 2007), available at [110](http://www.merck.com/newsroom/news-release-</p></div><div data-bbox=)

assert claims from exposure to toxic chemicals or ingestion of defective drugs, the pro-active reframing of duty to warn and design defect in modern, post-1960s products liability litigation has extended to the sub-category of toxic tort litigation.

V. TOXIC EXPOSURES THROUGH THE PRISM OF TORT: A REPRISÉ

As a general proposition, the common law of torts has shown considerable adaptability to changing social circumstances. Consider the principal “new torts” that emerged in the twentieth century: intentional infliction of emotional distress, negligent infliction of emotional distress, and privacy. In each of these areas, tort law showed considerable sensitivity—one might say that it served as a social barometer—in recognizing changing conceptions of personality that warranted legal protection. Norms of civility, unheard of in earlier times, were recognized not just as animating informal rules of appropriate interpersonal conduct, but as establishing legal rights and duties.⁵⁴

Similarly, in the economic sphere, as a new scale of business enterprise emerged, in which product manufacture and marketing became national in scope, corresponding theories of efficient and widespread distribution of risk emerged. And these theories, grounded in the foundational growth of insurance markets, crystallized in an enterprise liability perspective on obligations in tort.⁵⁵ Here, as in the newly recognized protections of personality interests, the flexible, bipolar structure of tort law could accommodate with relative ease to a new order of commercial relations.

Stress lines began to develop, however, as uncertainty about the parameters of legal responsibility clouded the picture. Concededly, tort law does not thrive on uncertainty; but it can cope within bounds. Questions of defect are pervasive in drug, auto, and medical device litigation: How much side-effect or product failure risk is there? When should it have been discovered? And what, if anything, could have been done to eliminate it? These can be perplexing questions to answer with any degree of confidence, generating differences of opinion both among outside commentators and between experts testifying in the courtroom.⁵⁶ Yet the tort system, despite

archive/corporate/2007_1109.html.

54. See Robert C. Post, *The Constitutional Concept of Public Discourse: Outrageous Opinion, Democratic Deliberation, and Hustler Magazine v. Falwell*, 103 HARV. L. REV. 601 (1990).

55. Abraham, *supra* note 2, at 143–49.

56. Compare Huber, *supra* note 24 (arguing that greater acceptance of public risks “improve the overall state of our risk environment” and the “judicial system is . . . incapable of engaging in the aggregative calculus of risk created and risk averted that progressive public-risk management

the vehement protests of some critics, has not backed off from addressing these issues—and the impetus for rolling back the primacy of tort has largely been limited to incremental remedial reforms.⁵⁷

But when are the boundaries of tolerable uncertainty exceeded? The toxic substance litigation has posed this question in a variety of ways, as we have seen. One version of uncertainty is encapsulated in the floodgates concern: Will there be boundless litigation if recovery is allowed in a given subcategory of cases? At its core, this is the concern in the NIED cancerphobia cases.⁵⁸ Boundless litigation is, from the judicial perspective, an attack on the very foundations of tort law: from a judicial administration vantage point, the capacity to process cases efficiently, and from the parties' vantage point, a recognition of claims to "just deserts" in the face of prospectively insolvent responsible parties. Judicial misgivings over procedural aggregation similarly become apparent when, in tandem, claimants are too many and claims are too dissimilar.

Another version of uncertainty is bound up in the converging characteristics of long latency and the limits of scientific information. The latter, of course, can be the centerpiece of prescription drug side-effect litigation as well. But the paradigmatic drug case is adjudicated against the backdrop of regulatory approval through compliance with an established protocol for submitting risk information. Moreover, in the typical drug or product defect case, there is no substantially long latency between exposure to risk and consequent harm, nor is the court being asked to award probabilistic damages in accordance with risk information. The resistance to proportional damages recovery, discounted present-value recovery of possible future harm, and to some extent medical monitoring, should be read against these reservations about stretching traditional boundaries.

