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“Negligence in the Air?” Should “Alternative Liability” Theories Apply in Lead Paint Litigation?*

JOHN S. GRAY** & RICHARD O. FAULK***

“Proof of negligence in the air, so to speak, will not do.”****

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**** Sir Frederick Pollock, *The Law of Torts* 455 (11th ed. 1920) (famously cited by Justice Cardozo in *Palsgraf v. Long Island R.R. Co.*, 248 N.Y. 339, 341, 162 N.E. 99, 99 (1928) for the proposition that negligence in the air is not a basis for imposing liability). The Iowa Supreme Court aptly described “market share” liability as allowing “negligence in the air” to serve as a substitute for causation in fact. *Mulcahy v. Eli Lilly & Co.*, 386 N.W.2d 67, 76 (Iowa 1986).

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I. PREFACE

Historically, American tort law has honored a basic axiom: as a condition to recovery, plaintiffs must prove that their injuries resulted from some act or omission of a particular defendant. Plaintiffs either prove that it is "more likely than not" that an identified defendant caused their injuries—and then they may recover their full damages—or else they fail to do so and recover nothing.¹ This principle was a "bedrock rule" of American tort law—until approximately 60 years ago, when the California Supreme Court flatly rejected it to preclude a particularly inequitable result. At that time, in the landmark case of *Summers v. Tice*, the principles of "alternative liability" were born.² Although it can be argued that "justice" was served in *Summers*, it can also be argued that *Summers* represented the first step onto a "slippery slope"—one which threatens to end the centuries-old tradition

1. W. PAGE KEETON ET AL., PROSSER AND KEETON ON THE LAW OF TORTS § 41, at 264 (5th ed. 1984) ("As a practical matter legal responsibility must be limited to those causes which are so closely connected with the result and of such significance that the law is justified in imposing liability. Some boundary must be set to liability for the consequences of any act, upon the basis of some social idea of justice or policy."). The identification element of causation-in-fact serves an important function in tort law. Besides assigning blame-worthiness to culpable parties, it also limits the scope of potential liability and thereby encourages useful activity that would otherwise be deterred if there were excessive exposure to liability. David A. Fischer, *Products Liability—An Analysis of Market Share Liability*, 34 VAND. L. REV. 1623, 1628–29 (1981); Richard O. Faulk, "Absolute Liability": *Historical Perspectives and Political Alternatives*, 37 OKLA. L. REV. 569 (1984).

2. 199 P.2d 1 (Cal. 1948). In this case, the plaintiff suffered an eye injury when two hunters negligently fired shots in his direction. At trial, it was undisputed that one of the two hunters injured the plaintiff. The plaintiff, however, could not establish which of the hunter's conduct caused the injury. The trial court held both hunters liable and the hunters appealed arguing that they could not both be liable because they had not acted in concert. In upholding the trial court's judgment, California's Supreme Court found (1) it inequitable that the hunter who caused plaintiff's injury would escape liability, and (2) it was equally probable either one of the two hunters was responsible for the injury. *Id.* at 4. To resolve this inequity, the court shifted the burden of proving identifying the wrongdoer from the innocent plaintiff to the culpable hunters leaving each of them to "absolve himself if he can." *Id.*

that requires individual culpability of a specific defendant as a prerequisite to recovery—or, to put it more informally, that imperils the principle that tort defendants are “innocent until proven guilty.”³

These exceptions to the causation requirement arose from competing tort interests, namely the perceived need to compensate innocently injured plaintiffs, and the belief that the costs of such injuries are best allocated to defendants that have the resources (or insurance) to pay for them. To further the “compensatory” interest, new “alternative” theories of liability were created as exceptions to the historical rule. Under these theories, the burden of proof is “shifted” from plaintiffs to require defendants to establish a negative, namely, that their conduct or product did not cause the plaintiffs’ injuries. These exceptions are sometimes referred to as “alternative liability,” “enterprise” liability, and “market share” liability,⁴ but by any name, they embody a principle that is precisely the *opposite* of the “bedrock” rules upon which the common law of torts was founded.

The principle of “alternative liability” was born of “extraordinary circumstances” very similar to *res ipsa loquitur*.⁵ It was cre-

3. The authors are well aware that the principle that a defendant is “innocent until proven guilty” is specifically applicable to criminal law, rather than civil law. Nevertheless, the analogy to that principle is particularly apt when discussing “alternative liability.” Indeed, the only meaningful difference between the concept of “guilt” in the criminal law and “liability” in civil law is the degree of proof required to establish culpability. Criminal law typically requires proof “beyond a reasonable doubt” as a prerequisite to a finding of guilt, whereas civil law typically requires proof by a “preponderance of the evidence.” Otherwise, however, the burden of proving criminal or civil liability has always rested upon the person seeking to impose it—something entirely different from the concept of “alternative liability,” where the burden is entirely shifted to the defendants to exculpate themselves. Accordingly, the authors believe the analogy to the traditional criminal law principle is especially valuable, even if it is, as some may think, somewhat polemical in this context.

4. “Concerted action” or “concert of action” collective liability is often listed as an alternative theory of liability. However, this paper does not address “concert of action” because it is a theory of joint liability involving two or more defendants who had an understanding, express or tacit, to participate in a common plan to commit a tortious act. The agreement is almost conspiratorial in nature. Thus, each is held responsible jointly for the acts of only one of them. See *Hamilton v. Accu-Tek*, 935 F. Supp. 1307, 1327 (E.D.N.Y. 1996) (citing RESTATEMENT (SECOND), TORTS §876); see also *Tidler v. Eli Lilly & Co.*, 851 F.2d 418 (D.C. Cir. 1988) (applying District of Columbia and Maryland law); *Shackil v. Lederle Labs.*, 561 A.2d 511 (N.J. 1989). This theory does not address the situation where a plaintiff is unable to identify the manufacturer of the product that allegedly caused the harm or injury that is the basis for proving causation.

5. *Res ipsa loquitur* allows a plaintiff to establish negligence by circumstantial evidence when the direct evidence concerning the cause of injury is primarily within

ated in a case where there was no dispute that the plaintiff was injured by one of the defendant's conduct (*i.e.*, the existence of a "signature injury") and where all of the potentially responsible parties were before the court. Despite its original limitations, the allure of shifting the burden of proof from themselves onto defendants has proven irresistible to some plaintiffs' counsel. Despite the "slippery slope" associated with this amorphous principle, some courts have also followed the temptation of following these rules—at the clear risk of making the exception "swallow the rule."

Today, the pressure and temptation to expand the use of alternative theories of liability have arisen most prominently in cases involving lead paint, including those based upon public nuisance claims. In those cases, governmental plaintiffs readily admit that they cannot prove which defendant's product caused the alleged nuisance, thus leaving juries to speculate as to the degree to which, if any, a defendant's conduct caused harm.⁶ Faced with this otherwise insurmountable barrier to recovery, these towns, cities and states appeal to emotions — claiming that lead paint presents a public health crisis that affects young and innocent children. Although the federal government and many states have enacted legislation to deal with lead in old paint,⁷ plaintiffs still

the knowledge and control of defendant. In order to take advantage of the inference, the plaintiff "must show that he was injured (1) in an occurrence which would not have occurred in the absence of negligence, (2) by an instrumentality or agency under the management or control of the defendant, and (3) under circumstances which were not due to any voluntary act or negligence on the part of the plaintiff." *Smith v. Eli Lilly & Co.*, 560 N.E.2d 324, 339 (Ill. 1990).

6. See Thomas J. Graves, *States Should Reject Attempts to Expand Pro-Plaintiff Liability Theory* 5 WASH. LEGAL FOUND. 15 (June 30, 1995) (citing *Santiago v. Sherwin-Williams Company*, 782 F. Supp. 186, 193 (D. Mass. 1992)).

7. See Pub. L. No. 91-695, 84 Stat. 2078 (1971) (codified at 42 U.S.C. § 4801) (passing the Lead-Based Paint Poisoning Prevention Act ("LPPPA") through which Congress banned the use of lead-based paint in residential structures constructed or rehabilitated by the federal government); Lead-Containing Paint and Certain Consumer Products Bearing Lead-Containing Paint, 42 Fed. Reg. 44192 (Sept. 1, 1977) (banning lead-based paint); Pub. L. No. 102-550, 106 Stat. 3672 (1992) (passing the Residential Lead-Based Paint Hazard Reduction Act); Lead; Identification of Dangerous Levels of Lead, 66 FED. REG. 1206, 1206 (Jan. 5, 2001) (final rule); Lead; Requirements for disclosure of Known Lead-Based Paint and/or Lead-Based Paint Hazards in Housing, 61 FED. REG. 9064 (March 6, 1996) (codified at 40 C.F.R. pt. 745, subpart F and 24 C.F.R. pt. 35, subpart H) (promulgating EPA's Lead Rule). See also ARIZ. REV. STAT. § 36-1674 (1996); CAL. HEALTH & SAFETY CODE § 17920.10(a) (West 2002); COLO. REV. STAT. ANN. § 25-7-1101 (1997); CONN. AGENCIES REGS. §§ 19a-111-1, 19a-111-4, 21a-82(a) (1992); DEL. CODE REGS. § 40 700 003 (Weil 1978); GA. CODE ANN. §§ 31-41-14 (1994); 410 ILL. COMP. STAT. 45/2, 45/9 (1973); IOWA ADMIN. CODE r. 641-68.5 (2004); KY. REV. STAT. ANN. § 211.905 (West 1974); LA. REV. STAT. ANN. § 1299:27 (1973); MASS. GEN. LAWS ANN. ch. 111, § 197 (1971); ME. REV. STAT. ANN.

argue that judicial assistance is necessary to protect these children because neither the states, the cities, nor private plaintiffs have sufficient resources to solve the crisis themselves.

Following that “slippery slope,” plaintiffs further claim that, as between the innocent plaintiffs and the paint manufacturers, the manufacturers are in a superior position to absorb the costs of abatement. Such arguments are made notwithstanding the fact that the manufacturers did nothing to permit or promote the decades of neglect and inadequate maintenance by landowners that ultimately produced the alleged exposures, and notwithstanding the frequent absence of these otherwise culpable parties from the lawsuits.⁸ Moreover, the plaintiffs assert that the courts should *ignore* their state’s legislative and regulatory efforts because they are pursuing a “common law” remedy, not relief regulated or governed by statute. Supposedly, the court’s “flexible” common law powers remain unaffected by public policies promulgated by the executive and legislative branches, especially when plaintiffs seek equitable relief, such as abatement orders in lieu of money damages. When damages are involved—and perhaps even when an equitable remedy is requested⁹—plaintiffs have sought alternative theories of liability known as “market share” liability. Under this theory, a simple showing that “lead is harmful” may result in a ruling that every defendant who was sued is presumed responsible for creating the hazard that is supposedly injuring children—unless each respective defendant can prove their innocence.

tit. 22, § 1321 (1973); MD. CODE ANN., ENVIR. § 6-819 (West 1992); MASS. GEN. LAWS ch. 111, § 197 (1993); MINN. STAT. ANN. § 144.9504 (1995); MO. ANN. STAT. §§ 701.300, 701.308 (West 1993); N.H. ADMIN. R. ANN. He-P 1613.02 (1995); N.J. ADMIN. CODE §§ 51-1.3, 51-6.1 (2005); N.Y. PUB. HEALTH LAW § 1373 (1970); N.C. GEN. STAT. §§ 130A-131.7, 130A-131.9C (1997); OHIO REV. CODE ANN. §§ 3742.37, 3742.38 (West 1994); S.C. CODE ANN. § 44-53-1430 (1993); VT. CODE R. § 13-140-054 (1994); WIS. STAT. ANN. §§ 254.11, 254.166 (West 1993).

8. Indeed, in one recent trial in Rhode Island, the plaintiff (State of Rhode Island) actually opposed the joinder of landlords and property owners in the trial against the paint manufacturers—despite Rhode Island’s clear regulatory mandate that recognizes that such persons are primarily responsible for preventing lead exposures in their properties. R.I. GEN. LAW §§23-24.6-11.1(a), 23-24.6-21.3(b) & (c). (2005); *see also* R.I. Lead Hazard Mitigation Regulations §§ 5.1 & 9 (2003). Incredibly, the trial court agreed with this argument and severed the manufacturers’ claims against the landlords and property owners from the proceedings. *Rhode Island v. Lead Indus. Ass’n, Inc.*, No. 99-5226, 2004 WL 4963044 (R.I. Super. Mar. 22, 2004).

9. The allocation of liability in equity is a largely unexplored field, and it is by no means clear that plaintiffs will not seek to expand “market share” liability principles to shift proof requirements in those proceedings as well.

Although these arguments are certainly appealing emotionally, their allure creates extraordinary dangers. In fact, these governmental plaintiffs (often represented by private counsel who themselves possess substantial resources to prosecute the actions) are not asking courts merely to take a *small* step further along an already “slippery slope.” Instead, they are asking the court to leap into an unknown abyss where *all* defendants are assumed guilty—even if the presence of their product cannot be shown to have any connection with the injury. In this “ends justify the means” argument, the governmental plaintiffs seek to force an entire industry into the role of unfunded underwriters of judicially-created insurance.

This article examines various theories of alternative liability and the circumstances, policies and limitations under which they were created and expanded. It then specifically examines the application of “market share” liability to the manufacturers of lead pigment currently being sued by governmental entities under theories of public nuisance. Finally, it demonstrates how these theories are unworkable in the context of the lead paint public nuisance litigation. Viewed in the proper perspective, it is time to stop the descent of American jurisprudence down the “slippery slope” of alternative liability—lest the uncontrolled descent lead to a precipitous fall into an irrational and unjust abyss.

II. THEORIES OF ALTERNATIVE LIABILITY

A. The Beginning: *Summers v. Tice*

In the case of *Summers v. Tice*, California’s Supreme Court held that two hunters each acted tortiously by firing their guns in the plaintiff’s direction—because it was equally probable that either one was responsible.¹⁰ In *Summers*, the plaintiff went hunting with the two defendants. He specifically cautioned them to stay in line and be careful, but when a bird was flushed, both defendants fired at it even though the plaintiff was directly in the line of fire and clearly visible. Summers was hit once in the eye and once in the lip. It was undisputed that one of the two hunters caused the plaintiff’s injury, but the plaintiff could not prove which defendant injured him.¹¹ Normally, this failure of proof would have been fatal to plaintiff’s claim, but the *Summers* court decided to create new law—instead of letting the innocent plain-

10. 199 P.2d at 2–3.

11. *See id.* at 4.

tiff go uncompensated and the negligent defendants go unpunished. Under these extraordinary circumstances, the court relieved the plaintiff of his burden to prove which defendant caused his injury and held that both defendants were jointly and severally liable for his injuries unless one of them could prove that he did not cause the injury.¹² This holding effectively shifted the burden of identifying the negligent defendant (proving "guilt") from the plaintiff to the defendants. As a matter of law, defendants in such "extraordinary circumstances" now had to "prove their innocence."

In *Summers*, the court crafted this alternative theory of liability based on its belief that it would be unfair for the culpable defendant(s) to escape liability simply because the plaintiff, through no fault of his own, was unable to prove which of the two defendants injured him. Because both hunters fired their gun in the plaintiff's direction, the court decided that it was more equitable to put the loss on the culpable hunters rather than on the innocent plaintiff. It reasoned that both defendants "brought about a situation where the negligence of one of them injured the plaintiff, hence, it should rest with them each to absolve himself if he can."¹³

This doctrine of "alternative liability" is now embodied in section 433B(3) of the Restatement (Second) of Torts. The Restatement notes that the policy underlying the shifting burden is "the injustice of permitting proved wrongdoers . . . to escape liability merely because the nature of their conduct and the resulting harm has made it difficult or impossible to prove which of them caused the harm."¹⁴ Courts have applied this form of alternative liability in cases where defendants' conduct was simultaneous in time, was of the same character, and created the same risk of harm, and where all potential tortfeasors were joined as defendants.¹⁵

12. *Id.* at 5.

13. *Id.* at 4.

14. RESTATEMENT (SECOND) OF TORTS § 433B(3) cmt. f (1965) (emphasis omitted).

15. *See id.* at cmt. h. *But see* *Abel v. Eli Lilly & Co.*, 343 N.W.2d 164, 172 (Mich. 1984) (holding that DES plaintiffs could rely on alternative liability even though contested issue over whether plaintiffs had sued all potential tortfeasors and where alleged tortious activity occurred over period of 20 years).

B. “Enterprise” Liability: “Industry-wide Liability”

“Enterprise” liability, also termed “industry-wide liability,”¹⁶ originated in 1972 in *Hall v. E.I. Du Pont de Nemours & Co.*¹⁷ In *Hall*, 13 children were injured in separate exploding blasting cap accidents. They sued six manufacturers (comprising virtually the entire blasting cap industry of the United States) and their trade association. The evidence showed that the defendants (1) adhered to an industry-wide safety standard, (2) delegated safety functions (design and investigation) to the their trade association, and (3) adopted an industry-wide design and manufacture of blasting caps.¹⁸ Plaintiffs alleged that defendants’ failure to place warnings on individual blasting caps created an unreasonable risk of harm. They further asserted that defendants knew of the high incidence of injury to children and consciously agreed not to place warnings on the caps. Defendants moved to dismiss on the ground that the complaint did not identify the specific manufacturer that caused any particular injury.

The *Hall* court held that “Plaintiffs’ allegations of joint knowledge and action raised issues of fact and law sufficient to defeat dismissal.”¹⁹ It focused on three issues: (1) defendants’ joint control of the risk; (2) the assignment of costs to those most able to reduce them; and (3) providing a remedy to innocent plaintiffs.²⁰ It reasoned that the burden of proving proximate cause should be relaxed where all manufacturers followed an industry-wide safety standard, delegated all safety functions to the trade association and explicitly cooperated in the manufacture and design of the blasting caps if the plaintiffs eventually demonstrate “defendants’ joint awareness of the risks at issue in this case and their joint capacity to reduce or affect those risks.”²¹ Under “enterprise” liability,

the industry-wide standard becomes itself the cause of plaintiff’s injury, just as defendants’ joint plan is a cause of injury in the traditional “concert of action” plea. Each defendant’s adherence perpetuates this standard, which results in the manufacture of the particular, unidentifiable injury-producing product. There-

16. See, e.g., *Starling v. Seaboard Coast Line R.R.*, 533 F. Supp. 183, 187 (S.D.Ga. 1982); *Zafft v. Eli Lilly & Co.*, 676 S.W.2d 241, 245 (Mo. 1984).

17. 345 F. Supp. 353 (E.D.N.Y. 1972).

18. *Id.* at 359, 375.

19. *Id.* at 386.

20. See *id.* at 371.

21. *Id.* at 378.

fore, each industry member has contributed to plaintiff's injury.²²

Since the *Hall* decision, "Enterprise liability . . . has been rejected by virtually all jurisdictions that have considered this concept."²³

The prominent reason for declining recovery under this theory is its limited application to cases that involve only a small number of manufacturers in a highly centralized industry. The *Hall* court recognized this limitation and stated "[w]hat would be fair and feasible with regard to an industry of five or ten producers might be manifestly unreasonable if applied to a decentralized industry composed of thousands of small producers."²⁴

Courts have also rejected "enterprise" liability because of its "inability to prove the defendants collectively controlled their conduct by jointly imposed safety standards."²⁵

C. "Market Share" Liability

Another alternative liability theory plaintiffs attempt to pursue is "market share" liability. "Market share" liability imposes pro rata liability in the ratio of the market share of each manufacturer of fungible products that are so generic that individual manufacturers cannot be identified.²⁶ When a court applies this alternative theory of liability, it shifts the burden of proof from the plaintiff to the defendant-manufacturers, requiring them to prove that they did not manufacture the offending product.

22. *Sindell v. Abbott Labs.*, 607 P.2d 924, 935 (Cal. 1980), *cert. denied*, 449 U.S. 912 (1980).

23. *Gaulding v. Celotex Corp.*, 772 S.W.2d 66, 70 (Tex. 1989) (citing *Mulcahy v. Eli Lilly & Co.*, 386 N.W.2d 67, 70-71 (Iowa 1986); *Martin v. Abbott Labs.*, 689 P.2d 368, 380 (Wash. 1984); *Zafft v. Eli Lilly & Co.*, 676 S.W.2d 241, 245 (Mo. 1984); *Sindell*, 607 P.2d at 935; *Cummins v. Firestone Tire & Rubber Co.*, 495 A.2d 963, 971 (Pa. Super. Ct. 1985); *Namm v. Charles E. Frosst & Co.*, 427 A.2d 1121, 1129 (N.J. Super. Ct. App. Div. 1981) ("Adoption of this legal theory would, of necessity, result in total abandonment of the well-settled principle that manufacturers are responsible only for damages caused by a defective product upon proof that the defective product was defective and that the defect arose while the product was in the control of defendant.").

24. *Gaulding*, 772 S.W.2d at 70 (quoting *Hall*, 345 F. Supp. at 378).

25. *Id.* (citing *Mulcahy v. Eli Lilly & Co.*, 386 N.W.2d 67, 71 (Iowa 1986); *Sindell*, 607 P.2d at 935; *Cummins*, 495 A.2d at 970-71).

