

12-1-1993

Resurrecting an Old Cause of Action for a New Wrong: Battery as a Toxic Tort

Christopher J. McAuliffe

Follow this and additional works at: <http://lawdigitalcommons.bc.edu/ealr>



Part of the [Environmental Law Commons](#), and the [Torts Commons](#)

Recommended Citation

Christopher J. McAuliffe, *Resurrecting an Old Cause of Action for a New Wrong: Battery as a Toxic Tort*, 20 B.C. Env'tl. Aff. L. Rev. 265 (1993), <http://lawdigitalcommons.bc.edu/ealr/vol20/iss2/4>

This Comment is brought to you for free and open access by the Law Journals at Digital Commons @ Boston College Law School. It has been accepted for inclusion in Boston College Environmental Affairs Law Review by an authorized administrator of Digital Commons @ Boston College Law School. For more information, please contact nick.szydowski@bc.edu.

RESURRECTING AN OLD CAUSE OF ACTION FOR A NEW WRONG: BATTERY AS A TOXIC TORT

*Christopher J. McAuliffe**

I. INTRODUCTION

Suppose a person develops a disease that frequently occurs among residents and workers in a certain polluted geographic area. Suppose further that this potential plaintiff, who recently has learned of his or her disease, no longer lives in the area or is a nonresident employee of the polluter. The diseased plaintiff, wanting to recover damages for the personal injury, turns to tort law for compensation. With most pollution-related injuries, however, the plaintiff has suffered a harm that lacks the obvious signs of a direct, physical injury.

The pollution has injured the plaintiff by causing a harm—the disease—that is not easily linked to the pollution.¹ A court may dismiss the injured plaintiff's tort action for personal injuries while granting recovery to those plaintiffs who have suffered property damage.² Alternatively, a court may deny recovery to all plaintiffs from the area because the polluter has complied with industry standards.³ Finally, the court may deny the plaintiff's request for personal injury damages because the contracted disease, even though it occurs at an alarming frequency in the particular area, lacks an obvious causal link to the polluter's emissions.⁴

This Comment examines the difficulties with which plaintiffs in hazardous substance litigation must contend when they seek to recover personal injury damages under traditional tort actions and

* Editor in Chief, 1992–1993, BOSTON COLLEGE ENVIRONMENTAL AFFAIRS LAW REVIEW.

¹ See *infra* part II.

² See *Ryan v. City of Emmetsburg*, 4 N.W.2d 435, 438 (Iowa 1942).

³ See, e.g., *Harrison v. Indiana Auto Shredders*, 528 F.2d 1107, 1125 (7th Cir. 1976) (operator of junk automobile shredder entitled to reasonable period of time to conform to industry standards).

⁴ See, e.g., *Stockdale v. Agrico Chem. Co.*, 340 F. Supp. 244, 259 (N.D. Iowa 1972).

under workers' compensation systems. This Comment then considers the tort of battery as an alternative for plaintiffs who wish to recover personal injury damages for hazardous substance injuries. Section II of this Comment discusses the obstacles plaintiffs must overcome when they attempt to win compensation for their toxic injuries through the tort system.⁵ Although courts have begun to accept innovative liability theories in order to take account of the problems of causation and latent harm that often defeat hazardous substance suits, plaintiffs still have trouble recovering personal injury damages. Section III analyses the traditional toxic torts of trespass, nuisance, negligence, and strict liability and how courts apply these torts in hazardous substance litigation for the recovery of personal injury damages.⁶ Section IV examines workers' compensation systems and how these systems apply to workers with hazardous substance injuries.⁷ In Section V this Comment considers the common law tort of battery and how plaintiffs have used this tort in hazardous substance litigation.⁸ This Comment concludes that the problems associated with using trespass, nuisance, negligence, strict liability, and workers' compensation in hazardous substance litigation may make battery a more successful cause of action when the plaintiff is seeking to recover personal injury damages.⁹

II. THE COURTS' RESPONSE TO HAZARDOUS SUBSTANCE INJURIES

In the modern world, plaintiffs complain of personal injuries caused by hazardous substances.¹⁰ With approximately five million organic and five hundred-thousand inorganic chemical substances in existence and ten thousand new chemical substances synthesized every year, the potential for a chemical substance to harm someone is great.¹¹

⁵ See *infra* notes 10-62 and accompanying text.

⁶ See *infra* notes 63-159 and accompanying text.

⁷ See *infra* notes 160-93 and accompanying text.

⁸ See *infra* notes 194-256 and accompanying text.

⁹ See *supra* notes 256-338 and accompanying text.

¹⁰ The term "hazardous substance", as used in this Comment, includes any substance or mixture that presents a danger to health or safety, including a substance that is an irritant, or that is toxic, corrosive, or flammable, or that generates pressure through decomposition, heat, or other means. 2 J.D. LEE & BARRY A. LINDHALL, *MODERN TORT LAW LIABILITY & LITIGATION* § 28.01, at 833 (rev. ed. 1989).