VI. ARE CONVENTIONAL REGULATORY STRATEGIES MORE EFFECTIVE?

The comparative competence of tort and regulation is far too broad a topic to pursue in this brief essay. But it would be remiss not to mention it because no policy analysis is complete without, at the very least, recognizing

require"), and A. Mitchell Polinsky & Steven Shavell, *The Uneasy Case for Products Liability*, 123 HARV. L. REV. 1437 (2010) (arguing "that the three beneficial effects of product liability—inducing firms to improve product safety, causing prices of products to reflect their risks, and providing compensation to injured consumers—are . . . likely to be outweighed by the litigation and related costs of product liability"), with Gillette & Krier, *supra* note 24 (directly responding to Huber's critique), and John C.P. Goldberg & Benjamin C. Zipursky, *The Easy Case for Products Liability: A Response to Professors Polinsky and Shavell*, 123 HARV. L. REV. 1919 (2010) (directly responding to Polinsky & Shavell's critique). On judicial efforts to assure the credibility of scientific evidence in the courtroom, see *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579 (1993). Discussion of *Daubert* and the vast literature and case law it has spawned is beyond the scope of this paper.

57. These state legislative reforms are discussed in Joseph Sanders & Craig Joyce, "Off to the Races": *The 1980s Tort Crisis and the Law Reform Process*, 27 HOUS. L. REV. 207 (1990).

58. See generally Rabin, *supra* note 36.

the need to ask the “as compared to what” question.

Without doubt, there are some public health and safety concerns that are best approached through regulatory initiatives and where the contribution of tort to reducing risk has been limited at best. In my view, tobacco control is a prominent example. Through a combination of reporting health-related information, prohibiting smoking in workplaces and public accommodations, and increasing excise taxes, governmental regulation has greatly reduced tobacco use since the mid-1960s.⁵⁹ By contrast, tort litigation against the tobacco companies has had a long and checkered career in which the major contributions to reducing smoking—the costs to the industry of defending the lawsuits and the Master Settlement Agreement with the states in 1998—appear to have added very little to overall harm reduction.⁶⁰

A similar assessment seems likely in the current efforts to address the public health problem of obesity. The difficulty in establishing a causal link between obesity and identifiable defendants on a case-by-case basis appears to be an overwhelming obstacle to accomplishing much on the tort litigation front, particularly when compared with the array of regulatory possibilities: educational efforts and food subsidy initiatives (in the schools), informational requirements (product labeling), excise taxes, and so on.⁶¹ This is not to overstate what can be accomplished by government initiatives in this challenging area, but rather to emphasize the far better prospects of government regulation than toxic tort litigation.

In other areas, however, regulation has played virtually no role at all in reducing risk and compensating victims. This is especially evident in the case of asbestos, where the toxic products remained on the market, unregulated in any meaningful sense, until the toll of death and disease from exposure had spiraled entirely out of control.⁶²

Then, there are still other areas in which tort and regulation have played a complementary role. Despite recent efforts to preempt state tort suits, in particular during the Bush Administration, the Supreme Court has for the most part reaffirmed the principle of complementarity. In the prescription

59. See generally Robert L. Rabin, *Tobacco Control Strategies: Past Efficacy and Future Promise*, 41 LOY. L.A. L. REV. 1721 (2008).

60. *Id.* at 1732–50.

61. On the array of strategies to curb childhood obesity, see generally Marlene B. Schwartz & Kelly D. Brownell, *Actions Necessary to Prevent Childhood Obesity: Creating the Climate for Change*, 35 J.L. MED. & ETHICS 78 (2007).

62. See CARROLL ET AL., *supra* note 10, at 11 (discussing the 1989 asbestos ban proposed by the EPA and put into effect; subsequently, some limited uses were permitted).

drug area, for example, the Court's recent decision in *Wyeth v. Levine*⁶³ seems destined to preclude tort suits only when they would directly conflict with the FDA's present findings of compliance.⁶⁴ Moreover, while observers might differ in assessing the comparative track records of agency regulations and tort litigation from a public health perspective, tort obviously plays a singular role in providing the prospect of compensation once a drug defect and harm has occurred.

In the final analysis, the case for retaining tort in the toxic substances area remains strong, as long as one remains cognizant of the limits of liability law and expectations do not press too sharply against traditional system boundaries.

63. 129 S. Ct. 1187 (2009).

64. See generally Robert L. Rabin, *Territorial Claims in the Domain of Accidental Harm: Conflicting Conceptions of Tort Preemption*, 74 BROOK. L. REV. 987 (2009).