26. Donald G. Gifford, *Market Share Liability Beyond DES Cases: The Solution to the Causation Dilemma in Lead Paint Litigation?*, 58 S.C. L. REV. 115, 117 (2006).

1. “Market Share” Liability was Created to Accommodate DES Plaintiffs

The alternative theory of liability known as “market share” liability was crafted by California’s Supreme Court in 1980 in *Sindell v. Abbott Laboratories*,²⁷ to accommodate the needs of plaintiffs allegedly injured by their mother’s in-utero exposure to the drug diethylstilbestrol (DES). DES cases often presented problems of proof for a plaintiff—namely identifying the product source. The length of time between exposure and discovery of injury was often in excess of 20 years—making it difficult for the plaintiff to locate witnesses and for those witnesses to recall facts with certainty.²⁸ “Pharmacists many times did not know who manufactured the DES they purchased because the chain of distribution went from manufacturer to wholesaler to pharmacist, and in its generic form, records of the particular manufacturer were not kept or have been destroyed. The plaintiff’s mother and her pharmacist often have no recollection of the color, size or manufacturer of the DES [she] ingested while pregnant”²⁹ Given the sheer number of DES manufacturers marketing generic versions of DES, it was often a daunting task to show which defendant manufactured and sold the DES responsible for the plaintiff’s injuries.

In *Sindell*, the plaintiffs brought a class action against 11 drug manufacturers, alleging that defendants were jointly liable because they had acted in concert to produce, market, and promote DES as a safe and effective drug for preventing miscarriages.³⁰ The trial court dismissed the claims because the plaintiffs’ were unable to identify the defendants that manufactured the DES responsible for their specific injuries. In reversing the decision, California’s Supreme Court declined to apply any of the then-existing theories of collective liability and held *Summers* inapplicable because all potential tortfeasors had not been

27. 607 P.2d 924. DES was a synthetic estrogen hormone that was marketed to women as a miscarriage preventative from 1947–1971. During that time hundreds of pharmaceutical companies produced the drug because it was never patented. Naomi Sheiner, Comment, *DES and a Proposed Theory of Enterprise Liability*, 46 *FORDHAM L. REV.* 963, 963–64, 963 n.1 (1978). In 1971, a link was discovered between fetal exposure to DES and the development many years later of certain rare forms of cervical and vaginal cancer. *Sindell*, 607 P.2d at 925, 927.

28. See *McElhaney v. Eli Lilly & Co.*, 564 F. Supp. 265, 267 (D.S.D. 1983).

29. *Id.* at 267–68 (footnotes omitted).

30. *Sindell*, 607 P.2d at 925.

joined.³¹ “Concert of action” was not available because these plaintiffs had merely alleged defendants’ parallel action, rather than a tacit understanding or a common plan.³² The court also held that “enterprise” liability was unsuitable because of the large number of DES manufacturers and defendants’ lack of joint control over the risk of harm.³³ Nonetheless, stressing the gravity of the injury, the court observed that in a “contemporary complex industrialized society, advances in science and technology create fungible goods which may harm consumers and which cannot be traced to any specific producer.”³⁴ Declining to apply traditional tort principles, the court instead chose to once again expand “alternative liability” and created what is now known as “market share” liability.³⁵

2. The Policy Considerations for “Market Share” Liability

The *Sindell* court based its decision on two policy considerations. First, assuming for purposes of appeal that all defendants were negligent, the court adopted the *Summers* rationale that “as between an innocent plaintiff and negligent defendants, the latter should bear the cost of the injury.”³⁶ Second, it reasoned that if manufacturers were held liable, this would create an incentive to produce safer products.³⁷ Specifically, the court concluded that drug manufacturers were in the best position to warn the public of side effects and dangers associated with taking drugs because the

31. *Id.* at 930–31. Unlike *Summers*, the *Sindell* defendants came from a large ill-defined class of companies that produced DES for a variety of uses under at least 70 trade names. *Id.* at 928 n.6. According to the court, there was “no rational basis on which to infer” that any defendant supplied the DES at issue. *Id.* at 931. Thus, the court concluded that it would be unfair to require each defendant to exonerate itself when there was a real possibility that the actual supplier of DES to *Sindell*’s mother was not before the court. *Id.* at 931.

32. *See id.* at 933. The court rejected this theory because Food and Drug Administration (“FDA”) regulations require drug companies to pool their clinical data. They also require companies to use the same standard to insure that each company’s DES was chemically identical. *See Sheiner, supra* note 27, at 975–78 (describing drug industry practices in general). Consequently, the court refused to imply a “concert of action” simply because the defendants complied with federal regulations. *Sindell*, 607 P.2d at 935.

33. *See Sindell*, 607 P.2d at 935. The *Sindell* Court likewise observed that it would be unfair to impose liability on an industry simply because they were required to adhere to FDA standards. *Id.*

34. *Id.* at 936.

35. *Id.* at 936–37.

36. *Id.* at 936.

37. *Id.*

consumer is virtually incapable of recognizing and protecting themselves against any defects.³⁸

The court thought it reasonable, under the circumstances, “to measure the likelihood that any of the defendants supplied the [offending] product” by each defendant’s share of the DES market.³⁹ Furthermore, by apportioning liability according to market share, “each manufacturer’s liability for an injury would be approximately equivalent to the damage caused by the DES it manufactured.”⁴⁰

Although this theory has superficial appeal—distributing liability among many potentially culpable defendants—it ignores fundamental fairness and increases overall costs in an effort to join a substantial share of the market.⁴¹ It also failed to provide much needed guidance on some fundamental issues. For example, the *Sindell* court failed to identify the relevant market for purposes of determining a particular defendant’s market share (*i.e.*, local, countywide, statewide or national). A defendant’s liability will vary widely depending on which market is used and this uncertainty undermines the court’s claim that “market share” liability approximates each defendant’s responsibility for the injuries caused by its own products.⁴² The decision also failed “to specify how the market for DES can be allocated fairly when DES has been prescribed for uses other than as a miscarriage preventative.”⁴³ The *Sindell* court never explained what constitutes a

38. *Id.*

39. *Id.* at 937.

40. *Id.* at 938.

41. “Acceptance of market share liability and the concomitant burden placed on the courts and the parties will imprudently bog down the judiciary in an almost futile endeavor. This would also create a tremendous cost, both monetarily and in terms of the workload, on the court system and litigants in an attempt to establish market share percentages based on unreliable or insufficient data.” *Smith v. Eli Lilly & Co.*, 560 N.E.2d at 338 (citing *Fischer*, *supra* note 1, at 1657). *See also Fischer supra* note 1, 1657 (“The legal fees and administrative costs arising from litigation of this magnitude easily could rival the cost of the plaintiff’s judgment.”); Jonathan B. Newcomb, Comment, *Market Share Liability for Defective Products: An Ill-Advised Remedy for the Problem of Identification*, 76 Nw. U. L. REV. 300, 323–26 (1981). Use of “market share” liability increases administrative costs because manufacturers have to defend themselves in multiple suits including those in which their product was not the actual cause of any injuries. Richard P. Murray, *Sindell v. Abbott Laboratories: A Market Share Approach to DES Causation*, 69 CAL. L. REV. 1179, 1188 n.51 (1981).

42. *Fischer*, *supra* note 1, at 1643–44.

43. *See Miller & Hancock, Perspectives on Market Share Liability: Time for a Re-assessment?*, 88 W.VA. L. REV. 81, 89 n.46 (1985); David J. Murray, Note, *The DES Causation Conundrum: A Functional Analysis*, 32 N.Y.L. SCH. L. REV. 939, 959–61 (1987).

“substantial share” of the market, sufficient to shift the burden of proof to the defendant. The law review article that influenced the court suggested that a plaintiff join 75 to 80 percent of the manufacturers,⁴⁴ but the court rejected this as too high and held that only a substantial percentage is required.⁴⁵ “In order to calculate market shares, the scope of the market itself must be defined in terms of the time period, geographical area covered, and the range of identifiable product forms included.”⁴⁶ In the DES litigation, the only factor used by the court to determine market share was time—the nine months during which the pregnant mother would have purchased the DES. If the manufacturer did not sell DES during that time period, it should be dismissed from the suit.⁴⁷ This, however, ignores the market share in any given geographical area where a manufacturer may not market its products or where a small local producer dominated the local market. With respect to the relevant product, in DES litigation, it depended on what the mother remembered. Did she remember taking a pill or a capsule and did she remember its size, shape or color markings? If she remembered any details, the size of the market should have been shrunk to include only those manufacturers who produced the pill or capsule with the specific characteristics during the nine months the DES was taken.

3. The Extraordinariness of “Market Share” Liability

In addressing the plight of DES plaintiffs, the courts were faced with a set of extraordinary circumstances. There was a signature injury caused by a specific product—cervical and vaginal cancer directly linked to the drug DES. Thus, there was little dispute about what caused the injury. The dispute was over proof that a specific defendant manufactured the DES that caused the injury.

There was a very finite period of time when the injury occurred – the nine month window between conception and birth when the plaintiff’s mother took DES to prevent a miscarriage. Plaintiffs knew when their mothers took the drug. Therefore, they knew when the DES was sold. This allowed the court to narrowly tailor the remedy to the market share of those defendants who sold DES in the relevant market during the relevant nine-month

44. Sheiner, *supra* note 27, at 996.

45. *Sindell v. Abbott Labs.*, 607 P.2d 924, 937 (Cal. 1980).

46. Murray, *supra* note 41, at 1189.

47. *Id.*; see *Sindell*, 607 P.2d at 937.

window. Additionally, the drug was only produced and marketed for twenty-four years.⁴⁸

Rightly or wrongly, based on these extraordinary facts (a signature injury caused by a drug sold during a nine-month window), some courts have applied the “market share” alternative theory of liability. Under “market share” liability, the burden of identification shifts to the defendants if the plaintiff establishes a prima facie case on every element of the claim except for identification of the actual tortfeasor or tortfeasors, and that the plaintiff joined manufacturers representing a “substantial share” of the market.⁴⁹ Once these elements are established, each defendant is severally liable for the portion of the judgment that represented its share of the market at the time of the injury, unless it proves that it could not have made the product that caused the plaintiff’s harm.⁵⁰

In deciding whether to adopt a rule of [market share] liability, courts have considered the following factors: (1) the generic nature of the product; (2) the long latency period of the harm; (3) the inability of plaintiffs to discover which defendant’s product caused plaintiff’s harm, even after exhaustive discovery; (4) the clarity of the causal connection between the defective product and harm suffered by plaintiffs; (5) the absence of other medical or environmental factors that could have caused or materially contributed to the harm; and (6) the availability of sufficient ‘market share’ data to support a reasonable apportionment of liability.⁵¹

III. MOST COURTS HAVE REJECTED “MARKET SHARE” LIABILITY

Because the allure of shifting the burden of proof from themselves onto defendants, whenever plaintiffs cannot prove causation or want to increase the number of potentially liable

48. See sources cited *supra* note 27.

49. *Sindell*, 607 P.2d at 936–37.

50. In *Brown v. Superior Court*, 751 P.2d 470 (Cal. 1988), the California Supreme Court clarified its intention to hold defendants severally, instead of jointly and severally, liable because joint liability would “frustrate *Sindell’s* goal of achieving a balance between the interest of DES plaintiffs and manufacturers of the drug.” *Id.* at 487.

51. *In re Methyl Tertiary Butyl Ether (“MTBE”) Prods. Liab. Litig.*, 379 F. Supp. 2d 348, 376 (S.D.N.Y. 2005) (citing RESTATEMENT (THIRD) OF TORTS: PRODUCTS LIABILITY § 15 cmt. c (1998)). See also Richard O. Faulk & John S. Gray, *Reunion in Salam: Updating the MTBE Controversy*, 36 ENVTL. L. REP. 10667, 10679–80 (2006) (discussing the federal courts adoption of the “commingled product theory” variation of market share liability in MTBE litigation).

defendants, they ask for this extraordinary relief. Although the *Sindell* decision was handed down in California over 25 years ago, to date only the highest court of five other states have adopted some form of "market share" liability.⁵² Three of those five states adopted it in DES cases,⁵³ one in a DES case and in lead paint litigation,⁵⁴ and the other in a case involving a blood product needed by hemophiliacs.⁵⁵ Some federal courts hearing diversity cases have predicted that the state's supreme court would adopt "market share" liability⁵⁶ but most have declined to adopt such a radical departure from the common law of the state in which each sits without clear direction from that state's supreme court.⁵⁷

52. *Sindell's* concept of "market share" liability has been extensively criticized, and has been adopted in the same form by only one Federal district court. See *McElhaney v. Eli Lilly & Co.*, 564 F. Supp. 265, 270-71 (D.S.D. 1983) (applying what it thought would be South Dakota law).

53. See *Hymowitz v. Eli Lilly & Co.*, 539 N.E.2d 1069, 1075 (N.Y. 1989), *cert. denied*, 493 U.S. 944 (1989) (adopting "market-share" theory of liability in which DES defendants are liable in proportion to their share in national market irrespective of proof that they did not cause the injury, but stressing that "the DES situation is a singular case, with manufacturers acting in a parallel manner to produce an identical, generically marketed product, which causes injury many years later, and which has evoked a legislative response reviving previously barred actions"); *Martin v. Abbott Labs.*, 689 P.2d 368, 380 (Wash. 1984) (adopting "modified market share" liability, in which plaintiff must join only one defendant who produced or marketed injury-causing product; burden is then shifted to defendant to prove its percentage share of market and thereby lower presumptive equal share of market); *Conley v. Boyle Drug Co.*, 570 So. 2d 275, 285 (Fla. 1990) (due diligence requirement).

54. *Collins v. Eli Lilly & Co.*, 342 N.W.2d 37, 53 (Wis. 1984), *cert. den.*, 469 U.S. 826 (1984) (adopting modified market-share theory of liability in which each DES defendant is liable in proportion to its "respective contribution" to the result, as measured by various factors); *Thomas ex rel. Gramling v. Mallett*, 701 N.W.2d 523 (Wis. 2005) (creating a form of "absolute liability" by expanding market share liability to lead paint litigation and requiring defendants to prove they never sold any paint in Wisconsin between 1900 and 1978).

55. See *Smith v. Cutter Biological, Inc.*, 823 P.2d 717 (Haw. 1991).

56. See *McElhaney*, 564 F. Supp. at 269 (predicting that South Dakota's Supreme Court would adopt an alternative theory of liability and choosing market share liability); *McCormack v. Abbott*, 617 F. Supp. 1521, 1526 (D. Mass. 1985) (adopting Washington's version of market share liability which the federal court held was consistent with Massachusetts court's guidelines in *Payton v. Abbott*, 437 N.E.2d 171 (Mass. 1982)).

57. See *Tidler v. Eli Lilly & Co.*, 851 F.2d 418, 423 (D.C. Cir. 1988) (refusing to apply "market share" liability to DES manufacturers under the laws of Maryland and District of Columbia because neither state recognizes "non-identification" theories); *Mizell v. Eli Lilly & Co.*, 526 F. Supp. 589, 596 (D.S.C. 1981) (holding that the application of *Sindell* market-share liability against DES manufacturers would violate public policy of South Carolina); *Lee v. Baxter Health Care Corp.*, 898 F.2d 146, No. 89-2143, 1990 WL 27325, at *4 (4th Cir. Feb. 27, 1990) (unpublished table decision) (declining to apply market-share liability because it "directly contravene[s] Maryland tort law, which requires direct proof that the defendant is liable for the plaintiff's injuries be-

Many of the states that have addressed “market share” liability have rejected its application in all cases, including those involving DES.⁵⁸

A. “Market Share” Liability Has Been Rejected on Policy Grounds

As stated above, a plaintiff in a products liability action must ordinarily prove that a manufacturer or supplier produced or provided the product or was in some way responsible for the plaintiff’s injury. This is a bedrock principle of tort law.⁵⁹ Plaintiffs ask courts to apply the “market share” theory of liability because it is one of the few exceptions to the rule that a plaintiff must show a causal connection between the defendant’s product and plaintiff’s injury (*i.e.*, causation in fact). As discussed above, such a theory allows recovery without proof of which defendant actually manufactured or supplied the product alleged to have harmed the plain-

cause the defendant manufactured, distributed, sold, or was otherwise responsible for or controlled the product.”); *see also* *Morton v. Abbott Labs.*, 538 F. Supp. 593, 599 (M.D. Fla. 1982) (“[M]arket share theory unquestionably represents a radical departure from the traditional concept of causation” and there was no indication that Florida would abandon such a fundamental principle.); *Pipon v. Burroughs-Wellcome Co.*, 532 F. Supp. 637, 639 (D.N.J. 1982) (finding no indication that the New Jersey Supreme Court would deviate from the causation requirement), *aff’d*, 696 F.2d 984 (3d Cir. 1982); *Ryan v. Eli Lilly & Co.*, 514 F. Supp. 1004, 1019 (D.S.C. 1981) (declining to apply burden shifting theory); *Griffin v. Tenneco Resins, Inc.*, 648 F. Supp. 964, 967 (W.D.N.C. 1986) (describing the expansion in tort law requested by plaintiff not as a “quantum leap, but rather a quantum detour or perhaps knight’s move, as it requires not only a quantum acceleration but also a marked change in direction as well.”); *Wood v. Eli Lilly & Co.*, 38 F.3d 510, 514 (10th Cir. 1994) (applying Oklahoma law).

58. *See* RESTATEMENT (THIRD) OF TORTS: LIABILITY FOR PHYSICAL HARM § 28 cmt. o (Proposed Final Draft No. 1 2007) (“Virtually all courts that have considered the question have declined to apply a market-share liability theory to products that are not fungible and therefore do not pose equivalent risks to all of those exposed to the products.”); *see also* *Smith v. Eli Lilly & Co.*, 560 N.E.2d 324 (Ill. 1990); *Mulcahy v. Eli Lilly & Co.*, 386 N.W.2d 67 (Iowa 1986); *Sutowski v. Eli Lilly & Co.*, 696 N.E.2d 187 (Ohio 1998); *City of St. Louis v. Benjamin Moore & Co.*, 226 S.W.3d 110 (Mo. 2007) (confirming the continuing vitality of *Zafft v. Eli Lilly & Co.*, 676 S.W.2d 241 (Mo. 1984), *Morton v. Abbott Labs.*, 538 F. Supp. 593 (M.D. Fla. 1982), *Ryan*, 514 F. Supp. 1004 (D.S.C. 1981). *See also* Richard E. Kaye, Annotation, “Concert of Activity,” “Alternate Liability,” “Enterprise Liability,” or Similar Theory as Basis for Imposing Liability Upon One or More Manufacturers of Defective Uniform Product, in Absence of Identification of Manufacturer of Precise Unit or Batch Causing Injury, 63 A.L.R. 5th 195, 225–239, 260–74 (1998) (collecting cases).

59. *Smith v. Eli Lilly & Co.*, 560 N.E.2d at 328 (“A fundamental principle of tort law is that the plaintiff has the burden of proving by a preponderance of the evidence that the defendant caused the complained-of harm or injury; mere conjecture or speculation is insufficient proof.”).

tiff. For some states this is too much of a deviation from traditional tort law.⁶⁰

Other states have refused to adopt "market share" liability because "in one way or another [it] provide[s] plaintiffs recovery of loss by a kind of *court-constructed insurance plan*. The result is that manufacturers are required to pay or contribute to payment for injuries which their product may not have caused."⁶¹ According to these courts, "awarding damages to an admitted innocent party by means of a court-constructed device that places liability on manufacturers who were not proved to have caused the injury involves social engineering more appropriately within the legislative domain."⁶² The Restatement (Third) of Torts notes that "[c]rafting a coherent market-share scheme that both relaxes the traditional tort requirement of factual causation and provides a workable market-share system is much more the type of lawmaking tradi-

60. See, e.g., *id.* at 344-45 ("We have not in the past been hesitant to develop new tort concepts; however, in this instance we decline to do so because of the infirmities in the proposed theory. Furthermore, this is too great a deviation from a tort principle we have found to serve a vital function in the law, causation in fact, especially when market share liability is a flawed concept and its application will likely be to only a narrow class of defendants."); *Sutowksi*, 696 N.E.2d 187; *Thompson v. Johns-Manville Corp.*, 714 F.2d 581, 583 (5th Cir. 1983) (refusing to apply "market share" liability in Louisiana diversity case because it represents "radical departure[] from traditional theories of tort liability"); *Blackston v. Shook & Fletcher Insulation Co.*, 764 F.2d 1480, 1483 (11th Cir. 1985) (holding that "significant policy reasons favor retention of proximate cause as an essential element of cause of action in asbestos litigation"); *Zafft*, 676 S.W.2d at 247 ("There is insufficient justification at this time to support abandonment of so fundamental a concept of tort law as the requirement that a plaintiff prove, at a minimum, some nexus between wrongdoing and injury."); *Case v. Fibreboard Corp.*, 743 P.2d 1062, 1067 (Okla. 1987) ("the public policy favoring recovery on the part of an innocent plaintiff does not justify the abrogation of the rights of a potential defendant to have a causative link proven between that defendant's specific tortious acts and the plaintiff's injuries").

61. *Mulcahy*, 386 N.W.2d at 76 (Iowa 1986) (emphasis added).