¹¹ Stanley M. Pier et al., *Recognition and Evaluation of Hazards*, in *TOXIC TORTS* 1, 2 (G.Z. Nothstein ed., 1984).

When one of these hazardous substances causes a personal injury, the injured person can recover damages through either a "toxic tort" claim,¹² or a workers' compensation system.¹³ A toxic tort claim is an action for damages from hazardous substances based on traditional tort theories.¹⁴ For example, plaintiffs have litigated toxic tort actions under the common law tort theories of trespass,¹⁵ nuisance,¹⁶ negligence,¹⁷ strict liability,¹⁸ and battery.¹⁹

Workers' compensation is a statutory system through which employees, injured in workplace accidents, can recover personal injury damages from their employers without having to prove their employers' fault.²⁰ Through workers' compensation, employees receive automatic compensation for work-related injuries in exchange for waiving their right to bring tort-based personal injury claims against their employer.²¹

A. *The Problem of Latent Harms in Hazardous Substance Litigation*

Hazardous substance litigation poses many problems that are not frequently issues in standard litigation.²² One such problem is the time delay between a plaintiff's exposure to a hazardous substance and the plaintiff's manifestation of harm from the exposure.²³ The

¹² See *infra* part III.

¹³ See *infra* part IV.

¹⁴ See G.Z. Nothstein, *Workers' Compensation and the Exclusivity Doctrine*, in TOXIC TORTS, *supra* note 11, at 147-48.

¹⁵ See, e.g., *Maddy v. Vulcan Materials Co.*, 737 F. Supp. 1528, 1540 (D. Kan. 1990) (plaintiffs sued chemical plant in trespass for damages from chemicals falling on their farm).

¹⁶ See, e.g., *Page v. Niagara Chem. Div.*, 68 So.2d 382, 383-84 (Fla. 1953) (railroad workers sued chemical plant in public and private nuisance for damages from defendant's hazardous gases).

¹⁷ See, e.g., *Davis v. Du Pont*, 729 F. Supp. 652, 653-54 (E.D. Ark. 1989) (plaintiff sued paint manufacturer in negligence action for personal injury damages from defendants' paint products).

¹⁸ See, e.g., *Ferebee v. Chevron Chemical Co.*, 736 F.2d 1529, 1531-32 (D.C. Cir.), *cert. denied* 469 U.S. 1062 (1984) (plaintiff sued insecticide manufacturer in strict liability for failure to warn plaintiff of dangers from defendant's insecticide).

¹⁹ See, e.g., *Mink v. University of Chicago*, 460 F. Supp. 713, 715 (N.D. Ill. 1978) (plaintiffs sued university in battery for damages from DES).

²⁰ See Nothstein, *supra* note 14, at 148.

²¹ See Note, *Compensating Victims of Occupational Disease*, 93 HARV. L. REV. 916, 917 (1980) [hereinafter *Occupational Disease*].

²² See LEE & LINDHALL, *supra* note 10, § 28.01, at 834. The term "hazardous substance litigation" in this Comment refers to both toxic tort litigation and workers' compensation claims for injuries caused by hazardous substances.

²³ *Id.*; see also Resha M. Putzrath et al., *Occupational and Environmental Exposures*, in TOXIC TORTS, *supra* note 11, at 68; Allan Kanner, *Emerging Conceptions of Latent Personal*

time between the exposure and the toxic effect—often referred to as the latency period—may be from ten to thirty years.²⁴ This latency period makes it difficult for plaintiffs to prove that a defendant's activity caused their harm because many other possible causes may have occurred in the time between the defendant's activity and the plaintiff's harm.²⁵

Because this latency period is longer than most statutes of limitations for personal injuries, many states have adopted so-called "discovery rules" that delay the accrual of a cause of action until after a plaintiff discovers his or her injury.²⁶ Courts have applied these discovery rules only in personal injury cases, not in property damage cases.²⁷

In further recognition of the problem of latent harm, some courts and commentators have recognized an exception to the claim preclusion rule for toxic torts.²⁸ Under the traditional claim preclusion rule, courts bar plaintiffs from bringing a second claim against a defendant for a latent disease that did not manifest itself until after the completion of the first suit.²⁹ Under the revised claim preclusion rule, toxic tort plaintiffs would be able to recover damages for a subsequent injury that the defendant's activity caused, even if the plaintiff already had recovered from the defendant for a different claim arising out of the same activity.³⁰

Injuries in Toxic Tort Litigation, 18 RUTGERS L.J. 343, 346-48 (1987); Palma J. Strand, Note, *The Inapplicability of Traditional Tort Analysis to Environmental Risks: the Example of Toxic Waste Pollution Victim Compensation*, 35 STAN L. REV. 575, 583-86 (1983). For the purposes of this Comment, the term, "plaintiff(s)" includes both toxic tort plaintiffs and injured workers claiming damages under a workers' compensation system. Likewise, the term "defendant(s)" includes both toxic tort defendants and employers in workers' compensation claims.