62. *Id.* See also *Starling v. Seaboard Coast Line R.R.*, 533 F. Supp. 183, 190 (S.D.Ga. 1982) (suggesting that the appropriate institution to address and fashion remedies for asbestos victims unable to prove which manufacturers' product to which they were exposed is the legislature); *Zafft*, 676 S.W.2d at 247; *Senn v. Merrell-Dow Pharmaceuticals, Inc.*, 751 P.2d 215, 223 (Or. 1988) (rejecting a theory of market-share liability against two DPT manufacturers because the "adoption of any theory of alternative liability requires a profound change in fundamental tort principles," which was perceived as more properly in the domain of the legislature); *Nutt v. A.C. & S. Co.*, 517 A.2d 690, 694 (Del. Super. 1986) (rejecting market-share liability and recognizing "that such a change in traditional tort law should be left to the legislature"). Cf. *Mizell v. Eli Lilly & Co.*, 526 F. Supp. 589 (D.S.C. 1981) (relying on *Ryan*, 514 F. Supp. 1004, court rejects *Sindell* market-share theory as choice of law because it violates South Carolina public policy); Victor E. Schwartz & Liberty Mahshagian, *Failure to Identify the Defendant in Tort Law: Towards a Legislative Solution*, 73 CAL. L. REV. 941 (1985) (urging that legislatures should be the engine for reform on this issue).

tionally and appropriately a matter for legislative action than for common-law decision making.”⁶³

A few states have declined to adopt “market share” liability in drug-related litigation where it perceived “that the imposition of a theory of collective liability . . . would frustrate overarching public-policy and public-health considerations by threatening the continued availability of needed drugs and impairing the prospects of the development of safer vaccines.”⁶⁴

B. “Market Share” Liability Has Been Rejected Where There is No “Signature” Injury

Although “alternate liability” also involves wrongful conduct by more than one party, it is essential that the conduct of one of the parties must have caused the injury to plaintiff. Under this theory there can be no dispute that the product made by the defendants caused the plaintiff’s injury; the only dispute is over which defendant manufactured or supplied the injury-causing product.⁶⁵

In DES cases, the “market share” theory succeeded in separating wrongdoers from innocent actors, because DES plaintiffs suffered from a signature DES injury—a rare form of cancer (adenocarcinoma) that was directly attributable to exposure to DES.⁶⁶ When other factors or other types of products can cause, or at least contribute to, the plaintiff’s injuries, the plaintiff does not suffer

63. See RESTATEMENT (THIRD) OF TORTS: LIABILITY FOR PHYSICAL HARM § 28 cmt. o (Proposed Final Draft No. 1, 2007).

64. *Shackil v. Lederle Labs.*, 561 A.2d 511, 512 (N.J. 1989) (rejecting the application of market-share liability in diphtheria, pertussis and tetanus (“DPT”) vaccine-related litigation and rejecting the claim that there was a trend toward wholesale adoption of market-share liability in New Jersey); see also *Sheffield v. Eli Lilly & Co.*, 192 Cal. Rptr. 870, 879–80 (Cal. Ct. App. 1983) (noting that if market-share liability had been generally prevalent during the development of the poliomyelitis vaccine, manufacturers would have been reluctant to proceed with the distribution of the vaccine, and consequently thousands of polio sufferers would not have been saved by the Salk vaccine program). *But see Morris v. Parke, Davis & Co.*, 667 F. Supp. 1332 (C.D. Cal. 1987) (applying market-share liability against manufacturers of DPT based on allegations of industry manufacturing defects).

65. *Mulcahy*, 386 N.W.2d 67, 72 (Iowa 1986) (citing *Morton v. Abbott Labs.*, 538 F. Supp. 593, 598 (M.D. Fla. 1982)); *Brenner v. American Cyanamid Co.*, 699 N.Y.S.2d 848, 854 (N.Y. App. Div. 1999) (among the reasons for rejecting market-share theory in a lead paint poisoning case the court included the fact that “there is no signature injury associated with lead poisoning”).

66. See Nancy Lee Firak, *The Developing Policy Characteristics of Cause-in-Fact: Alternative Forms of Liability, Epidemiological Proof and Trans-Scientific Issues*, 63 TEMP. L. REV. 311, 334 (1990) (“In the DES cases there is no doubt that DES, and not a background risk, caused the injuries that the plaintiffs suffered.”).

from a “signature” injury.⁶⁷ “The public policy reasons favoring the use of market share do not control where there is a possibility that the [product of the] defendant[] did not cause the harm in question.”⁶⁸

C. “Market Share” Liability Has Been Rejected When the Product at Issue is Not Fungible

Additionally, courts typically refuse to apply “market share” liability if they determine that the product at issue is not fungible.⁶⁹ For example, many courts refused to apply “market share” liability in asbestos litigation because they concluded that asbestos was not a fungible product.⁷⁰ A draft of the Restatement (Third) of Torts explains:

67. *Santiago v. Sherwin-Williams Company*, 782 F. Supp. 186, 192 (D. Mass. 1992), *aff'd*, 3 F.3d 546 (1st Cir. 1993).

68. *Id.* at 193. *See also* *Case v. Fibreboard Corp.*, 743 P.2d 1062, 1066 (Okla. 1987) (“Because the market share liability theory is a theory which eliminates proof of causation of injury for public policy reasons, it must also be clearly founded in facts which support the link between the injury suffered and the risk to which plaintiff was exposed. In the DES arena this cause and effect was clear cut. In the application to asbestos related injuries there are more complications.”) (citations omitted); *Starling*, 533 F.Supp. at 191 (refusing to apply market share in an asbestos case because “[t]he injuries caused by asbestos exposure are not restricted to asbestos products—other products, such as cigarettes, may have caused or contributed to the injury.”).

69. “Fungibility . . . is not a term that is capable of being defined with categorical precision; its character will depend on the context of the injury, its cause and the particular obstacles encountered in linking the causation to the possibly negligent defendants. Fungibility does not require chemical identity.” DAVID G. OWEN et al., 2 MADDEN & OWEN ON PROD. LIAB. § 24:6 (3d ed. 2006). BLACK’S LAW DICTIONARY defines fungibles as “[g]oods which are identical with others of the same nature, such as grain and oil.” BLACK’S LAW DICTIONARY 465 (6th ed. 1990).

70. *See* DAVID G. OWEN et al., *supra* note 69, at § 24:7 n.6 (noting cases precluding application of market-share liability for asbestos-related cases because of nonfungibility); *Stevens v. Owens-Corning Fiberglas Corp.*, 57 Cal. Rptr. 2d 525, 540 (Cal. Ct. App. 1996) (noting the “diversity of asbestos products”); *Celotex Corp. v. Copeland*, 471 So. 2d 533, 538–39 (Fla. 1985) (noting cases that reject market-share theory in asbestos cases); *Gaulding v. Celotex Corp.*, 748 S.W.2d 627 (Tex. App. 1988), *aff'd*, 772 S.W.2d 66 (Tex. 1989) (concluding that alternative theories of liability, including market-share liability, are not available in Texas for an asbestos-related injury); *Starling*, 533 F. Supp. 183; *Vigiolto v. Johns Manville Corp.*, 643 F. Supp. 1454 (W.D. Pa. 1986) (holding that market-share liability is not appropriate in an action based on an asbestos-related injury); *see also* *Goldman v. Johns-Manville Sales Corp.*, 514 N.E.2d 691, 700 (Ohio 1987) (reasoning that market-share liability is inappropriate “in an asbestos litigation case, especially where it cannot be shown that all the products to which the injured party was exposed are completely fungible.”); *Marshall v. Celotex Corp.*, 651 F. Supp. 389, 393 (E.D. Mich. 1987) (“asbestosis litigation is an inappropriate area in which to extend market share liability.”); *Robertson v. Allied Signal, Inc.*, 914 F.2d 360, 383–84 (3d Cir. 1990) (applying Pennsylvania law); *White v. Celotex Corp.*, 907 F.2d 104 (9th Cir. 1990) (applying Arizona law); *Blackston v.*

When market-share liability is limited to fungible products that pose equivalent risks to users who have no reasonable means to prove which manufacturer provided the product that cause plaintiffs harm, it has an exceedingly limited reach. . . . Only products that cause harm after a lengthy latency period between exposure and development of harm are likely to create the systemic proof problems that market-share liability addresses. Many toxic substances, including asbestos products, do not pose equivalent risks to all exposed to the products.⁷¹

Courts have recognized that many products are not fungible because they have widely varying ranges of toxicity, depending upon its form and use. For example, courts evaluating claims of asbestos-related injury declined to extend “market share” liability because while all of the asbestos products shared an important characteristic in that they all contained asbestos fibers, they also “have widely divergent toxicities . . . caused by a combination of factors, including: the specific type of asbestos fiber incorporated into the product; the physical properties of the product itself; and the percentage of asbestos used in the product.”⁷²

Courts rejected “market share” liability in the following litigation in addition to the asbestos cases mentioned above after determining that the products at issue in litigation were not fungible:

- perfume litigation involving repeated exposure to aldehydes;⁷³

Shook & Fletcher Insulation Co., 764 F.2d 1480, (11th Cir. 1985) (applying Georgia law). *But c.f.*, Wheeler v. Raybestos-Manhattan, 11 Cal. Rptr. 2d 109 (Cal. Ct. App. 1992) (recognizing that an exception might exist in asbestos-containing brake pad litigation); Black v. Abex Corp., 603 N.W.2d 182, 190 (N.D. 1999) (“Although Wheeler recognized that non-identical products may give rise to market-share liability if they contain roughly equivalent quantities of a single type of asbestos fiber, the court did not hold that all asbestos-containing friction brake products in all cases will be considered fungible.”).

71. See RESTATEMENT (THIRD) OF TORTS: LIABILITY FOR PHYSICAL HARM § 28 cmt. o (Proposed Final Draft No. 1, 2007).

72. Mullen v. Armstrong World Indus., Inc., 246 Cal. Rptr. 32, 36, (Cal. Ct. App. 1988); see also *Starling*, 533 F. Supp. at 191 (noting that “products containing asbestos are not uniformly harmful-many products contain different degrees of asbestos. The total risk created by any manufacturer would be a function of both its share of the market and the relative harmfulness of its products; but a company’s market share could not be adjusted for the latter relation.”) (citations omitted); *Goldman*, 514 N.E.2d 691 (1987) (refusing to apply *Sindell* to asbestos products because of the difference in risks associated with asbestos products).

73. See, e.g., Sanderson v. Int’l Flavors & Fragrances, Inc., 950 F. Supp. 981, 992 (C.D. Cal. 1996) (explaining that while all defendants’ fragrance products allegedly contain aldehydes, “each contains different types of aldehydes, with different physical properties, at different levels of concentration”).

- tainted blood litigation;⁷⁴
- lead paint litigation;⁷⁵
- breast implant litigation;⁷⁶
- latex glove litigation;⁷⁷
- tire rim litigation;⁷⁸
- burning pajama litigation;⁷⁹
- volatile organic compound (“VOC”) litigation;⁸⁰

74. See, e.g., *King v. Cutter Labs.*, 685 So. 2d 1358, 1360 (Fla. Dist. Ct. App. 1996), *review dismissed*, 725 So. 2d 1108 (Fla. 1998) (noting that because the blood factoring product was created from plasma donors “at various sites across the nation . . . each plasma pool from which the concentrate is processed is different[,]” and that “[e]ach manufacturer uses a different proprietary method to prepare its concentrate”); *Poole v. Alpha Therapeutic Corp.*, 696 F. Supp. 351 (N.D. Ill. 1988); *but see Doe v. Cutter Biological, Inc.*, 971 F.2d 375 (9th Cir. 1992); *Smith v. Cutter Biological, Inc.*, 823 P.2d 717.

75. See, e.g., *City of St. Louis*, 226 S.W.2d 110, 115–16 (Mo. 2007) (“Without product identification, the city can do no more than show that the defendants’ lead paint may have been present in the properties where the city claims to have incurred abatement costs. That risks exposing these defendants to liability greater than their responsibility and may allow the actual wrongdoer to escape liability entirely. . . . Absent product identification evidence, the City simply cannot prove actual causation.”); *Jackson v. Glidden Co.*, No. 87779, 2007 WL 184662, ¶¶ 12, 15 (Ohio Ct. App. Jan. 25, 2007), *pet. denied*, (Ohio, June 20, 2007) (acknowledging that “[i]n Ohio market-share liability is not an available theory of recovery in a lead-paint based products liability action.”) (citations omitted); *Skipworth v. Lead Indus. Ass’n, Inc.*, 690 A.2d 169, 172 (Pa. 1997); *Brenner v. American Cyanamid Co.*, 699 N.Y.S.2d 848, 853 (N.Y. App. Div. 1999) (among the reasons cited for rejecting market-share theory in a lead paint poisoning case were the fact that lead pigments other than white lead carbonate are used in lead-based paint; white lead carbonate is used for products other than interior residential paint; lead pigments are found in products other than lead-based paint; and lead-based paint is not fungible.); *Santiago v. Sherwin-Williams Company*, 3 F.3d 546 (1st Cir. 1993) (declining to extend market-share liability under Massachusetts law because the plaintiff could not date when the lead paint was applied with any degree of precision; thus making the determination of the appropriate market speculative at best).

76. See *Matter of New York State Silicone Breast Implant Litigation*, 166 Misc. 2d 85, 89 (N.Y. Sup. Ct. 1995), *order aff’d*, 234 A.D.2d 28(1st Dep’t 1996) (not applicable “to breast implants because such products are not fungible and the manufacturers of the implants can often be identified”).

77. See *Kennedy v. Baxter Healthcare Corp.*, 50 Cal. Rptr. 2d 736 (Cal. Ct. App. 1996).

78. See *Cummins v. Firestone Tire & Rubber Co.*, 495 A.2d 963 (Pa. Super. Ct. 1985) (rejecting theory in action against manufacturers of multipiece tire and rim assemblies because products are not sufficiently similar to be considered identical or fungible).

79. See *Bixler v. Avondale Mills*, 405 N.W.2d 428 (Minn. Ct. App. 1987) (rejecting theory because cotton flannelette is not a fungible product).

80. See *Setliff v. E.I. Du Pont de Nemours & Co.*, 38 Cal. Rptr. 2d 763, 769–70 (Cal. Ct. App. 1995) (rejecting market-share liability against manufacturers of paints, solvents, strippers, glue products because VOC is a generic description for a class of chemicals found in many products including antiperspirants and deodorants and

- handgun injuries;⁸¹ and
- exploding car batteries.⁸²

IV. LEAD PAINT LITIGATION AND “MARKET SHARE” LIABILITY

One area of litigation where plaintiffs continue to pursue the use of “market share” liability has been in the lead paint litigation. Lead paint cases are typically brought by persons who lived in older homes once painted with lead-based paint who have or had elevated levels of lead in their blood. They may also be pursued by governmental or quasi-governmental entities looking for persons to pay for the cost of removing lead paint from buildings (*e.g.*, school districts and housing authorities). Sometimes they are filed by parents, activists and lawyers seeking relief on behalf of children who suffered from lead poisoning, who had elevated levels of lead in their blood, or who are merely in danger of being exposed to high concentrations of lead because they live in older homes.⁸³

In lead paint litigation, plaintiffs often sue their landlords or owners of the homes who are responsible for the upkeep and maintenance of their properties.⁸⁴ In these types of claims, the plain-

“[w]ithout an allegation of a fungible product, plaintiff cannot state a cause of action under the market share theory of liability”).

81. See *Hamilton v. Beretta U.S.A. Corp.*, 750 N.E.2d 1055, 1067 (N.Y. 2001) (refusing to apply market-share liability because “guns are not identical, fungible products” and gun manufacturers’ marketing techniques are not uniform; therefore, a “manufacturer’s share of the national handgun market does not necessarily correspond to the amount of risk created by its alleged tortious conduct”).

82. See *York v. Lunkes*, 545 N.E.2d 478, 480 (1989) (declining to apply market-share liability because “batteries made by different manufacturers are readily distinguishable from one another” and because unlike the drug DES, all batteries are not “defective”).

83. For a thorough overview of the use of lead historically, its toxicity, its use in paint, federal regulations aimed at controlling and eliminating the risk of lead paint poisoning and a summary of lead paint litigation see generally Richard Faulk & John Gray, *Getting the Lead Out? The Misuse of Public Nuisance Litigation By Public Authorities and Private Counsel*, 21 *Toxics L. Rep.* (pts. 1–3) 1071, 1071–98, 1124–52, 1172–96 (2006) (three-part series), for a thorough overview of the use of lead historically, its toxicity, its use in paint, federal regulations aimed at controlling and eliminating the risk of lead paint poisoning and a summary of lead paint litigation.

84. See RESTATEMENT (SECOND) OF TORTS, § 358, case citations July 1991 to June 1998, case citations July 1998 to June 2006 (1965) (collecting cases); RESTATEMENT OF LAW 2D, PROPERTY, §17.6 (“A landlord should be subject to liability for physical harm caused to the tenant and others upon the leased property with the consent of the tenant or his subtenants by a dangerous condition existing before or arising after the tenant has taken possession, if he has failed to exercise reasonable care to repair the condition and the existence of the condition is in violation of: (1) an implied warranty

tiffs allege that the landlord negligently failed to properly maintain the home or failed to provide the warnings required by the Residential Lead-Based Paint Hazard Reduction Act of 1992⁸⁵ as amended on March 6, 1996. Through this Act, the EPA and HUD jointly established regulations requiring sellers, lessors and brokers to provide purchasers and tenants with pre-sale/lease information about lead-based paint hazards in targeted homes, condos or apartments.⁸⁶ The Act's primary focus is on disclosure of known hazards.

In addition to landlords, plaintiffs look to the historical manufacturers of lead pigment and paint. However, plaintiffs are generally unable to identify with any specificity the manufacturer of the lead paint that they claim caused their injuries.⁸⁷ Therefore, they often cast a wide net by suing all known paint and pigment manufacturers claiming that they marketed most of the lead pigments used in the paints that were sold in the U.S. during the early parts of the Twentieth Century until 1978, when lead paint pigment

of habitability; or (2) a duty created by statute or administrative regulation.”); *see also* *Young v. Garwacki*, 402 N.E.2d 1045, 1049 (Mass. 1980); *Thompson v. Crownover*, 381 S.E.2d 283, 284–85 (Ga. 1989); *Pines v. Perssion*, 111 N.W.2d 409 (Wis. 1961).

85. Pub. L. No. 102-550, 106 Stat. 3672 (1992). This Act is Title X of the Housing and Community Development Act of 1992, 42 U.S.C. § 4851 and is often referred to as “Title X.” *See also* Barbara B. Altera, *Lead-Based Paint Activities in Military Family Housing*, 54 A.F. L. REV. 101, 105 (2004). “Various provisions of Title X were incorporated into the LPPPA and [the Toxic Substances Control Act] (“TSCA”).” *See* 15 U.S.C. §§ 2601–2692 (subchapter IV—Lead Exposure Reduction) (2007). “Those remaining provisions are codified in Title 42 of the United States Code, Chapter 63A.” Altera, *supra* note 85, at 105.

86. Lead; Requirements for disclosure of Known Lead-based Paint and/or Lead-Based Paint Hazards in Housing, 61 FED. REG. 9064 (March 6, 1996) (codified at 40 C.F.R. Pt. 745, subpt. F & 24 C.F.R. Pt. 35, subpt. H, respectively). “Congress required the EPA . . . to publish and periodically revise a lead hazard information pamphlet. In addition, the EPA was required to implement regulations requiring paid renovators to provide a lead hazard information pamphlet to owners/occupants of housing to be renovated.” Altera, *supra* note 85, at 107 (citing Pub. L. No. 102-550 § 1021(a), 106 Stat. 3672, 3920 (1992) (adding TSCA § 406(a), 15 U.S.C. § 2686(a)) and adding TSCA § 406(b), 15 U.S.C. § 2686(b)). *See also* Faulk and Gray, *supra* note 83, at 1139–40.

87. *See, e.g.,* *Jefferson v. Lead Industries Association, Inc.*, 106 F.3d 1245, 1250 (5th Cir. 1997); *see also* *Santiago*, 3 F.3d at 547 (1st Cir. 1993) (“plaintiff could not identify which, if any, of the defendants were the source of the lead she ingested or when the alleged injury-causing paint may have been applied to the walls and woodwork of her childhood home.”); *Lewis v. Lead Industries Ass’n, Inc.*, 793 N.E.2d 869 (Ill. 2003) (holding that “[b]y failing to identify the defendant that supplied the lead pigment used in the paint to which their children were exposed, the plaintiffs failed to satisfy the causation element of a claim . . . for lead poisoning.”); *Chicago v. American Cyanamid Co.*, 823 N.E.2d 126, 134 (Ill. App. Ct. 2005) (noting that plaintiff is unable to identify any specific defendant as the source of the lead pigment or paint at any particular location).

was outlawed for residential purposes. But with just a few exceptions, products liability law requires plaintiffs to identify the manufacturer of the allegedly defective product they claim caused their injury in order to prove proximate causation. Consequently, when plaintiffs were unable to make this showing, their cases were dismissed on summary judgment grounds or later at trial.⁸⁸

A. With one Exception, Courts Have Held that “Market Share” Liability is Not Appropriate in Lead Paint Litigation

To get around this identification problem, plaintiffs ask courts to apply “market share” liability to their cases. They want the court to presume the product of each and every defendant that historically manufactured lead paint pigment caused their injury unless the defendant can prove otherwise. Every court, except one, that has addressed this issue has rejected the use of “market share” liability in lead paint cases. As discussed above, most states have generally rejected the use of “market share” liability for any product for policy reasons.⁸⁹ Other courts have specifically addressed the applicability of “market share” liability in lead paint cases and rejected its use. This section briefly addresses the reasons courts have rejected the use of “market share” liability in lead paint cases.

1. Lead Paint is Not a Fungible Product

Perhaps the most fundamental reason that lead paint litigation does not lend itself to “market share” liability is that lead-based paint was not a generic uniform product. All DES used for

88. See, e.g., *Jefferson*, 106 F.3d at 1252–53 (noting that plaintiff’s obligation to identify the manufacturer of the allegedly defective product is inherent in the Louisiana Products Liability Act requirements); *Chicago v. American Cyanamid Co.*, 823 N.E.2d at 139 (dismissing case because, among other reasons, the plaintiffs were unable to make requisite factual allegations of proximate causation); see also *Cofield v. Lead Indus. Ass’n*, No. MJG-99-3277, 2000 WL 34292681 (D. Md. Aug. 17, 2000); *Philadelphia v. Lead Indus. Ass’n*, 994 F.2d 112, 114, 121–22 (3d Cir. 1993) (stating that the city’s claims for negligence and strict liability were time barred because they accrued in 1976 when Congress enacted federal law regarding lead abatement in federally funded public housing, and the complaint was filed 14 years later); *Hymowitz v. Eli Lilly & Co.*, 539 N.E.2d 1069, 1073 (N.Y. 1989), *cert. denied*, 493 U.S. 944 (1989) (explaining that “[i]n a products liability action, identification of the exact defendant whose product injured the plaintiff is, of course, generally required”); *Santiago*, 3 F.3d at 550–52 (holding that under Massachusetts law, plaintiff could not recover under either market-share theory of liability or concert in action theory).

89. See *supra* section III.A.

the treatment of pregnant women was manufactured according to an identical formula and presented an identical risk of harm.⁹⁰ In contrast, lead paint had different chemical formulations, contained different amounts of lead, and differed in potential toxicity.⁹¹ Some lead-based paint contained 10% lead pigment while some contained 50% lead pigment. In addition to the varying amount of lead pigment, the type of lead pigment used also varied.⁹² Thus, the equivalent risk of harm that formed the basis for “market share” liability in the DES setting is absent.

a. History of Paint Manufacturing

People have been using lead-based paint since before the Roman Empire.⁹³ By the 12th century, paint making involved the painters mixing dry pigments with oils such as linseed oil. “Advancements in the production of paint came about in the early 1700s when paint mills in England and America were making finely powdered pigments ground with a granite ball. Painters would blend pigments with a solvent on their own.”⁹⁴ Thus, each painter created his own unique brand of paint. It was not until the mid-to-late 1860s that paint manufacturers began making pre-mixed paints for customers.⁹⁵ “By the mid-1880s, mechanization was making the manufacturing process accessible to a larger and less specialized group of entrepreneurs.”⁹⁶ More importantly, the weight of prepared paint makes it expensive to transport, so a decentralized structure of small paint factories began springing up across the nation. These small independent paint mills dominated the industry until the mid-1900s.⁹⁷

90. *Sindell v. Abbott Labs.*, 607 P.2d 924, 936 (Cal. 1980).

91. *Skipworth v. Lead Indus. Ass’n, Inc.*, 690 A.2d 169, 173 (Pa. 1997).

92. *Brenner v. American Cyanamid Co.*, 699 N.Y.S.2d 848, 853 (N.Y. App. Div. 1999).

93. “[R]ed lead was discovered by accident in about 2500 BC. White lead occurred naturally but demand encouraged production of manmade versions. Vitruvius describes production of white lead in the 2nd century AD.” *The History of Paint*, <http://www.brendasemanick.com/art/historyofpaint.htm> (last visited June 25, 2007).

94. Ester Brody, *The Painting Trade*, 2 *PAINTPRO* (2000), available at <http://www.paintpro.net/Abstracts/PP202-England.cfm> (last visited June 24, 2007). National Paint & Coatings Ass’n, *News & Information: History of Paints and Coatings* (2006) (“The first recorded paint mill in America was reportedly established in Boston in 1700 by Thomas Child.”), http://www.paint.org/ind_info/history.cfm (last visited June 25, 2007).

95. Brody, *supra* note 94.

96. National Paint & Coatings Ass’n, *supra* note 94.

97. *Id.*

b. Many Formulas Were Used to Make Paint

Until the late 1800s and early 1900s, most painters mixed their own paint to meet their own unique and diverse needs.⁹⁸ This diversity in paint formulations is driven by the need for a range of colors, the wide range of surfaces to which paint is applied, a diversity of paint uses and differing exposure (weathering) conditions. There are many paint properties such as covering or obscuring power, drying time, paint-film-hardness, film flexibility, color permanence, water resistance, UV resistance, ease of application, control of paint layer thickness, rate of chalking, mold and fire resistance, among others, that are able to be modified by varying the properties and proportions of major components and minor additives.⁹⁹ The commercial pressures to differentiate products in the marketplace, and the many possible ways to prepare paints resulted in a wide variety of accessory compounds in pigment materials. Likewise, variations in the origin and amount of processing of minerals and chemical raw materials also had a strong influence on accessory compounds in a bulk pigment product as well as an influence on trace elements in bulk pigment samples and trace elements within pigment particles.

Of all the lead-based paints, white lead was once clearly the foundation of the paint industry. A 1944 book about mixing paint contained a listing of 246 paint color recipes or formulae, 135 of which included white lead as an ingredient, and an additional 38 that did not contain white lead but did list other lead pigments such as lead chromates.¹⁰⁰ Thus, even when white lead predominated as an ingredient, a substantial portion of the lead paint marketed and used by customers did not contain it. This fact alone illustrates the uniqueness and variability of lead paint.

98. Thomas ex rel. Gramling v. Mallett, 701 N.W.2d 523, 570 (Wis. 2005) (noting that “painters in the early decades of the 1900s often had their own individual formulas or methods for mixing the paint that they thought was best, depending on what a specific job required”). With respect to inorganic pigments: black lead sulfate was first introduced between 1855 and 1866; chrome green was first used in 1825; chrome orange, red and yellow were discovered in 1809; lead sulfate (white lead) goes back to at least Roman times; mineral yellow was patented in 1871; and red lead also dates back to Roman times. MIKE VAN ALPHEN, Australian Dep’t of Human Servs., PAINT FILM COMPONENTS: NATIONAL ENVIRONMENTAL HEALTH MONOGRAPHS, NATIONAL ENVIRONMENTAL HEALTH FORUM MONOGRAPHS, GENERAL SERIES No. 2 (1998) [hereinafter PAINT MONOGRAPH] (citations omitted).

99. PAINT MONOGRAPH, *supra* note 98, at 9. See also Faulk and Gray, *supra* note 83, at 1142–44 (a primer on paint).

100. PAINT MONOGRAPH, *supra* note 98, at 27 (citing F.N. Vanderwalker, THE MIXING OF COLORS AND PAINTS (Frederick J. Drake & Co. 1944)).

When a New York court was asked to apply “market share” liability to a lead paint case, the court concluded that although in New York “market share” liability is applicable in DES cases, it is not appropriate in lead paint cases.¹⁰¹ In making its decision, the New York court compared the factors present in a lead paint case to those present in a DES case. On the issue of fungibility, the court noted the following:

Arguably, the white lead carbonate used as a raw material in some lead-based paint did not differ between manufacturers. However, paint manufacturers used differing amounts of white lead carbonate, or some other lead pigment, in their paints. Some lead-based paint contained 10% lead pigment, while other paint was more toxic, containing as much as 50% lead pigment. Not only did the amount of lead pigment vary, but so did the type of lead pigment used. Thus, unlike DES, the finished product that was used by consumers here, *i.e.*, lead-based paint, was not fungible.¹⁰²

Furthermore, lead compounds other than white lead carbonate are often found in interior residential paint. Residential paint can include leaded zinc oxide, lead chromate, lead silicate, and lead sulfate.¹⁰³ In one case, plaintiffs’ own expert agreed that white lead carbonate accounted for only approximately 80% of the lead in all lead pigments used for interior paints between 1926 and 1955. In that case, the plaintiff had not sued the manufacturers of the remaining 20% of the lead pigments found in those interior paints.¹⁰⁴

101. *Brenner v. American Cyanamid Co.*, 699 N.Y.S.2d 848, 853 (N.Y. App. Div. 1999).

102. *Id.* See also *Jackson v. Glidden Co.*, No. 87779, 2007 WL 184662, ¶¶ 24 (Ohio Ct. App. Jan. 25, 2007), *pet. denied*, (Ohio, June 20, 2007) (noting that “paint manufacturers used their own formulas for incorporating white lead into paint” and that there were a “variety of lead pigments other than white lead carbonate that were used in paint formulations”). Before 1955, the paint contained anywhere from less than 2% to more than 70% lead by weight. See Gifford, *supra* note 26, at 153 n.290 (comparing Am. Standard Ass’n, Am. Standard Specifications to Minimize Hazards to Children from Residual Surface Coating Materials 5, § 2(a) (1955) (indicating that the voluntary standard adopted by industry in 1955 limited lead in paint to no more than 1% of total weight) with Bureau of Standards, U.S. Dept. of Commerce, United States Government Master Specification for Paint, White, and Tinted Paints Made on a White Base, Semipaste, and Ready Mixed (Standard Specification No. 10b), in Circular of Bureau of Standards, No. 89, at 2 (3d ed. 1927) (requiring that paint purchased by the federal government include between 45% and 70% white lead.)). Thus, one paint can pose a risk 35 times as great as another paint. Gifford, *supra* note 26, at 153.

103. *Brenner*, 699 N.Y.S.2d at 853.

104. *Id.* at 852.

c. Differing Paint Formulas Means Differing Levels of Bioavailability

Differing formulas of lead paint result in differing levels of bioavailability of the lead. “The term ‘bioavailability’ refers to ‘the extent to which the lead is in a form which is easily internalized by the body, *i.e.*, the extent to which it is in a form which can be physiologically transported through the lungs, gastrointestinal tract, skin, etc. and absorbed into the bloodstream. . . .’”¹⁰⁵ Putting this concept into the context of lead paint litigation one court stated:

Because of differences in bioavailability, a child who ingests dust or chips of lead paint containing equal amounts of lead “derived from two lead paints will *not* generally develop equal elevation in internal lead level from the two paints. Rather, more highly bioavailable lead has a greater impact than lead in less bioavailable form.” Thus, differing formulae of lead paint has a direct bearing on how much damage a lead paint manufacturer’s product would cause.¹⁰⁶

The fact that differing paint formulas create different degrees of risk of harm was found to be “fatal” to plaintiffs claim that “market share” liability should be applied to their lead paint case. The court noted that “market share liability is grounded on the premise that it ensures that ‘each manufacturer’s liability would approximate its responsibility for the injuries caused by its own products.’”¹⁰⁷ It reasoned that in lead paint cases, apportioning liability on a manufacturer’s market share would not approximate that manufacturer’s responsibility for injuries caused by its lead paint.¹⁰⁸

2. Childhood Lead Poisoning is Not Caused by a Signature Injury

Another factor present in the DES context is the presence of a signature injury directly linked to the drug DES.¹⁰⁹ In lead paint litigation, the harm or injury complained about is frequently termed “childhood lead poisoning.” As can be seen below, however,

105. *Skipworth v. Lead Indus. Ass’n, Inc.*, 690 A.2d 169, 173 n.5 (Pa. 1997) (quoting the Record on Review).

106. *Id.* at 173 (internal citations omitted).

107. *Id.* (quoting *Sindell*, 607 P.2d at 937).

108. *Id.*

109. *See supra* note 27.

there is no “signature injury”—similar to those associated with DES—that necessarily links “childhood lead poisoning” solely to lead-based paint.¹¹⁰

“Childhood lead poisoning” is a term frequently used to describe children found to have elevated levels of lead in their blood. The Center for Disease Control and Prevention (the “CDC”) has set its blood lead level of concern at 10 µg/dL.¹¹¹ Based on this level of concern, any child with an elevated blood lead level (in excess of 10 µg/dL) is often deemed by governmental agencies to be lead poisoned.¹¹² However, “childhood lead poisoning” is not

110. Jackson v. Glidden Co., No. 87779, 2007 WL 184662, ¶¶ 24 (Ohio Ct. App. Jan. 25, 2007) (“there is no single, defined injury that results from lead poisoning”); see also Brenner v. American Cyanamid Co., 699 N.Y.S.2d 848, 853 (N.Y. App. Div. 1999); Santiago v. Sherwin-Williams Company, 782 F. Supp. 186, 192–93 (D. Mass. 1992) (noting the absence of a unique injury in lead cases); Starling v. Seaboard Coast Line R.R., 533 F. Supp. 183, 190–91 (S.D.Ga. 1982) (noting that asbestos is not caused by a signature injury because the asbestos-related injuries “are not restricted to asbestos products—other products, such as cigarettes, may have caused or contributed to the injury.”); Case v. Fibreboard Corp., 743 P.2d 1062, 1066 (Okla. 1987). See also Faulk and Gray, *supra* note 83, at 1093–96 (discussing exposure pathways for lead).

111. Comm’n on Life Scis, Measuring Lead Exposure In Infants, Children, and Other Sensitive Populations, 28 (1993). The CDC has proclaimed that “it is not possible to select a single number to define lead poisoning for the various purposes of all of these groups.” Ctr. For Disease Control, Preventing Lead Poisoning in Young Children (1991), available at <http://www.cdc.gov/nceh/lead/publications/books/plpyc/chapter1.htm>. It acknowledged that epidemiologic studies have identified harmful effects of lead in children at blood lead levels (“BLLs”) at least as low as 10 µg/dL and recognized that some studies have suggested harmful effects at even lower levels, but the body of information accumulated so far is not adequate for effects below about 10 µg/dL to be evaluated definitively. It further recognized that no threshold has been identified for the harmful effects of lead. *Id.* Clinical symptoms of lead poisoning appear at blood lead levels of 80 µg/dL or greater, and symptomatic lead poisoning may appear at BLLs of 50–60 µg/dL, particularly in the presence of anemia, although in some individuals “symptoms may be so mild that they are overlooked.” U.S. Dep’t of Health, Education and Welfare, Ctr. for Disease Control, Nat’l Inst. For Occupational Safety & Health, NIOSH Alert No. 91-116a, Preventing Lead Poisoning in Construction Workers (April 1992), available at <http://cdc.gov/niosh/91-116.html>.

112. Today, most government agencies refer to any child with a BLL above 10 µg/dL as having lead poisoning. While perhaps technically accurate (*i.e.*, *poisoning* is the act of taking in any substance that is injurious to health or dangerous to life), this loose use of the term “lead poisoning” ignores the specific level of harm at issue. Clinical symptoms of lead poisoning appear at BLLs of 70–100 µg/dL or greater and symptomatic lead poisoning may appear at BLLs of 35–40 µg/dL. AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY (“ASTDR”), DEP’T OF HEALTH & HUMAN SERV., CASE STUDIES IN ENVIRONMENTAL MEDICINE—LEAD TOXICITY, EXPOSURE PATHWAY, (Course: SS3059) (Oct. 2000), available at http://www.atsdr.cdc.gov/HEC/CSEM/lead/exposure_pathways.html#paint. Thus, a child with a BLL of 10 µg/dL is not suffering from either chronic or acute blood poisoning. Obviously, at 10 µg/dL, government agencies are not concerned with classical examples of lead poisoning. Instead, they are concerned with subclinical manifestations associated with exposure to lead. Spe-

caused solely by exposure to lead-based paint. Instead, it can be caused by any exposure to lead. Thus, a plaintiff's injuries may be caused by some source other than lead-based paint.¹¹³

Typically, plaintiffs in lead paint litigation try to causally connect low level exposures (as compared to high level exposures) of lead to adverse neurological effects (*i.e.*, lower IQs and behavior problems) in very young children.¹¹⁴ Significantly, the children involved are usually not in high school or even middle school, where academic performance can be measured to some degree. Instead, the plaintiffs usually focus on the IQ of *preschoolers*—sometimes children as young as two years old.¹¹⁵ To show injury in such persons, plaintiffs must show that lead—and only lead—is responsible for an observed “effect” on a child’s IQ or behavior. Overall, this is extremely difficult because these researchers have great difficulty demonstrating that a low level exposure to only one sub-

cifically, the government agencies are concerned about the possibility that low level exposure to lead may affect a child’s IQ. *See, e.g.*, CTR. FOR DISEASE CONTROL, U.S. DEPT OF HEALTH, EDUCATION & WELFARE, PUB. HEALTH SERV., GENERAL LEAD INFORMATION: QUESTIONS AND ANSWERS,(2006), *available at* <http://www.cdc.gov/nceh/lead/faq/about.htm> (“Lead poisoning can cause learning disabilities, behavioral problems, and, at very high levels, seizures, coma, and even death.”).

113. *See Brenner*, 699 N.Y.S.2d at 853; *Santiago*, 782 F. Supp. at 192 (noting that “heredity, social and environmental factors, or lead in other products, could have caused, or could have contributed to, Santiago’s injuries.”).

114. Bruce P. Lanphear, et al., *Low-Level Environmental Lead Exposure And Children’s Intellectual Function: An International Pooled Analysis*, 113 ENVTL HEALTH PERSPECTIVES 894 (2005); *Safety Drinking Water in the District of Columbia: Hearing Before the Subcomm. on Env’t and Hazardous Materials of the H. Energy and Commerce Comm.*, 108th Cong. (2004) (statement of Bruce P. Lanphear, M.D., the Sloan Professor) (“Experimental studies, both in rodents and non-human primates, have since documented lead related deficits at low-level exposures and established these to be *direct effects* of lead.”) (emphasis added) [hereinafter “Lanphear testimony”]. To support the causal association between lead and IQ, Dr. Lanphear cited his own studies as proof of a “lead-associated reading deficit” in children with BLLs below 5 µg/dL (citing to Bruce P. Lanphear et al., *Cognitive Deficits Associated With Blood Lead Levels < 10 Mg/Dl In U.S. Children And Adolescents*, 115 PUB. HEALTH REP. 521 (2000)) and as proving that an increase in a lifetime mean BLL from less than 1 to 10 µg/dL was “associated” with a 7.4 point IQ deficit (citing R.I Canfield, et al., *Intellectual Impairment In Children With Blood Lead Concentrations Below 10 Micrograms Per Deciliter*, 348 N ENG. J MED. 1517 (2003)).

115. *See* U.S. ENVTL. PROT. AGENCY, OFFICE OF RESEARCH & DEV., NAT’L CTR. FOR ENVTL ASSESMENT, EPA/600/R-05/144aF, *AIR QUALITY CRITERIA FOR LEAD*, VOL 1, 6-72 (2006) [hereinafter “CRITERIA DOCUMENT”] (“Testing of infants is especially difficult because they “are in a period of rapid developmental change. Also, the way an infant’s cognitive functions can be probed is restricted. The lack of continuity between their response modalities and ones that can be exploited as a child gets older is also a factor.”) and 6-71 (“acknowledging that the sensitivity of these tests to toxicity has been in question.”), *available at* <http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=158823> (last visited June 25, 2007) (links to PDF downloads).

stance “directly effects” the brain’s intelligence and a person’s behavior. The problem is compounded (1) because scientists truly do not have an understanding of how the brain works or why some people are “more intelligent” and others are “less intelligent,” and (2) because many variables acting independently or in conjunction with other variables can affect the way the brain functions or how a person behaves. These issues raise the age-old “nature or nurture” question (*i.e.*, the extent a person’s genetics [nature] versus the environment in which they are raised [nurture] have in explaining individual differences in intelligence).¹¹⁶

a. Children are Exposed to Many Different Sources of Lead

Beyond the inability of science to establish a “signature injury,” it is equally impossible to ascribe all instances of “childhood lead poisoning” to lead paint, as opposed to some other source of lead.¹¹⁷ Exposure to lead occurs through every conceivable pathway. Children may be exposed to lead when they eat food¹¹⁸ or candy¹¹⁹ contaminated with lead. Many children are exposed to lead when they drink the water in their homes¹²⁰ or at their

116. See generally, Nature vs. Nurture in Intelligence, <http://www.wilderdom.com/personality/L4-1IntelligenceNatureVsNurture.html> (last visited June 25, 2007) (discussion on nature versus nurture).

117. See Faulk and Gray, *supra* note 83, at 1080–84, 1142–50 (discussing alternative source of lead exposure).

118. Smog and haze accounts for “an estimated 40% of lead in food, while the bulk of the remainder [comes] from contaminations during harvesting, transporting, processing, packaging or preparing the food.” CRITERIA DOCUMENT, *supra* note 115, at 3-48 (citation omitted). Lead in meat and poultry is a result of lead emissions that settle onto forage, feed or onto soil that is directly ingested by animals. *Id.*

119. Several brands of candy manufactured in Mexico have been found to be wrapped in wrappers containing lead or bearing lead-containing ink. Letter from Alan H. Schoem, Dir., Office of Compliance, Consumer Prod. Safety Comm’n to U.S. Candy Importers (July 9, 2004), available at <http://www.cpsc.gov/BUSINFO/cndyus.pdf>; Letter from Alan H. Schoem, Dir., Office of Compliance, Consumer Prod. Safety Comm’n to Candy Producers in Mexico (July 12, 2004), available at <http://www.cpsc.gov/BUSINFO/cndymex.pdf>. The FDA has determined that some ingredients (chili powder and tamarind) used in candy products imported into the U.S. and marketed to the U.S. Hispanic population contain high levels of lead. Letter from Janice F. Oliver, Deputy Dir., Ctr. for Food Safety & Applied Nutrition, FDA to Manufacturers, Importers, and Distributors of Imported Candy (Mar. 25, 2004), available at <http://www.cfsan.fda.gov/%7Edms/pbltr.html>.

120. Lead in drinking water contributes between 10 and 20% of the total lead exposure in young children. Ctr. for Disease Control and Prevention, U.S. Dept. of Health & Human Servs., Fact Sheet: Lead and Drinking Water from Private Wells (2003), available at <http://www.cdc.gov/ncidod/dpd/healthywater/factsheets/pdf/lead.pdf>; see also Criteria Document, *supra* note 115, at 3-33; Richard P. Maas, et al., *Reducing*

schools.¹²¹ Exposure to lead may occur from ingesting soils containing lead from lead arsenate pesticides and even lead weights used to balance tires.¹²² Young children are exposed to lead on baby cribs and their accessories,¹²³ on toys,¹²⁴ costume jewelry,¹²⁵

Lead Exposure from Drinking Water: Recent History and Current Status, 120 Pub. Health Rep. 316, 318 (2005), available at http://www.publichealthreports.org/userfiles/120_3/120316.pdf (citation omitted).

121. The holding tanks on many older water fountains are made of lead. Lead tests in some “[p]ublic [s]chools show that more than 80% of its schools have serious lead contamination in one or more drinking fountains. In some schools, virtually every drinking fountain in the school was above the EPA limit of 20 ppb.” Mark S. Cooper, Editorial, *Get The Lead Out Of Schools’ Water*, SEATTLE POST-INTELLIGENCER, July 2, 2004. At B7. For example, one Seattle school had a drinking fountain with a lead level of 1,600 ppb. *Id.*

122. Jack Caravanos et al., *An Exterior and Interior Leaded Dust Deposition Survey in New York City: Results of a 2-Year Study*, 100 ENVTL. RESEARCH 159-64 (2006). CRITERIA DOCUMENT, *supra* note 115, at 3-16 to -17. Lead concentrations decrease both with depth and distance from roadways. *Id.* at 3-19. In many studies the age of housing was not a major factor, suggesting that the impacts of lead-based paint may be dominated by historic emissions of leaded gasoline additives. *Id.* at 3-20.

123. Children’s jewelry is not the only product being sold for use by children that contain lead-based paint. As a result of testing, the CPSC has found that some baby cribs and accessories being sold in the U.S. contain hazardous levels of lead paint. See Press Release, U.S. Consumer Product Safety Comm’n, Danara Baby Crib Exercisers Recalled Because of Lead Hazard, Release No. 85-063 (Dec. 5, 1985), available at <http://www.cpsc.gov/cpscpubl/prerel/prhtml85/85063.html>; see also, Press Release, U.S. Consumer Product Safety Comm’n, Musical Crib Mobile Recalled, Release No. 87-033 (June. 4, 1987), available at <http://www.cpsc.gov/cpscpubl/prerel/prhtml87/87033.html>; Press Release, U.S. Consumer Product Safety Comm’n, The Little Tikes Company Recalls Little Tikes Crib Center Due To Lead Paint Hazard, Release No. 92-094 (June 16, 1992), available at <http://www.cpsc.gov/cpscpubl/prerel/prhtml92/92094.html>; Press Release, U.S. Consumer Product Safety Comm’n, CPSC, Delta Enterprise Corp. Announce Recall of Certain Cribs Sold at Toys R Us Stores, New Release No. 06-036 (Nov. 22, 2005), available at <http://www.cpsc.gov/cpscpubl/prerel/prhtml06/06036>.

124. Children are continually being given toys that are considered lead hazards. For example, it has been discovered that toys given to children by libraries across the nation as reading prizes this summer had unacceptable levels of lead. The toys were distributed by the Collaborative Summer Library Program, whose members include about 1,000 libraries in 36 states. Michael P. McKinney, *Library Prizes Pose Lead Hazard to Children*, PROVIDENCE J., Sep. 3, 2006, at B-05; Jeri Krentz, *After Test Finds Lead in Toys, Libraries Taking Back Prizes; Flexible Dogs And Cats Exceed Level Of Lead Allowed By Federal Rules*, CHARLOTTE OBSERVER, Aug. 10, 2006, at 1B; see also, Courtney Bacalso, *Toy Risk Feared*, ORANGE COUNTY REGISTER (CALIFORNIA), Aug. 9, 2006.

125. Recalls of children’s jewelry that contain high concentrations of lead are seemingly becoming a common occurrence these days. And these are just the products we know about. In the last couple of years over a hundred million pieces of cheap and free children’s jewelry have been recalled because of high lead concentrations. Press Release, U.S. Consumer Product Safety Comm’n, Metal Charms Sold with Twentieth Century Fox DVDs Recalled for Toxic Lead Hazard, Release No. 06-156 (May 5, 2006), available at <http://www.cpsc.gov/cpscpubl/prerel/prhtml06/06156.html>. See also,

and even through sidewalk chalk or crayons.¹²⁶ A child may be exposed to lead through the tableware¹²⁷ holding their food or the glassware¹²⁸ from which they drink. Children can be exposed to lead counter weights in a home's grandfather clock or the lead bal-

Press Release, U.S. Consumer Product Safety Comm'n, Dollar Tree Stores Inc. Toy Jewelry Recalled for Lead Poisoning Hazard to Children, Release No. 06-118 (Mar. 23, 2006), available at <http://www.cpsc.gov/cpscpubl/prerel/prhtml06/06118.html>; Press Release, U.S. Consumer Product Safety Comm'n, Juicy Couture Children's Jewelry Recalled for Lead Poisoning Hazard, Release No. 05-160 (Aug. 25, 2006), available at <http://www.cpsc.gov/cpscpubl/prerel/prhtml06/06160>; Press Release, U.S. Consumer Product Safety Comm'n, Children's Jewelry Sold at American Girl Stores Recalled for Lead Poisoning Hazard Release No. 06-123 (Mar. 30, 2006), available at <http://www.cpsc.gov/cpscpubl/prerel/prhtml06/06123.html>; Press Release, U.S. Consumer Product Safety Comm'n, CPSC Announces Recall of Metal Toy Jewelry Sold in Vending Machines; Firms Agree to Stop Importation Until Hazard is Eliminated, Release No. 04-174 (July 8, 2004), available at <http://www.cpsc.gov/cpscpubl/prerel/prhtml04/04174.html>; Assoc. Press, *Lead Poisoning Threat Forces Kids Jewelry Recall*, (Mar. 23, 2006).

126. See Press Release, U.S. Consumer Product Safety Comm'n, CPSC And Concord Enterprises Announce Recall of Certain Crayons Because of Lead Poisoning Hazard, Release No. 94-049 (Mar. 22, 1994), available at <http://www.cpsc.gov/cpscpubl/prerel/prhtml94/94049.html> (recalling crayons made in China). Some of these crayons contained enough lead to present a lead poisoning hazard to young children who ate or chewed on the crayons. *Id.* In 2004, Target and Toys "R" Us had to recall sidewalk chalk they sold because it contained high levels of lead. Press Release, U.S. Consumer Product Safety Comm'n, CPSC, Target Corporation Announce Recall of Multicolored Sidewalk Chalk, Release No. 04-032 (Nov. 13, 2003), available at <http://www.cpsc.gov/cpscpubl/prerel/prhtml04/04032.html>; Press Release, U.S. Consumer Product Safety Comm'n, CPSC, Toys "R" Us, Inc. Announce Recall of Solid-colored and Multi-colored Sidewalk Chalk, Release No. 04-038 (Nov. 24, 2003), available at <http://www.cpsc.gov/cpscpubl/prerel/prhtml04/04038.html>.

127. Lead is used as a coloring element in ceramic glazes used in common tableware, notably in the colors red and yellow. Michael McCann, *Lead Glazes in the Americas*, 18 ART HAZARDS NEWS 3 (1995) ("The problem of lead poisoning from glazed pottery imported from Mexico and other developing countries is well known . . . [C]ases of severe lead poisoning are due to very high levels of lead in the glazes (as much as 75-85%) and poor firing conditions that result in glazes that leach a lot of lead."); see also CERAMICS TODAY *Lead: A Once Common Glaze Ingredient*, <http://www.ceramicstoday.com/articles/lead.htm> (last visited June 12, 2007) ("Any acidic foods or liquids subsequently used with such glazes, e.g., fruit juices, will dissolve unbound lead particles from the glaze surface. In extreme cases this could create a lethal dose of lead.").

128. "Lead may leach from lead crystal decanters and glasses into the liquids they contain." Agency for Toxic Substances & Disease Registry, U.S. Dep't of Health and Human Servs., Draft Toxicological Profile for Lead 316 (2005). For example, after 4 months in three decanters (containing 32%, 32%, and 24% lead oxide), the lead concentration in Port wine increased from 89 µg/L to 5,331 µg/L, 3,061 µg/L and 2,162 µg/L, respectively. *Id.* Of more concern, lead was also found to leach from lead crystal wine glasses within minutes. Mean lead concentrations in wine contained in 12 glasses rose from 33 µg/L initially to 68 µg/L, 81 µg/L, 92 µg/L and 99 µg/L after 1, 2, 3 and 4 hours, respectively. *Id.*

last in a sailboat.¹²⁹ They can be exposed by an older sibling's or parent's cosmetics,¹³⁰ hobby materials, folk remedies,¹³¹ or candles.¹³² There are countless sources of lead to which a young child may be exposed. The following diagram represents an attempt by the National Academy of Sciences to map the multiple environmental pathways that result in human exposure to lead.¹³³

As can be seen, blaming a single product for "childhood lead poisoning" is impossible without ruling out the presence of alternative and confounding causes in the child's environment—and without such an exercise, there is no way to show that any cause is either present or "substantially" responsible for the child's condition. Although it may be potentially *lucrative* to isolate an "industry" with assets supposedly sufficient to address "childhood lead poisoning," and although it may be *convenient* to focus all attention on that "industry" by ignoring the universe of alternative causes for elevated levels of lead in the blood, such fictions have nothing to do with *science* or *reality*. In fact, the use of "market share" liability in these cases turns the problem on its head by

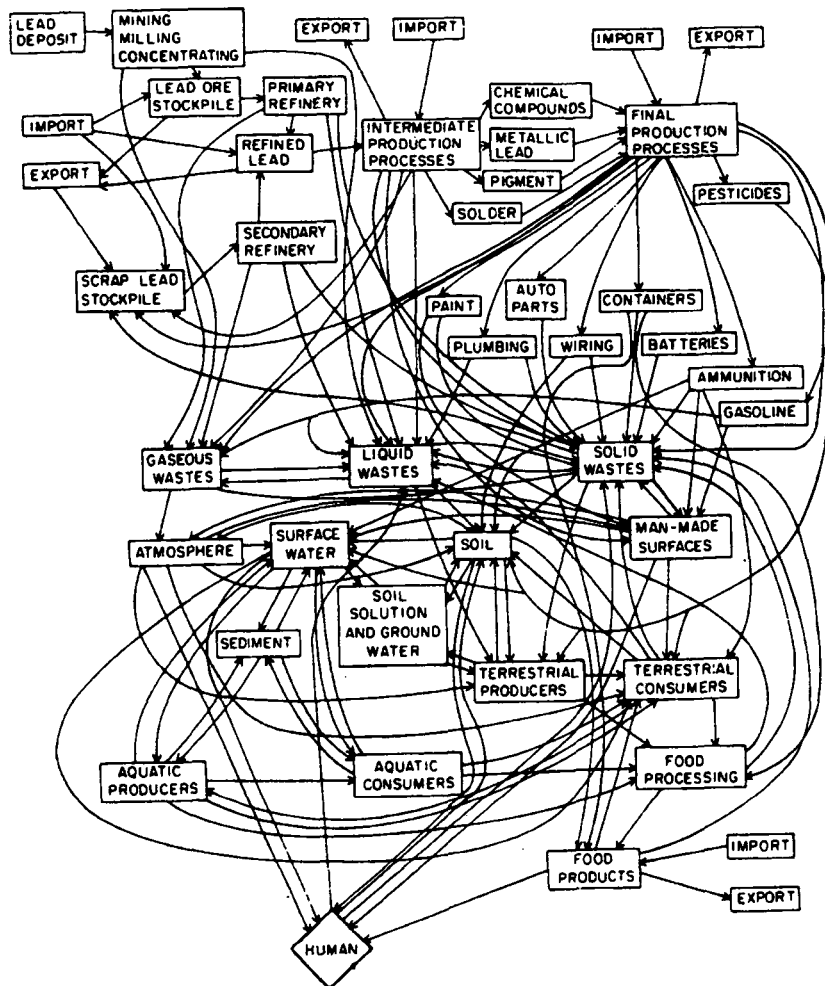
129. Lead is used for the ballast keel of sailboats and as counterweights for grandfather clocks and elevators. See generally American Tin & Solder, *Lead Ballast*, <http://www.american-tinand solder.com/lead-ballast.htm> (last visited June 24, 2007) (click on links at left for more information).

130. Lead is used in some non-Western cosmetics, such as surma and kohl and some types of hair colorants, cosmetics and dyes contain lead acetate. AGENCY FOR TOXIC SUBSTANCES & DISEASE REGISTRY, U.S. DEP'T OF HEALTH AND HUMAN SERVS., DRAFT TOXICOLOGICAL PROFILE FOR LEAD 6 (2005) (Public Health Statement for Lead).

131. Agency for Toxic Substances & Disease Registry, U.S. Dep't of Health and Human Servs., Draft Toxicological Profile for Lead 315 (2005) (discussing non-Western folk remedies such as: "Alarcon, Ghasard, Alkohol, Greta, Azarcon, Liga, Bali Goli, Pay-loo-ah, Coral and Rueda"). See also Ctr. for Disease Control and Prevention, *Adult Lead Poisoning from an Asian Remedy for Menstrual Cramps - Connecticut, 1997*, 48 Morbidity and Mortality Weekly Rep. 27, (1999) (discussing Koo Sar), available at <http://www.cdc.gov/mmwr/preview/mmwrhtml/00056277.htm>.

132. Some lead-cored candle wicks emit relatively large amounts of lead into the air during burning, placing children who inhaled the vaporized lead at risk. "Some of the candles tested . . . emitted lead levels in excess of 3,000 micrograms per hour - about seven times the rate that could lead to elevated levels of lead in a child." Press Release, U.S. Consumer Product Safety Comm'n, CPSC Bans Candles With Lead-Cored Wicks, Release No. 03-105 (Apr. 7, 2003), available at <http://www.cpsc.gov/cpsc/pub/prerel/prhtml03/03105.html>; see also Metal-Cored Candle Wicks Containing Lead and Candles With Such Wicks; Notice of Proposed Rulemaking, 67 FED. REG. 20062 (Apr. 24, 2002); Metal-Cored Candle Wicks Containing Lead and Candles With Such Wicks; Final Rule, 68 FED. REG. 19142 (Apr. 18, 2003) (to be codified at 16 C.F.R. pt. 1500).

133. Figure from, Comm. on Lead in the Human Env't., *Lead in the Human Environment*, 35 (1980).



using liability as a tool of social engineering, as opposed to a trustworthy legal principle supported by reliable scientific proof.

b. Many Variables can Affect an Individual's IQ

In research studies, every variable except the focus of the research (*i.e.*, lead), is known as a confounder.¹³⁴ In order to make

134. When one variable is studied to try to explain another, the relationship between them may be biased by a third variable. The bias, known as 'confounding,' is common and must be minimized in research. When present, confounders result in a biased estimate of the effect of exposure on disease. "The bias can be negative—resulting in underestimation of the exposure effect—or positive, and can even reverse the apparent direction of effect. It is a concern no matter what the design of the study or what statistic is used to measure the effect of exposure." Roseanne McNamee, *Confounding and Confounders*, 60 OCCUPATIONAL & ENVTL. MED. 227 (2003).

the claim that lead directly effects IQ, researchers must identify, account for and control all the confounders. Anything less merely means that the researcher has only documented an “association” or an “observation” between what was being looked at (*i.e.*, IQ or behavior) and the object of the study (*i.e.*, exposure to lead). This does not belittle the researchers’ work because “associations” are important in learning. But claims of “associations” are a lot different from claims of “causation.”¹³⁵

Scientists have been trying since the mid-1960s to understand how lead effects the central nervous system at sub-chronic levels of exposure. While significant research advances have been made in animal studies over the last four decades, there are problems with extrapolating the results of these animal studies and applying them to children.¹³⁶ For example, “[a]nimal studies show that alterations in neurobehavioral function can persist long after lead exposure has stopped and [blood lead] levels have returned to normal,” but scientists have been unable to duplicate these results in human studies.¹³⁷ In its 2006 Lead Criteria Document, the EPA notes that “[h]uman studies provide little information on the persistence of effects that lead may have on the

135. To date, it appears that researchers have been observing “*associations*” between persons who have been exposed to lead and IQ deficits or behavior problems. See Lanphear testimony, *supra* note 114. According to Dr. Lanphear:

Schwartz reported that lead-associated cognitive deficits and hearing loss occur at blood lead levels below 10 mg/dL. In a meta-analysis, the observed decrement was greater for studies with children having blood lead levels below 15 mg/dL compared to those with children having higher blood lead levels. In an analysis of NHANES III, the lead-associated reading deficit increased, from -1.0 point per 1 mg/dL increase in blood lead for the entire sample to -1.7 point per 1 mg/dL increase for the subgroup with blood lead levels below 5 mg/dL. In a prospective study, an increase in lifetime mean blood lead level from <1 to 10 mg/dL was associated with a 7.4 point IQ deficit. Moreover, consistent with the earlier studies, the lead-associated cognitive deficits associated with each 1 mg/dL increase in blood lead level were greater at blood lead concentrations below 10 mg/dL (18, 20-22). Although there are several plausible mechanisms to explain these findings, the specific mechanism is unclear.

Id. (emphasis added & internal citations omitted). Note that at the end of his testimony discussing IQ deficits, Dr. Lanphear clarifies his “associations” and “observation” regarding humans by stating that “there are several plausible mechanisms to explain these findings.” *Id.* Each of those several mechanisms are confounders.

136. CRITERIA DOCUMENT, *supra* note 115, at 5-18. The EPA delicately addresses this problem by noting that “[w]hile significant research advances have been made in animal studies over the last four decades, relating these findings to neurotoxicity in children has been challenging and difficult.” *Id.*

137. *Id.* at 5-19.

brain.”¹³⁸ There can be multiple reasons why scientists are having such a difficult time studying the effects of low level exposures to lead on the brain. Some believe the principal problem is lead’s “multiple toxic mechanisms of action in brain tissue, which encompass variable, overlapping, and, at times, opposing dose-effect relationships.”¹³⁹ The problem could also be a result of factors that confound the studies. Or, the reason why the scientists have been unable to duplicate the results of the animal studies in man is simply because “man is not a big mouse.”¹⁴⁰

Of all the confounders, one of the most complex and most important appears to be the social and economic status of the child (“SES”). Moreover, one the most significant SES confounder with respect to a child’s IQ is their mother’s IQ.¹⁴¹ The exact mechanisms of the impact of SES on lead’s neurotoxic effects on the central nervous system are unknown. Individually or collectively, factors such as poverty, pre-1960 housing in segregated communities, ethnicity, and nutritional deficiencies can contribute to neurological problems.¹⁴² One noted researcher has admitted that complete confounder control is impossible in real world studies. As a result, in most studies reviewed, control of confounders has reduced the magnitude of the lead-IQ effect. But, he also notes that it has not obliterated the lead-IQ effect.¹⁴³ This reduction was

138. *Id.*

139. *Id.* at 5-18.

140. See ROBERT SCOTT, OF MICE AND MEN: EXTRAPOLATION OF ANIMAL DATA TO HUMANS (Def. Res. Inst. April 30, 1998) (noting that there are many biologic and biochemical differences among mammals and even substantial differences in responses among similar species of rodents within the subspecies of the same species; thus, if extrapolation between the same animal species is a delicate exercise, extrapolations from animals to humans raise even greater questions).

141. CRITERIA DOCUMENT, *supra* note 11155, at 6-266.

142. *Id.* at E-9, 4-21, 4-80, 5-71, 5-102 to -103. Historically, the SES confounders were measured rather crudely in most studies with such indices as the Hollingshead Four-Factor Index of Social Position that incorporates education and income of both parents. In an effort to better control for confounding by SES more recent lead studies have incorporated more direct assessments such as the HOME scale, parental intelligence, parental attitude assessments, and measures of parental substance abuse and psychopathology. *Id.* at 6-73 to -74.

143. Herbert L. Needleman & C.A. Gatsonis, *Low-level lead exposure and the IQ of children. A meta-analysis of modern studies*, 263 J. Am. Med. Assoc. 673-78 (1990). It is often the case that following adjustment for factors such as social class, parental neurocognitive function, and child rearing environment using covariates such as parental education, income, and occupation, parental IQ, and HOME scores, the lead coefficients are substantially reduced in size and statistical significance. CRITERIA DOCUMENT, *supra* note 115, at 6-75. In the Port Pirie study, I. Shilu Tong & Ying Lu, *Identification of Confounders in the Assessment of the Relationship Between Lead Exposure and Child Development*, 11 ANNALS OF EPIDEMIOLOGY 38, 45 (2001), the au-

even noted in Dr. Lanphear's pooled analysis of seven prospective studies¹⁴⁴ where the lead affect on IQ has been characterized as modest after an attempt was made to account for the confounders.¹⁴⁵ It has even been noted that blood lead typically accounts for only 1 to 4% of the variance in child IQ scores, compared to the 40% or more by social and parenting factors.¹⁴⁶

3. Defining the Appropriate Market is Problematic

In DES cases, the market was narrowly tailored to consist of DES manufacturers who sold the product during the nine-month window during the plaintiff's mother's pregnancy.¹⁴⁷ Nationally, there were only about 300 known manufacturers of DES.¹⁴⁸ In lead paint cases, a national market is not as easily defined. It is not so easily defined because the plaintiffs cannot identify when the lead paint was applied, therefore they cannot narrow the time period in which to apply the "market share" theory.

In DES cases, plaintiffs knew when their mothers ingested the drug and thus when the product was sold. In contrast, plaintiffs in lead paint cases assert that they are unable to identify the particular year or years in which paint was applied to the interior of the house. Therefore, they ask courts to use the age of the housing to set the appropriate time period for the market. Unsurprisingly, the period at issue can be in excess of 50 years and may require defendants to prove they never sold paint as long ago as 1900.¹⁴⁹ It is one thing to determine a reasonable market share

thors "observed that adjustment for four factors (*i.e.*, quality of home environment, SES, maternal intelligence, and parental smoking behavior) reduced the magnitude of the estimated association between lead and IQ by 40% and inclusion of additional factors resulted in another 10% reduction." CRITERIA DOCUMENT, *supra* note 115, at 6-265.

144. See Lanphear testimony, *supra* note 114.

145. "[T]he crude coefficient for concurrent lead and childhood IQ score was -4.66 (95% CI: -5.72, -3.60), while the coefficient adjusted for study site, quality of the home environment (HOME score), birth weight, maternal IQ, and maternal education was -2.70 (95% CI: -3.74, -1.66). When expressed as the percentage of variance accounted for in a health outcome, the contributions of lead have been characterized as modest in magnitude." CRITERIA DOCUMENT, *supra* note 115, at 6-265.

146. *Id.* at 6-265 to -266 (citing K. Koller et al., *Recent Developments in Low-Level Lead Exposure and Intellectual Impairment in Children*, 112 ENV'TL HEALTH PERSPECTIVES 987-94 (2004)).

147. See *supra* note 41 and accompanying discussion.

148. See *Hymowitz*, 539 N.E.2d at 1072.

149. See, e.g., *Brenner*, A.D.2d at 172 (defining the relevant market period to be "between 1926, the year the house was built, and 1955, the year lead-based paint was no longer available for interior residential use."); *Thomas*, 701 N.W.2d at 562 (defin-

during a nine-month period, but it is a far different and more complex problem to determine the market share for during a period in excess of a century where multiple manufacturers have entered and exited the market.¹⁵⁰ Courts considering this issue have reasoned that even if plaintiffs could determine each defendant's average market share during the relevant market period, "the application of such percentages would result in the possibility of assessing liability against a manufacturer that was not in the market at the time the lead-based paint was used in plaintiffs' residence."¹⁵¹ This is a reason learned commentators advise that "the greater the span of time within which the potentially injury-causing product was sold, the less suited market share liability will be."¹⁵²

From a practical standpoint, some courts encountered fundamental problems attempting to apply the "market share" liability theory. For example, a Los Angeles trial judge "expressed exasperation with the task of attempting to formulate market shares after spending over four weeks examining the DES market."¹⁵³ Plaintiffs argued that the difficulty the trial judge in Los Angeles experienced could be attributed to the uncooperativeness of the defendants. But, the court noted that the Los Angeles judge "began his analysis of the situation by thanking the parties for all their cooperation and for the highly professional manner in which the case was presented."¹⁵⁴ The judge then . . . criticize[d] those who developed the "market share" theory because of their obvious lack of trial experience or knowledge as to what would go into proving a case based on the theory."¹⁵⁵

To make matters more complicated, in most lead paint cases, the plaintiff is complaining about childhood lead poisoning where

ing the relevant market period to be between 1900, the year one of the relevant houses was built, and 1978, the year federal government banned lead paint).

150. Gifford, *supra* note 26, at 130 (noting that neither "plaintiffs nor defendants possess the necessary records to determine the market shares of lead paint or lead pigment in 1880, 1900, or 1920.").

151. Brenner v. American Cyanamid Co., 699 N.Y.S.2d 848, 853 (N.Y. App. Div. 1999).

152. DAVID G. OWEN et al., *supra* note 69, at § 24:7.

153. See Smith v. Eli Lilly & Co., 560 N.E.2d 324, 337 (Ill. 1990) (quoting Stapp v. Abbott Laboratories, No. C 344407 (Super. Ct. Los Angeles County, Cal.)) ("The harsh blunt fact that the evidence has shown is that that information and data is just not available' and 'when the Supreme Court, * * * without having any evidence says that you can determine what the [sales are] as to a particular manufacturer, it's just, just not there. That data doesn't exist.'").

154. *Id.*

155. *Id.* at 338.

the injury is allegedly caused by paint located inside their homes. In order to appropriately and narrowly tailor the market share of the lead pigment manufacturers, a court should exclude from the market share data all lead pigment used in paint sold for any use other than interior residential use. Thus, the court should exclude from the relevant market all paint sold for industrial use (*i.e.*, paint sold for use in refineries, steel mills, boatyards, food processing plants, chemical plants, fabricating shops, storage tanks, and all types of factories, etc.) and commercial use (*i.e.*, paint used in shops, malls, office buildings, governmental buildings, barns, churches, restaurants, gas stations, warehouses, boats, etc.). It should exclude lead pigment used to cover the exterior of buildings, bridges, and homes. It should exclude paint used on signs, cars and road stripes. But it is highly likely that (1) lead pigment manufacturers did not know in what types of products paint manufacturers placed their products or in what concentrations and (2) paint manufacturers did not inquire about or track the purpose for which their customers (professional painters and other customers) used the paint they purchased. This makes it difficult, if not impossible, to define the appropriate market in lead paint litigation and makes it even more likely that the application of such percentages would result in the possibility of assessing liability against a manufacturer at a level disproportionate with their product use in the interior of residential homes.

If courts allow juries to “apportion damages when reliable information is not available, the clear result will be arbitrary determinations and wide variances between judgments, without sufficient explanations for the differences.”¹⁵⁶ Without narrowly tailored, accurate and adequate evidence, apportioning damages will be inherently unfair.¹⁵⁷ Under these circumstances, it is possible—even likely—that the manufacturer that actually sold the product will not be before the court. Some manufacturers may not be served, have gone out of business, have merged with other companies and due to successor liability laws cannot be held liable for sales of lead paint, or are not amenable to suit in the forum

156. *Id.* at 338.

157. *See id.*; *see also* Conley v. Boyle Drug Co., 570 So. 2d 275, 283–84 (Fla. 1990); George v. Parke-Davis, 733 P.2d 507, 512 (market should be as narrow as possible to impose liability on only those companies most likely to have produced drug that caused plaintiff's harm). *But see* Smith v. Cutter Biological, Inc., 823 P.2d 728 (Haw. 1991); Hymowitz v. Eli Lilly & Co., 539 N.E.2d 1069, 1077 (N.Y. 1989).

state.¹⁵⁸ To impose liability when it is quite possible (or probable) that defendants are not before the court is an unacceptably speculative exercise.¹⁵⁹

4. Manufacturers did not have Exclusive Control Over the Risk Produced by the Lead Pigment

In DES cases, the plaintiffs sued the manufacturers and marketers of the offending drug. These manufacturers were found to have exclusive control over any risk produced by their product. There was no change in the drug from the point of manufacture to the point of ingestion by the patient.¹⁶⁰ In lead paint litigation, however, *lead pigment manufacturers are being sued for selling the lead pigment in bulk to paint manufacturers*. They are not necessarily the manufacturers or marketers of the allegedly offending paint. The paint manufacturers are the entities which decided the particular pigments to use in their paints, and they also determined the quantities that were actually used. The lead pigment suppliers, therefore, did not and could not have controlled all of the risks that their products may have presented to the public.¹⁶¹ Moreover, DES manufacturers intended that their product be ingested by pregnant women to prevent miscarriages. Certainly, white lead carbonate or lead-based paint is not intended for inges-

158. *Smith v. Eli Lilly*, 560 N.E.2d at 338. Even if a “successor” can somehow be deemed responsible under traditional principles merely by the accident of being in the chain of ownership by participating in a remote transaction, applying “market share” liability to such a defendant is flatly inconsistent with the principles of “market share” liability. Such a defendant did not manufacture the product, did not participate in the market, and may not be in a position currently to purchase insurance for those remote sales to justify allocating the successor a portion of the responsibility. Holding such a party responsible stacks one fiction on top of another—first using the convenient fiction of “successor” liability to establish liability for the remote sales by another company, and then using the “market share” fiction to shift the burden of proof and allocate responsibility for a market in which the successor never participated. Surely, this is a “bridge too far.” See CORNELIUS RYAN, *A BRIDGE TOO FAR* 9 (Simon & Schuster 1974) (telling the story of the failed Allied attempt to break through German lines at Arnhem in the occupied Netherlands during World War II. The book’s title comes from a comment made by British Lt. Gen. Frederick Browning, deputy commander of the First Allied Airborne Army, who told Field Marshal Bernard Montgomery before the operation, “I think we may be going a bridge too far.”).

159. *Smith v. Eli Lilly*, 560 N.E.2d at 338 (citing *Ryan v. Eli Lilly & Co.*, 514 F. Supp. 1004, 1007, 1018 (D.S.C. 1981)).

160. *Id.*

161. *Santiago v. Sherwin-Williams Company*, 782 F. Supp. 186, 195 (D. Mass. 1992) (plaintiff acknowledging that the paint manufacturers were the ones that decided what amount of lead pigment to use, and whether to use any lead pigment at all, knew the hazards associated with lead paint, and controlled the packaging of the paint and the warnings placed thereon).

tion and obviously was not marketed for such use.¹⁶² Finally, and of great importance, owners and landlords of residences had control of a substantial portion of the risks posed by lead-based paints—simply because lead-based paint is not hazardous until it is neglected to the point where it peels and flakes and is then ingested or the dust inhaled.¹⁶³ Owners and landlords can eliminate this risk simply by properly maintaining their property.¹⁶⁴

B. The Wisconsin Exception

In 2005, in *Thomas ex rel. Gramling v. Mallett*, the Wisconsin Supreme Court reversed a summary judgment motion allowing a childhood lead paint claim to go forward to trial against lead-pigment manufacturers despite the plaintiff's inability to identify which manufacturers caused his injury.¹⁶⁵ For the purposes of their summary judgment motion, the defendants conceded that the plaintiff could prove that he was injured by lead ingestion and that his source of lead ingestion was lead paint.¹⁶⁶

In reversing the summary judgment Wisconsin's Supreme Court became the first court in the nation to allow such a case to go forward by eliminating the causation requirement in lead paint by extending "market share" liability to lead paint litigation. The dissent in this case described Wisconsin's version of lead paint "market share" liability as a type of absolute liability by creating an irrebuttable presumption of causation.¹⁶⁷ As one commentator has noted:

This is, then, a form of collective tort liability untethered to any actual responsibility for the specific harm asserted, imposed by the judiciary as a matter of loss-distribution policy in response to an admittedly serious public health problem. As Justice Wilcox observed in his dissent, "[t]he end result of the majority opinion is that the defendants, lead pigment manufacturers, can

162. *Brenner v. American Cyanamid Co.*, 699 N.Y.S.2d 848, 853 (N.Y. App. Div. 1999).

163. *Id.*

164. *Id.* Legislatures in many jurisdictions have enacted laws to prevent or mitigate childhood lead poisoning that place responsibility upon landowners to remediate the effects of deteriorated lead-based paint. *See, e.g.*, Lead Poisoning Prevention Act, 410 ILL. COMP. STAT. ANN. 45/1 – 45/17 (West 2000); Lead Poisoning Prevention Act, R.I. GEN LAWS § 23-24.6 (2005); Lead Hazard Mitigation Act, R.I. GEN LAWS § 42-128.1 (2006).

165. *Thomas ex rel. Gramling v. Mallett*, 701 N.W.2d 523 (Wis. 2005).

166. *Id.* at 580 (Wilcox, J., dissenting).

167. *Id.* at 575.

be held liable for a product they may or may not have produced, which may or may not have caused the plaintiff's injuries, based on conduct that may have occurred over 100 years ago when some of the defendants were not even part of the relevant market."¹⁶⁸

1. The Court Focused on the State's Constitutional Requirement that Injured Plaintiffs Must Have Legal Remedies

Wisconsin law is unique in that the state's constitution guarantees every person a legal remedy for all injuries or wrongs.¹⁶⁹ Because of this constitutional guarantee, the *Thomas* court was troubled by the possibility of "permitting possibly negligent defendants to escape liability to an innocent, injured plaintiff."¹⁷⁰ It had "serious concerns" with the effect blaming the landlords will have on the adequacy of a plaintiff's remedy.¹⁷¹ It stated that although landlords have a legal duty to test for lead paint, Wisconsin case law recognized that a pollution exclusion clause bars coverage for lead poisoning from neglected paint. Thus, it was afraid that many victims of lead poisoning would be deprived of an effective remedy for their harm.¹⁷² The court was also of the opinion that a certificate stating a dwelling was lead-safe would wrongly immunize the landlord from liability because a lead-safe dwelling still poses a danger of lead poisoning from lead paint.¹⁷³

Consequently, the court concluded that former lead pigment manufacturers "are in a better position to absorb the cost of the injury. They can insure themselves against liability, absorb the damage award, or pass the cost along to the consuming public as a cost of doing business."¹⁷⁴ The *Thomas* court was acutely aware that its decision would unjustly place liability on innocent defend-

168. See Diane S. Sykes, *Hallows Lecture: Reflections on the Wisconsin Supreme Court*, 89 MARQ. L. REV. 723, 731 (2006).

169. WIS. CONST. art. I, § 9. ("Every person is entitled to a certain remedy in laws for all injuries or wrongs which he may receive in his person, property, or character, he ought to obtain justice freely, and without being obligated to purchase it, completely and without denial, promptly and without delay, conformably to the laws.")

170. *Thomas*, 701 N.W.2d at 549 (citing *Collins v. Eli Lilly Co.*, 342 N.W.2d 37 (Wis. 1984)).

171. *Id.* at 552.

172. *Id.* (citations omitted).

173. *Id.* at 553 (reasoning that "a loaded pistol is a dangerous weapon, even when it is locked up in a gun case, and a mamba is a deadly poisonous snake, even when it is confined in a reptile house.") (citations omitted).

174. *Id.* at 558.

ants.¹⁷⁵ But, it believed that this is “a price the defendants, and perhaps ultimately society, must pay to provide the plaintiff an adequate remedy under the law.”¹⁷⁶

To accomplish its objective, the court glossed over, disagreed with, or disregarded by distinguishing away every reason why all other courts addressing this issue have refused to extend “market share” liability to lead paint litigation. One dissenting justice even raised serious, substantive and procedural due process problems, as well as equal protection problems with the court’s decision.¹⁷⁷ The majority ignored these problems by finding that they were not ripe for adjudication.¹⁷⁸

2. Accepting Plaintiff’s Alleged Facts as True, the Court Disregarded the Fungible Nature of Lead

The *Thomas* court acknowledged that DES was a fungible drug and that lead paint is made according to differing formulae. But, the court observed that “fungibility” is not a term that can be defined with categorical precision.¹⁷⁹ Citing a 2004 article by Allen Rostron¹⁸⁰ that advocates the extension of market-share liability for nonfungible products, the *Thomas* court adopted his argument that a product can be fungible three different ways: a product can be chemically identical (e.g., DES); it can in used in-

175. See *id.* at 565. “This procedure is not perfect and could result in drawing in some defendants who are actually innocent, particularly given the significantly larger time span at issue” *Id.* “We continue to believe that this procedure will result in a pool of defendants which can reasonably be assumed ‘could have caused the plaintiff’s injuries’” *Id.* (citing *Collins*, 342 N.W.2d at 52) (emphasis added). “[O]ur application of *Collins* here achieves *Collins*’ requirement that it be shown that the defendant pigment manufacturer ‘reasonably could have contributed in some way to the actual injury.’” *Id.* (citing *Collins*, 342 N.W.2d at 49 n.10) (emphasis added).

176. *Thomas*, 701 N.W.2d at 565 (quoting *Collins*, 342 N.W.2d at 49 n.10).

177. *Id.* at 591–97 (Prosser, J., dissenting). Procedural due process is violated because the court’s decision denies defendants the opportunity to present a defense under well settled tort theory because it sets up an irrebuttable presumption of causation raising the very real possibility that innocent defendants will be held liable for wrongs they did not commit. *Id.* at 593, 595. Substantive due process is violated because its “complete disregard for longstanding principles of tort liability certainly ‘shocks the conscience’ . . .” by imposing ex post facto liability on the defendants for activities long past. *Id.* at 595–96 (citing *Eastern Enterprises v. Apfel*, 524 U.S. 498 (1998) (Kennedy, J., concurring)). The equal protection clause is violated because the court’s decision does not “treat like cases alike” because it makes companies still in business bear a disproportionate share of the liability. *Id.* at 596 (citing *Vacco v. Quill*, 521 U.S. 793 (1997)).

178. *Id.* at 567.

179. *Id.* at 561.

180. Allen Rostron, *Beyond Market Share Liability: A Theory of Proportional Share Liability for Nonfungible Products*, 52 UCLA L. Rev. 151 (2004).

terchangeably, functionally or physically, because of its generic status; or it can present a uniformity of risk.¹⁸¹

When considering the uniformity of risk in a summary judgment context, the court accepted as fact the plaintiff's expert's opinion that formula differences between types of lead paint do not affect its bioavailability (thus, all lead paint present the same risk of harm) because lead paint is "inherently hazardous."¹⁸² As a result, the court concluded that like DES, all white lead carbonate based paints are inherently dangerous.¹⁸³ Consequently, it rejected using the chemical identity of the lead paint at issue as a basis for not applying "market share" liability in this case.¹⁸⁴ The *Thomas* court held that to present a uniformity of risk, such that a product is deemed fungible, it only needs to have a "common dominator in the formulas." For lead paint—that common dominator is lead.¹⁸⁵ At least one commentator has noted that on a scale of uniformity of risks, this holding (requiring only a common toxin) is very over-inclusive.¹⁸⁶

The majority of the *Thomas* court described its holding in this regard as preventing a "triumph of form over substance."¹⁸⁷ The

181. *Thomas*, 701 N.W.2d at 559–60. The *Thomas* court described functional interchangeability as follows: "for signaling New Year's Eve, a blast of an auto horn and one from a saxophone may be equivalent as noise, but few would want to dance to the former." *Id.* at 560 (quoting *Hamilton v. Accu-Tek*, 32 F. Supp. 2d 47, 51 (E.D.N.Y. 1998)). Functional interchangeability was used in tainted blood cases as a basis for applying market-share liability even though not all blood products posed an equivalent risk (like DES) because some were tainted and some were not. See Gifford, *supra* note 26, at 138–39.

182. *Id.* at 559–60. In a footnote, the court recognized that defendant's expert opined that differing lead formulae have differing bioavailability, but held that on summary judgment, the court is to construe facts in the light most favorable to the non-moving party. *Id.* at 560 n.47.

183. *Id.* at 560.

184. *Id.* at 559–60. See also *Rostron*, *supra* note 180, at 168.

185. *Thomas*, 701 N.W.2d at 559–60. The court also concluded that the plaintiff alleged that white lead carbonate was functionally interchangeable because all forms of it were lead pigments. *Id.* at 561. It held that white lead carbonate is physically indistinguishable because consumers cannot tell the differences between types of it. *Id.* at 561–62. It also held that all white lead carbonate have a uniformity of risk because it was made from "virtually identical chemical formulas." *Id.* at 562.

186. Gifford, *supra* note 26, at 144 (noting that the scale goes from zero variance [chemically identical] to over-inclusive [requiring only a common toxin] as is now all that is required in Wisconsin).

187. *Thomas*, 701 N.W.2d at 560. The dissent notes that in Wisconsin, all finished products containing a common raw material are now fungible. Under this rationale, victims of a shooting who cannot identify a gun manufacturer could sue all steel companies, a person injured by a drain cleaner could sue all producers of sodium hydroxide, and one who is injured in a fire started by matches could sue all producers of sulfur. *Id.* at 585.

dissent, however, complained that the majority's focus on white lead carbonate conveniently ignores the existence of other types of lead in paint even though the defendants argued that the plaintiff could not prove his harm was caused by white lead carbonate and the plaintiff himself admitted that he had no proof of the type of lead product that caused his injuries.¹⁸⁸ According to the dissent, the record establishes that a variety of leaded pigments were used in interior painting including: basic lead carbonate, basic lead sulfate, lead chromates, leaded zinc oxides, lead silicates, lead titanates, and litharage. It reflected that some painters used mixtures that contained lead-free pigments but contained leaded dryers or thinners.¹⁸⁹ In fact, the dissent points out that plaintiff's expert could only opine that the plaintiff *probably* ingested basic lead carbonate because it was contained in the majority of interior paints.¹⁹⁰ Nonetheless, the majority concluded on this record that, as a matter of law, the plaintiff's injuries were caused by basic lead carbonate. The dissent, however, complained that it is one thing to hold multiple defendants liable for a product they all produced when the only issue is which one of the defendants produced the specific product that caused the injury, but it is quite another to hold them all liable when the plaintiff cannot even establish that their product caused his injuries.¹⁹¹

3. The Court Skirted Around Other Factors

a. No Signature Injury is Required

According to the majority, "harm is harm, whether it be 'signature' or otherwise."¹⁹² In Wisconsin, the plaintiff always retains the burden of establishing causation. In this case, the plaintiff still has to prove by a preponderance of the evidence that basic lead carbonate caused his injuries. After that showing the plaintiff's burden is relaxed only in that he does not have to prove whose white lead carbonate he ingested.¹⁹³ As long as a defendant made white lead carbonate at any time between 1900 and 1978, it is liable.

188. *Id.* at 580 (Wilcox, J., dissenting).

189. *Id.* at 581.

190. *Id.* (noting that "[g]eneral statistics do not establish causation in a specific case") (citations omitted).

191. *Id.* at 583.

192. *Id.* at 563.

193. *Id.*

b. Control of the Product is Immaterial

The Wisconsin court concluded that because lead is fungible and inherently dangerous, the harm existed the moment the white lead carbonate was created. If anything, the harm was diluted when the paint manufacturers mixed it into their paint.¹⁹⁴ The dissent disagrees based on the fact that “differing formulae of lead paint has a direct bearing on how much damage a lead paint manufacturer’s product would cause.”¹⁹⁵

4. The Result

Because the *Thomas* decision was made in the context of a summary judgment motion, the defendants should be given an opportunity to rebut the plaintiff’s expert’s claim that all lead paint products present the same uniformity of risk. If they are successful, they will be in a position to argue that “market share” liability should not be applied to lead paint litigation in Wisconsin using the analysis laid out in the *Thomas* decision.

But, if the defendants are not given the opportunity to rebut the plaintiff’s expert or if the court ignores the widely varying risks presented by the differing lead paint formulas, then Wisconsin’s new risk contribution theory very likely will function as a form of absolute liability for the manufacturers of lead pigment. In lead-paint cases (as contrasted to Wisconsin’s use of market-share liability in DES cases) the opportunity for the defendant manufacturers to exculpate themselves may be almost nonexistent.¹⁹⁶ The majority in *Thomas* made it clear that the relevant time period for lead-paint risk contribution liability is not the time period of the plaintiff’s exposure but the entire time period each house with lead paint existed. In *Thomas*, the lead paint present in the three houses where the plaintiff lived could have been applied at any time between 1900 and 1978.¹⁹⁷ Apportioning risk contribution liability among manufacturers of lead pigment based on market share and relative culpability over a 78-year period of time is

194. *Id.* at 563.

195. *Id.* at 583–84 (Wilcox, J., dissenting) (citing *Skipworth*, 690 A.2d at 173).

196. “In DES cases each drug company had (at least in theory) a meaningful opportunity to defend against liability by proving it did not produce or market the drug either where the plaintiff lived or during the specific nine-month period she was exposed.” Diane S. Sykes, *Hallows Lecture: Reflections on the Wisconsin Supreme Court*, 89 MARQ. L. REV. 723, 730 (2006).

197. *Thomas*, 701 N.W.2d at 562.

nearly impossible as a purely factual matter leaving defendants no ability to defend themselves.

V. MANY POLICY JUSTIFICATIONS FOR APPLYING “MARKET SHARE” LIABILITY ARE MISPLACED

When applying an alternative theory of liability, courts consider the two policy reasons initially cited in *Summers* for shifting the burden of proof: (1) “as between an innocent plaintiff and negligent defendants, the latter should bear the cost of the injury,” and (2) that the theory would create an incentive to produce safer products.¹⁹⁸ Additionally, in the context of public nuisance litigation, governmental agencies openly admit that the goal of this litigation is about securing additional funding. This section examines the practical, legal and moral underpinnings of these reasons for applying “market share” liability in lead paint litigation.

A. In Lead Paint Cases, Is It Material—or Unjust—to Consider Whether Defendants Are Better Positioned to Absorb the Cost?

One of the main bases relied upon by some courts in adopting “market share” liability is the reasoning that defendants are better able to insure against liability and to pass the costs on.¹⁹⁹ Courts and commentators alike have questioned the fairness of this basis for imposing “market share” liability.²⁰⁰ Indeed, it is morally wrong and unjust for courts to base their decision not on the merits of the case and the applicable law, but on the supposed wealth and ability of a defendant (or that of an entire industry) to pay a damage award to a plaintiff. The “ability to pay” (whether by insurance or otherwise) should be immaterial to a court’s decision as should the perceived ability to “pass the cost” of a damage award off to its customers. Once a court starts down those roads,

198. *Id.* at 549–50

199. *See, e.g., id.* at 558.

200. *See, e.g., Sindell v. Abbott Labs.*, 607 P.2d 924, 941 (Cal. 1980) (Richardson, J., dissenting) (imposition based on defendant’s perceived wealth is an unsound principle and creates a two-tiered system of justice); Elliot M. Kroll, *Intra-Industry Joint Liability: The Era of Absolute Products Liability*, 687 INS. L. J. 185, 195 (1980) (it is an unsound principle to impose liability based on the perceived wealth of defendant and its ability to obtain insurance); Jonathan B. Newcomb, Comment, *Market Share Liability for Defective Products: An Ill-Advised Remedy for the Problem of Identification*, 76 Nw. U. L. REV. 300, 328 (1981) (it is an unfair system to impose liability solely due to ability to pay and subsequently spread the costs).

the paradigm clearly changes from jurisprudence to “result-oriented” social engineering—and the resulting decrees transform manufacturers into insurers not only of their own products but also those made by others in the industry.²⁰¹

A number of courts and commentators have suggested that debates about who should pay to remedy such problems are most appropriately left for the legislature, with its ability to hold hearings and determine public policy.²⁰² This is particularly true in the context of public nuisance cases where governmental plaintiffs are asking courts to find defendants liable for a public nuisance (the mere presence of lead paint on houses in the community) and asking courts to apply “market share” liability to determine each defendant’s liability for abating the nuisance. When lead paint is involved, public officials often face legions of conflicts with federal and state public policy priorities. For example, laws and regulations in some states place “primary responsibility” for minimizing the risks of deteriorating lead paint on *property owners*, including landlords.²⁰³ Despite this mandate from the legislative and executive branches of government, public servants—themselves part of the executive branch—find themselves arguing that the manufacturers of lead paint should be held responsible, and incredibly assert the extreme argument that property owners are not even appropriate parties to the trial.²⁰⁴ How can a public official, charged with enforcing the state laws against the persons primarily responsible for a condition, ignore that duty and pursue a “common law” judicial remedy solely against the manufacturers—who have no ability to control the deterioration that has produced the alleged risk?

The question is more than rhetorical. It points out an inherent conflict of public counsel that arises when they arbitrarily ignore the declared “public policy” they are sworn to uphold—and attempt to create public policy based on their *personal* views

201. See *Smith v. Eli Lilly & Co.*, 560 N.E.2d 324, 342 (Ill. 1990) (citing *Mulcahy*, 386 N.W.2d at 76; Elliot M. Kroll, *Intra-Industry Joint Liability: The Era of Absolute Products Liability*, 687 INS. L. J. 185, 194–97 (1980)).

202. See *Smith v. Eli Lilly*, 560 N.E.2d at 342. See also *Goldman v. Johns-Manville Sales Corp.*, 514 N.E.2d 691, 701 (Ohio 1987); *Mulcahy v. Eli Lilly & Co.*, 386 N.W.2d 67, 76 (Iowa 1986); Cynthia L. Chase, Note, *Market Share Liability: A Plea for Legislative Alternatives*, 1982 U. ILL. L. REV. 1003, 1004 (1982).

203. See, e.g., sources cited *supra* notes 7 & 8.

204. *Rhode Island v. Lead Indus. Ass’n, Inc.*, No. 99-5226 2004 WL 4963044 (R.I. Super. Mar. 22, 2004) (severing all of the Defendants’ third-party claim from the trial).

through judicial decree. The problems are exacerbated if public counsel, and the agencies they are responsible for as clients, fail to take action to reduce risks by enforcing existing statutes and regulations enacted and promulgated to protect public health—pursuing the perceived panacea of “common law” remedies for years in protracted litigation, while the “dangers” they claim remain unresolved as a result of their own indifference. It seems reasonable that such dereliction would have political consequences, and perhaps the dogged and unjust pursuit of extreme remedies in lead paint cases, such as “market share” liability, demonstrates just how far elected officials will go to avoid them.

B. When the Product is no Longer Made, There can be no Incentive to Make it Safer

Although some courts and commentators believe “market share” liability is necessary as an incentive for manufacturers to produce safer products,²⁰⁵ other courts recognize that it is unlikely that an overall safety incentive could result from imposing of “market share” liability long after the product was discontinued.²⁰⁶ This reasoning is particularly true in the context of lead paint litigation where plaintiffs ask courts to apply “market share” liability 75 to 200 years after the lead-based paint was sold—more than 50 years after most companies stopped producing lead-based paint and almost 30 years after its use was banned by the federal government. The “marketing defects,” if any, which typically justify liability because of manufacturers’ failures to provide adequate warnings and precautionary instructions, ring hollow when the manufacturer is dealing with a product that is no longer sold.

205. See, e.g., *Collins v. Eli Lilly & Co.*, 342 N.W.2d 37, 49–50 (Wis. 1984); *Sindell*, 607 P.2d at 936; Glenn O. Robinson, *Multiple Causation in Tort Law: Reflections on the DES Cases*, 68 VA. L. REV. 713, 741 (1982); John J. Grundhauser, Note, *The DES Manufacturer Identification Problem: A Florida Public Policy Approach*, 40 U. MIAMI L. REV. 857, 867–70 (1986).

206. “[I]t is unlikely that an overall safety incentive could result from imposition of market share liability 40 years after the undesirable occurred and almost 20 years after the potential harm was discovered and the product removed from the market.” *Smith v. Eli Lilly*, 560 N.E.2d at 342 (citing *Zafft v. Eli Lilly & Co.*, 676 S.W.2d 241, 247 (theory adds little incentive for production of safe products)).

C. It is Not the Court's Job to Provide Funding for Governmental Entities

Under common law, there exists a general rule that "public expenditures made in the performance of governmental functions are not recoverable" from a tortfeasor in the absence of a specific statute.²⁰⁷ This rule against "municipal cost recovery" is rooted in the legislative policy of taxing citizens to pay for these services and on the constitutional doctrine of separation of powers.²⁰⁸

"The seminal case on this doctrine is *Flagstaff v. Atchison, Topeka & Santa Fe Ry. Co.*,"²⁰⁹ in which the city of Flagstaff, claiming negligence and the conduct of an ultrahazardous activity, attempted to recover from the railway the costs associated with emergency response after the derailment of tank cars carrying explosive gas.²¹⁰ Affirming the district court's dismissal of the complaint, the court of appeals held that "the cost of public services for protection from fire or safety hazards is to be borne by the public as a whole, not assessed against the tortfeasor whose negligence creates the need for the service."²¹¹ According to the Ninth Circuit Court of Appeals:

Where such services are provided by the government and the costs are spread by taxes, the tortfeasor does not expect a demand for reimbursement. This is so even though the tortfeasor is fully aware that private parties injured by its conduct, who

207. *Koch v. Consol. Edison Co. of N.Y.*, 468 N.E.2d 1, 8 (N.Y. 1984), *cert. denied*, 469 U.S. 1210 (1985); *see also* *Dist. of Columbia v. Air Florida, Inc.*, 750 F.2d 1077, 1080 (D.C. Cir. 1984); *In re TMI Litig. Governmental Entities Claim*, 544 F. Supp. 853, 855 (M.D. Pa. 1982); *Pennsylvania v. Gen. Pub. Utils.*, 710 F.2d 117, 121 (3d Cir. 1983); *People v. Wilson*, 240 Cal. App. 2d 574, 576 (Cal. Ct. App. 1966); *Freetown v. New Bedford Wholesale Tire, Inc.*, 423 N.E.2d 997, 997-98 (Mass. 1981); *Bridgeton v. B.P. Oil, Inc.*, 369 A.2d 49, 54 (N.J. Super. Ct. Law Div. 1976).

208. *See, e.g.*, *United States v. Standard Oil Co. of California*, 332 U.S. 301, 314-15, (1947) (declining to recognize cause of action by federal government to recover costs of injured soldier's hospitalization and pay resulting from negligence of defendants and noting that Congress, not the Court, "is the custodian of the national purse," and the "exclusive arbiter of federal fiscal affairs"); *see also* *County of Champaign v. Anthony*, 337 N.E.2d 87 (Ill. App. Ct. 1975), *aff'd*, 356 N.E.2d 561 (1976) (holding that the county could not recover from a criminal defendant the cost of providing protection to a witness against him).

209. *Chicago v. Beretta U.S.A. Corp.*, 821 N.E.2d 1099, 1144 (Ill. 2004).

210. *Flagstaff v. Atchison, Topeka & Santa Fe Ry. Co.*, 719 F.2d 322, 323 (9th Cir. 1983).

211. *Id.* (applying Arizona law in a case of first impression). *See also* *Koch*, 468 N.E.2d at 7, 8 (in absence of statutory authority, city cannot recover wages, salaries, and overtime paid to police, fire, and other municipal employees as a result of city-wide blackout caused by defendant's negligence).

cannot spread their risk to the general public, will have a cause of action against it for damages proximately or legally caused.²¹²

This concept, the Ninth Circuit said, is a product of state and federal common law and “does not turn on the underlying theory of the tort . . . for it is the identity of the claimant and the nature of the cost that combine to deny recovery.”²¹³ Where a system already exists for the rational allocation of costs, and where society as a whole relies upon that system, there is little reason for a court to impose an entirely new system of allocation. Judicial activism of this nature substantially upsets the settled expectations of potential defendants, both business entities and individuals, and their insurers. No matter how well intended, this type of judicial activism could have significant unintended consequences.²¹⁴

With respect to the alleged lead paint health crisis, many legislatures have addressed the problem²¹⁵ and a fair and sensible

212. *Flagstaff*, 719 F.2d at 323. See also *Chicago v. Beretta*, 821 N.E.2d at 1144; *Bridgeton*, 369 A.2d at 54 (holding in pertinent part: “Governments, to paraphrase the Declaration of Independence, have been instituted among men to do for the public good those things which the people agree are best left to the public sector Nevertheless, there remains an area where the people as a whole absorb the cost of such services—for example, the prevention and detection of crime. No one expects the rendering of a bill (other than a tax bill) if a policeman apprehends a thief”) *Bridgeton* further holds “that a municipal corporation may not recover as damages the costs of its governmental operations which it was created to perform.” *Id.* at 54–55.

213. *Flagstaff*, 719 F.2d at 324.

214. *Chicago v. Beretta*, 821 N.E.2d at 1144 (discussing unknown consequence of allowing governmental entities to sue to recover of the costs of routine police and other emergency services).

215. See, e.g., ARIZ. REV. STAT. ANN. § 36-1672 (2006); ARK. CODE ANN. §20-27-605 (2005); CAL. HEALTH & SAFETY CODE § 124160 (West 1995); CAL. HEALTH & SAFETY CODE § 372 (West 1986); COLO. REV. STAT. ANN. § 25-5-1103 (1997); CONN. GEN. STAT. §19a-111a (2003); DEL. CODE ANN. Tit. 16, § 2601 (2003); D.C. CODE ANN. § 7-871.01 (2002); FLA. STAT. ANN. § 381.984 (West 2007); GA. CODE ANN. § 31-41-2 (2006); 410 ILL. COMP. STAT. 45/1 (2006); IND. CODE ANN. § 16-41-39.4 (2006); IOWA CODE ANN. § 135.102 (2007); KAN. STAT. ANN. §§ 65-1202, -1210 (2002); KY. REV. STAT. ANN. §§ 211.900 to 211.905 (LexisNexis 1999); LA. REV. STAT. ANN. §§ 40:1299.20 to 40:1299.29 (2001); ME. REV. STAT. ANN. tit. 22, § 1314 (2004); MD. CODE ANN. ENVIR. § 6-304 (2007); MASS. GEN. LAWS ANN. ch. 111, § 190 (2003); MICH. COMP. LAWS ANN. § 333.5474 (2004); MINN. STAT. ANN. §§ 144.9501 to 144.9509 (2005); MO. REV. STAT. § 701.300 (2006); NEB. REV. STAT. § 71-2513 (2006); N.H. REV. STAT. ANN. § 130-A (1993); N.J. STAT. ANN. § 24:14A-8 (West 1971); N.Y. PUB. HEALTH LAW § 1370 (McKinney 2002); N.C. GEN. STAT. §§ 130A-131.7 to 130A-131.9C (1997); OHIO REV. CODE ANN. § 3742 (LexisNexis 2002); OKLA. STAT. ANN. tit 36, § 1-114-1 (2004); OR. REV. STAT. § 701 (2005); 35 PA. CONS. STAT. ANN. § 5903 (2006); R.I. GEN. LAWS § 23-24.6 (2001); S.C. CODE ANN. § 44-53-1430 (2002); TEX. HEALTH & SAFETY CODE ANN. § 88 (Vernon 2003); VT. CODE ANN. tit. 18, § 1751 (2002); VA. CODE ANN. § 32.1-46.1 (West

system for spreading costs is already in place. Thus, “governmental entities themselves currently bear the cost in question, and they have taken no action to shift it elsewhere. If the government has chosen to bear the cost for reasons of economic efficiency, or even as a subsidy to the citizens and their business[es], the decision implicates fiscal policy; the legislature and its public deliberative processes, rather than the court, is the appropriate forum to address such fiscal concerns.”²¹⁶

The Ninth Circuit, however, acknowledged several exceptions to the municipal cost recovery rule that may permit a governmental entity to “recover the cost of its services.” For example, recovery is allowed “where the acts of a private party create a public nuisance which the government seeks to abate . . . and where the government incurs expenses to *protect its own property*.”²¹⁷ In the lead paint litigation, however, governmental entities typically do not sue as property owners and they do not sue to abate a nuisance on public property. Instead, they sue to obtain *funding* for abatement projects. Whether the desired “public nuisance” recovery is cast in damages or in the form of an equitable abatement injunction, the alleged nuisance is on *private* property.²¹⁸

Some jurisdictions have allowed governmental entities to sue to recover its costs when ongoing misconduct is so pervasive and continuing that it creates a public nuisance.²¹⁹ But, other jurisdic-

2004); WASH. REV. CODE ANN. § 70.103.010 (West 2002); W. VA. CODE § 16-35-4a (2006); WIS. STAT. ANN. §§ 254.15 (2004).

216. *Flagstaff*, 719 F.2d at 324 (citing *Standard Oil*, 332 U.S. at 314–17). As the District of Columbia appeals court noted:

It is critically important to recognize that the government’s decision to provide tax-supported services is a legislative policy determination. It is not the place of the courts to modify such decisions. Furthermore, it is within the power of the government to protect itself from extraordinary emergency expenses by passing statutes or regulations that permit recovery from negligent parties. In other words, the city clearly has recourse to legislative initiative to eliminate or reduce the economic burdens of accidents such as the Air Florida crash.

Dist. of Columbia v. Air Florida, Inc., 750 F.2d 1077, 1080 (D.C. Cir. 1984)

217. *Flagstaff*, 719 F.2d at 324 (emphasis added).

218. See *Philadelphia v. Beretta U.S.A. Corp.*, 126 F. Supp. 2d 882, 894–95 (E.D.Pa. 2000) (explaining that the City cannot have it both ways; it is either suing in its “governmental capacity to abate a public nuisance” or “[i]f it sues for costs it has itself incurred the action is barred under the municipal cost recovery rule.”).

219. *Cincinnati v. Beretta U.S.A. Corp.*, 768 N.E.2d 1136, 1149–50 (Ohio 2002) (“Although a municipality cannot reasonably expect to recover the costs of city services whenever a tortfeasor causes harm to the public, it should be allowed to argue that it may recover such damages in this type of case. Unlike the train derailment that occurred in the *Flagstaff* case, which was a single, discrete incident requiring a

tions have rejected the idea that the municipal cost recovery rule is limited to discrete events or that it should not be applied where the harm is frequent or ongoing. In *Chicago v. Beretta U.S.A. Corp.*, the court noted that

the need for emergency response to shootings is a day-to-day occurrence, well within the predictable need for law enforcement and other municipal resources, while the risk of an explosion or other disaster is unpredictable and may impose devastating costs on a local government. Such a “single incident” does not result in a merely “nominal expense” that can be spread across the tax base without difficulty, as these cases would suggest. . . . It defies common sense to suggest that the more predictable the expense, the greater the ability of the city to recover its costs in tort. The potential unintended consequences of such a rule are staggering. We agree with defendants that when the need for emergency services in response to an alleged nuisance is ongoing, the municipal cost recovery rule is stronger, not weaker, because the legislature is better able to consider need for cost-recovery legislation than in cases of sudden disaster. If the legislature concludes that the costs of a certain public service should be borne by the parties whose conduct necessitates that service, rather than by the taxpayers in general, it has the ability to enact a statute expressly authorizing recovery of such costs.²²⁰

Courts should not forget that they are not legislatures. They do not have the power to appropriate money through taxation to fund government agencies efforts to remedy childhood lead poisoning. While courts do have the power to transfer money from one party to another, that power is supposed to be linked to proof of a causal connection “between the injurer’s tortious conduct and the victim’s injury.” Therefore, courts must resist the temptation

single emergency response, the misconduct alleged in this case is ongoing and persistent. The continuing nature of the misconduct may justify the recoument of such governmental costs Moreover, even the *Flagstaff* court recognized that recovery by a governmental entity is allowed ‘where the acts of a private party create a public nuisance which the government seeks to abate.’” (quoting *Flagstaff*, 719 F.2d at 324). See also *Boston v. Smith & Wesson Corp.*, No. 199902590, 2000 WL 1473568, *7–8 (Mass. Super. Ct. July 13, 2000) (distinguishing *Flagstaff* on basis that it involved a discrete emergency); *James v. Arms Technology, Inc.*, 3820 A.2d 27, 48–49 (N.J. App. Div. 2003) (holding the municipal-cost-recovery rule should not apply to a claim alleging an ongoing public nuisance because the ongoing course of conduct alleged against these defendants is distinguishable from the single incident at issue in *Flagstaff*).

220. *Chicago v. Beretta*, 821 N.E.2d at 1147 (stating that this was a question for the legislature).

to believe that they, more so than legislatures, are the appropriate branch of government to solve public health problems.²²¹

VI. CHASING THE DEVIL? “ALTERNATIVE LIABILITY” ON THE MARCH

The advocates of “alternative liability” and “market share” liability are on the march. The concept’s attraction to plaintiffs’ counsel is understandable. Although “market share” liability is considered an extraordinary remedy—its “benefits” are also extraordinary, primarily because it removes the plaintiff’s burden to establish the requisite causative links between a specific defendant’s tortious acts and the plaintiff’s alleged injuries. Once that fundamental burden is excused, plaintiffs argue that they only need to demonstrate an injury—or, in some cases, only a potential injury—associated with lead-based paint. Once this “feather-weight” standard is allowed and, predictably, met, plaintiffs may believe that they are on their way to bringing the lead industry to its knees.²²² Once the rule is accepted and established, they will inevitably assert that *all* of the defendants who merely made lead paint—as opposed to actually selling it in the state—during the life span of the oldest dwelling in which the plaintiff lived (often up to 100 years ago) are presumed “guilty” of harming the plaintiff. If this reasoning is upheld, each defendant is “presumed guilty” unless it can prove that it *never* sold lead paint during those 50, 75 or 100 years.

As of this writing, “market share” liability has been expressly accepted in only six jurisdictions.²²³ All other appellate courts have rejected its application in lead paint cases. In five of the jurisdictions accepting “market share” liability, its only common application has been in DES cases, and only one state has authorized its application in lead paint litigation. Perhaps uniquely, that jurisdiction—Wisconsin—based its application of “market share” liability on the state’s constitutional guarantee that every person will have a legal remedy for all injuries or

221. See Gifford, *supra* note 26, at 159.

222. See Mark Curriden, *Tobacco Fees Give Plaintiffs’ Lawyers New Muscle for Other Litigation*, DALLAS MORNING NEWS, Oct. 31, 1999; Michael Freedman, *Turning Lead into Gold*, FORBES, May 14, 2001, at 122 (explaining that Mr. Motley targeted the former lead companies as his “next big-game hunt,” found victims, and “demonized” the industry because they were a “fat target”).

223. See *supra* section III. Those jurisdictions include: New York, Washington, Florida, Wisconsin and Hawaii.

wrongs.²²⁴ More importantly, the Wisconsin decision was made in the context of a summary judgment motion, where facts presented by the plaintiff were presumed true. Hence the court presumed that the plaintiff could prove that he was injured by lead ingestion and that his source of lead ingested was lead paint. Furthermore, for the purposes of applying “market share” liability, the court also accepted as fact the plaintiff’s expert’s opinion that that all lead based paints present the same uniformity of risk. These presumed facts will not exist in a hotly contested trial. Thus, at trial, Defendants will have an opportunity to challenge the applicability of “market share” liability to lead paint litigation by rebutting plaintiff’s claim that lead paint presents an acceptable uniformity of risk.

Nevertheless, the reasoning underlying “alternative liability” has recently found receptive ears in the noted “public nuisance” litigation in Rhode Island. There, a trial court has started its slide down the “slippery slope”—not by expressly accepting “market share” liability or any other specific type of “alternative liability”—but by instructing the jury that they were not required to find that any of the defendants sued in the case actually manufactured any of the lead pigment present in the homes at issue.²²⁵ In fact, the court went so far as to instruct the jury that defendants could be found responsible even if there was no evidence that it sold its paint in Rhode Island.²²⁶ Moreover, the court did not require a showing that any specific property contained lead paint,²²⁷ or that any specific property was sufficiently deteriorated or poorly maintained to permit exposures to lead from paint.²²⁸ All that the court required was some evidence the defendant manufactured lead paint and that it sold its product *somewhere* at *some time*. Incredibly, the court did not even require proof to substantiate the *possibility* that any particular defendant’s product was ever present in Rhode Island or used in any specific residence.

Based on these extraordinary instructions, the jury returned a verdict that found that the paint manufacturers should be required to abate or suppress the “public nuisance.”²²⁹ They did so

224. See *supra* section IV.B.

225. Jury Instructions from Rhode Island v. Lead Indus. Ass’n, Inc., C.A. No. 99-5226, *14 (R.I. Super. 2006) (issued Feb. 13, 2006).

226. *Id.*

227. *Id.*

228. See *id.*

229. See Peter B. Lord, *Three Companies Found Liable in Lead-Paint Nuisance Suit*, PROVIDENCE J., Feb. 23, 2006, at A-01. See also Peter Krouse, *Verdict Raises*

irrespective of Rhode Island's own regulations that declared that the state's property owners were the persons "primarily responsible" for dealing with lead paint concerns.²³⁰ The verdict is particularly troubling because the landowners—the persons "primarily responsible"—were not sued by the state and were not included on the verdict form.²³¹ Indeed, the court severed the manufacturers' claims against the property owners from the proceedings before the trial commenced.²³²

On February 26, 2007, the court denied all defense post-trial motions in the Rhode Island case. It took the court over one year and 170 pages of a 198 page decision to explain why it has decided that the multitude of alleged legal errors by the court and misconduct on the part of the State either did not occur or were not serious enough to require a new trial.²³³ It now appears that the proceedings must still proceed into a "remedy" phase to determine the type of abatement or suppression appropriate for the "nuisance." It is now up to appellate court to halt Rhode Island's headlong plunge into the abyss—and to avoid the manifest injustice compounded by the "cumulative presence" of so many rulings that are antithetical to the traditions of balanced government and fundamental fairness.²³⁴

Risk for Paint Companies, PLAIN DEALER, Apr. 2, 2006, at A1 (including interviews with jurors stating that some members of the jury did not want to find for liability, but the jury instructions, according to one juror, "didn't give the paint companies much of a window to crawl through."). Post-verdict interviews have indicated that the jury was initially deadlocked four to two in favor of the defense, but that the court's definitions in the jury instructions led them to find for liability. *Id.*

230. See *supra* note 8.

231. See Jury Verdict Form from Rhode Island v. Lead Indus. Ass'n, Inc., No. 99-5226, 2004 WL 4963044 (R.I. Super. Feb. 22, 2006).

232. Rhode Island v. Lead Indus. Ass'n, Inc., No. 99-5226, 2004 WL 4963044 (R.I. Super. Mar. 22, 2004) (severing all of the Defendants' third-party claim from the trial).

233. Rhode Island v. Lead Indus. Ass'n, Inc., No. PC 99-5226 2007 R.I. Super. Lexis 32 (R.I. Super. Ct. Feb. 26, 2007) (Court's Decision).

234. A reference to the "cumulative presence" of these errors in the Rhode Island record seems particularly apt because the trial court refused to allow the jury to consider specific properties, but rather allowed them to find that a "public nuisance" existed solely on the basis of the "cumulative presence" of lead paint in residences in the State. Jury Instructions from Rhode Island v. Lead Indus. Ass'n, Inc., C.A. No. 99-5226, *10, *14 (R.I. Super. issued Feb. 13, 2006); see also Rhode Island v. Lead Indus. Ass'n, Inc., C.A. No. 99-5226, (R.I. Super. issued Nov. 23, 2004) (sustaining State's Motion in Limine to exclude evidence concerning individual properties from trial); Faulk and Gray, *supra* note 83, at 1188-92 (discussing the mosaic of errors in the Rhode Island lead paint trial, many of which standing alone constitute reversible error).

The Rhode Island case is an extreme example of “alternative liability”—especially extreme because all of the persons potentially responsible for producing the risks plainly are not before the court. As of this writing, the “Rhode Island” model, where public officials and private contingent fee lawyers work together to bring “public nuisance” lawsuits, has proliferated to Ohio, where six cities have now sued lead paint manufacturers for similar relief.²³⁵ Another such suit is pending in New Jersey.²³⁶ The trial of the Wisconsin “market share” case is scheduled later this year, and there is every reason to believe that Wisconsin’s precedent will be advanced in other states receptive to common law “flexibility.” Accordingly, it appears that the “extreme” is rapidly becoming routine—and the “extraordinary” is now increasingly commonplace.

This curious style of “justice” is plainly wrong in a country that takes pride in its belief that everyone is “presumed innocent until proven guilty.” Although our nation treasures the principle that all persons are “equal in the eyes of the law,” critics suggest that some forums believe it is necessary to “tip the balance” with carefully placed judicial thumbs.²³⁷ In the American legal tradition, fairness is ensured when the party bringing the lawsuit has the burden to prove their case. Fairness is also ensured by trial and appellate judges who act as impartial referees—referees who enforce fundamental rules and who do not create novel principles that unjustly favor any particular party. Finally, fairness is assured when public counsel perform their duties in accordance with the public policy priorities previously declared by the executive and legislative branches, rather than neglecting and departing from those laws to advance creative “common law” theories at variance with existing duties. Unless all of these individual fairness guarantees work together in a manner designed by the government’s framers, we face an increasingly subjective system that produces merely *results*, as opposed to justice.²³⁸ When that oc-

235. Bob Driehaus, *6 Ohio Cities Rush to File Suits Against Makers of Lead Paint*, N.Y. TIMES, Jan. 6, 2007, at A12.

236. See Faulk and Gray, *supra* note 83, at 1194–95.

237. AMERICAN TORT REFORM ASSOCIATION, JUDICIAL HELLHOLES 2006 28 (2006) (referring to Rhode Island where it notes that a trial “court stripped the traditional elements from public nuisance law to do an end-run around product liability law and thereby create a defenseless lawsuit”).

238. See Richard O. Faulk, *Armageddon Through Aggregation: The Use and Abuse of Class Actions in International Dispute Resolution*, 10 MICH. ST. – DCL J. INT’L L. 205, 236 (2001) (advising “caution” and “careful deliberations” in pursuit of potentially oppressive judicial solutions, such as class actions in civil law nations, “lest by risking Armageddon, we gain not justice, but merely results.”).

curs, our treasured system of justice is reduced to an exercise in *economics*, in the same manner as the asbestos crisis, and due process is reduced to a caricature and, ultimately, an illusion.²³⁹

While everyone—including these authors—agrees that young innocent children need to be protected from unreasonable risks, sacrificing one of the pillars of American tort law is the wrong way to do so. The need for litigation-based “solutions” is belied by any argument that maintains that the continued presence of lead in residential homes is a societal problem, or that litigation-based “solutions” are needed to address them, is belied by the hugely successful efforts that have been undertaken by state legislatures and regulatory agencies. As the figure below reflects, those efforts have resulted in a great “success story” that reflects major and substantial reductions in the number of children with elevated lead blood levels—all achieved without any meaningful assistance from the tort bar.²⁴⁰

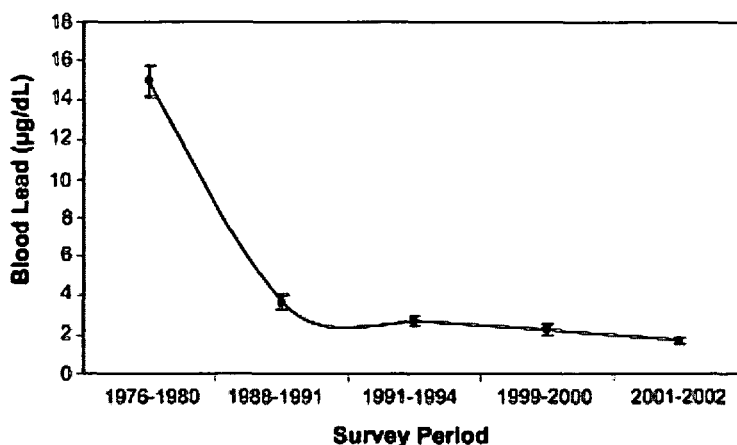
The average blood lead level of children under the age of six in the U.S. in the early to mid-1970s was about 16.5 µg/dL.²⁴¹ While many sources of lead may have contributed to this very high average blood lead level, it is generally accepted that the vast majority of the lead came from tailpipe emissions from vehicles burning leaded gasoline.²⁴² According to the most recent data available (collected during 2001-2002), the average blood lead level for chil-

239. See Richard O. Faulk, *Dispelling the Myths of Asbestos Litigation: Solutions for Common Law Courts*, 44 S. Tex. L. Rev. 945, 946 (2003) (comparing the regular practice of asbestos settlements through “voluntary” disposition without trial to the “Cold War because it is also an economic struggle, not merely a struggle between competing ideas”).

240. CRITERIA DOCUMENT, *supra* note 115, at 4-21. Figure taken from CRITERIA DOCUMENT, *supra* note 115, at 4-24, Fig. 4-3 (“Blood lead concentrations in U.S. children, 1–5 years of age. Shown are geometric means and 95% confidence intervals as reported from the NHANES II (1976–1980) and NHANES III Phase 1 (1988–1991); Pirkle et al., (1994); NHANES III Phase 2 (1991–1994); J.L. Pirkle et al., (1998); and NHANES IV (1999–2000, 2001–2002; Centers for Disease Control and Prevention, 2005).”)

241. William Kovarik, *Ethyl-Leaded Gasoline: How a Classic Occupational Disease Became an International Public Health Disaster*, 11 INT’L J. OCCUPATIONAL & ENVTL. HEALTH 384, 394 (2005).

242. By 1996, when the phase-out of leaded gasoline was complete, the average blood lead level for children under the age of six had dropped to 2.7 µg/dL. Criteria Document, *supra* note 115, at 4-21. This represents a steep decline (from 77.8% to 4.4%) of children who had blood lead levels above 10 µg/dL. CTR. FOR DISEASE CONTROL & PREVENTION, U.S. DEPT. OF HEALTH & HUMAN SERVS., *Blood Lead Levels - United States, 1999–2002*, 54(20) MORBIDITY & MORTALITY WEEKLY REP. 513–16 (May 27, 2005), available at <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5420a5.htm#tab1> [hereinafter 1999–2002 BLLs].



dren in the U.S. continued to decrease to 1.70 µg/dL.²⁴³ Thus, as a consequence of the governmental intervention, the level of lead in the blood of young children is 90 percent less today than it was 30 years ago.²⁴⁴

Despite this clear “success story,” some towns, cities and even state attorneys general are apparently dissatisfied with their elected representatives’ decisions and efforts. These plaintiffs are asking the courts for additional relief—relief that amounts, for all practical purposes, to *absolute* liability. In an increasing number

243. CRITERIA DOCUMENT, *supra* note 115, at 4-22.

244. It should be noted that while the State of Rhode Island was in trial against the lead manufacturers on its “public nuisance” claims, the incidence of elevated blood lead levels actually decreased below the State’s regulatory standard for “elimination.” See R.I. DEPT. OF HEALTH, CHILDHOOD LEAD POISONING IN RHODE ISLAND: THE NUMBERS 2007 EDITION, 4-5 (July 2007), available at http://www.health.ri.gov/lead/databook/2006_Databook.pdf. Despite these ongoing achievements, the State’s counsel actually argued to the jury that the levels had reached a “plateau” above these levels and that the State could make no further progress without victory in the suit. See Morning Trial Transcript, February 9, 2006, at 80. (“[W]e also know that in 2004 more than 1,100 Rhode Island children—there’s actually 1,167 children, real children with real families, who tested positive for lead poisoning We know that Rhode Island has made great strides but that today too many children still have lead poisoning But if you’ll remember what Dr. Shannon told you, he was asked if lead poisoning and the treatment of lead poisoning was a public health success story, and he said yes because the numbers have come down. But he said there’s been a *plateau* recently and that it is still a public health menace”); see also, Trial Transcript, February 9, 2006, at 173 (“Ladies and Gentlemen, we’ve reached a *plateau*. We’ve gone as far as the secondary measures of enforcement and the screening program can take us”). One must question why a public official would choose to ignore success and plead disaster. Such a decision raises the question of whether victory in the lawsuit was deemed more important than serving the public interest. See also Faulk and Gray, *supra* note 83, 1180-83, 1181 n.647 (discussing ethical problems related to states hiring of private lawyers on a contingency fee basis).

of lawsuits, they seek more funding—and they are asking judges to make the few remaining companies that formerly made lead pigment and paint the insurers for an entire industry without any regard to whether their products actually contributed to the harm. To accomplish this result, which to date has been successfully accomplished by legislative action and executive enforcement, public counsel (often joined by private counsel on a contingent fee arrangement) insist that their “common law” theories are entirely independent of public policies and procedures adopted by the very agencies that created their offices. If a new “solution” is necessary—and the evidence suggests it is not—the supposed “flexibility” of common law courts and remedies is not the answer. Instead, the public officials should seek additional laws and, if appropriate, additional funding from the legislature, or they should seek new regulations from administrative agencies. Most importantly, they should pay attention to the public policies already in existence and pursue them vigorously through existing laws in accordance with their sworn duties—a pursuit that should not be abandoned in favor of protracted and speculative litigation while, if their allegations are correct, children remain endangered for years.

VII. CONCLUSION

The honored judicial principles that have traditionally allocated the burden of proof in tort cases were not created “out of the air.” Instead, they are hallowed for a reason—because without them, *every* citizen’s liberty is imperiled, not just those who may be unpopular. This principle is remarkably illustrated in Robert Bolt’s play, *A Man for All Seasons*. In a familiar passage, Sir Thomas More is assailed with the charge that he would “give the devil the benefit of law.”

MORE: Yes. What would you do? Cut a great road through the law to get after the devil?

ROPER: I’d cut down every law in England to do that!

MORE: Oh? . . . And when the last law was down, and the Devil turned round on you—where would you hide, Roper, the laws all being flat? . . . This country’s planted thick with laws from coast to coast—man’s laws, not God’s—and if you cut them down . . . d’you really think you could stand upright in the winds that

would blow then? . . . Yes, I'd give the Devil benefit of law, for my own safety's sake.²⁴⁵

This dialogue is particularly relevant today, especially to those cases that are filled with massive emotional appeal—such as those involving children's health. It is, of course, at the *extremes* that the rigor and wisdom of the law is tested, and under great stress, such extremes can produce the seeds of abuse that, when fully grown, can threaten the fundamental values essential to a free society. More than ever before, courts must be careful and cautious before striking down traditional rules and replacing them with new ideas that promise justice in “extraordinary circumstances”—especially when those ideas primarily arise from *economic* considerations, as opposed to historical jurisprudence.

If legal history teaches us anything, it shows that the “extraordinary” cannot be predictably contained. Even with the best intentions, exceptions born of such circumstances often swallow the rules they were so carefully structured to preserve. Courts should therefore be especially vigilant when tempted to accept principles that are contrary to centuries of experience to “correct” an alleged contemporary “injustice.” This vigilance is especially relevant in lead paint litigation—where a candid appraisal of the record demonstrates that the circumstances are only “extraordinary” when reasonable alternatives to extremism have been arbitrarily disregarded.

245. ROBERT BOLT, *A MAN FOR ALL SEASONS* 66 (2d ed. 1962).