²⁴ Putzrath et al., *supra* note 23, at 68.

²⁵ See, e.g., *Ayers v. Jackson Township*, 525 A.2d 287, 301 (N.J. 1987).

²⁶ *Developments in the Law—Toxic Waste Litigation*, 99 HARV. L. REV. 1458, 1606 (1986) [hereinafter *Developments*]. See, e.g., *Cipollone v. Liggett Group Inc.*, 893 F.2d 541, 580 (3d Cir. 1990) (state statute of limitation does not start running until plaintiff, by exercising reasonable diligence, should have known she might have cancer from smoking); CAL. LAB. CODE § 5412 (West 1989) (for workers' compensation claims, date of injury for occupational disease is date worker, through exercise of reasonable diligence, should have known disability was from employment).

²⁷ See, e.g., *Corporation of Mercer Univ. v. National Gypsum Co.*, 368 S.E.2d 732, 733 (Ga. 1988), *cert. denied* 493 U.S. 965 (1989).

²⁸ See, e.g., *Ayers*, 525 A.2d at 300 (N.J. 1987). See generally Note, *Claim Preclusion in Modern Latent Disease Cases: A Proposal for Allowing Second Suits*, 103 HARV. L. REV. 1989, 1990, 1993 (1990) [hereinafter *Claim Preclusion*].

²⁹ *Claim Preclusion*, *supra* note 28, at 1989.

³⁰ *Id.* at 1990; see, e.g., *Ayers*, 525 A.2d at 300.

B. *The Problem of Causation in Hazardous Substance Litigation*

Although discovery rules and a modified claim preclusion rule may help plaintiffs in toxic tort and workers' compensation actions by allowing time for their harms to become manifest, plaintiffs still must prove that their exposure to the defendant's hazardous substance caused their harm.³¹ This causation requirement mandates that plaintiffs identify both the substance that caused their alleged harm and the party who released the hazardous substance.³²

1. Identifying the Substance that Caused the Harm

The long latency period between the exposure to the hazardous substance and the resulting disease makes establishing a cause-and-effect relationship particularly difficult for toxic tort plaintiffs.³³ Hazardous substances often cause diseases that do not appear until many years after the initial exposure.³⁴ When the plaintiff's disease does manifest itself, it is often indistinguishable from naturally occurring diseases or from the effects of other hazardous substances the plaintiff may have encountered since exposure to the defendant's hazardous substance.³⁵

Plaintiffs traditionally have established a causal link between their harm and their exposure to a particular hazardous substance through data gathered from tests on laboratory animals and from epidemiological records on the incidence of disease in the affected geographic area.³⁶ Plaintiffs can show that a defendant's hazardous substance caused their disease by showing that an increase in the amount of the substance in a certain area increases the incidence of disease in that area.³⁷

³¹ See *Ayers*, 525 A.2d at 301; see also Warren J. Hurwitz, *Environmental Health: An Analysis of Available and Proposed Remedies for Victims of Toxic Waste Contamination*, 7 AM. J.L. & MED. 61, 70-73 (1981); *Developments*, *supra* note 26, at 1617; Strand, *supra* note 23, at 583-86.

³² *Developments*, *supra* note 26, at 1617.

³³ *Ayers*, 525 A.2d at 301; see also Putzrath et al., *supra* note 23, at 69; see *supra* notes 23-25 and accompanying text.

³⁴ See Z. PLATER ET AL., ENVIRONMENTAL LAW AND POLICY: A COURSEBOOK ON NATURE, LAW AND SOCIETY 182 (1992).

³⁵ *Id.*; Resha M. Putzrath et al., *The Diagnosis of Occupational or Environmental Illness & Injury*, in TOXIC TORTS, *supra* note 11, at 105 [hereinafter Putzrath, *Diagnosis*]; *Developments*, *supra* note 26, at 1618.

³⁶ John S. Forstrom, *Victim Without a Cause: the Missing Link Between Compensation and Deterrence in Toxic Tort Litigation*, 18 ENVTL. L. 151, 156-57 (1987).

³⁷ *Id.* at 157.

The tests required to prove the causal nexus between a plaintiff's exposure and its disease, however, are often expensive and time-consuming.³⁸ Detecting latent, chemically induced diseases requires sophisticated testing that must continue over a long period of time.³⁹ Tragically, the individuals who experience the most severe toxic exposures often are the least able to afford these medical and scientific costs.⁴⁰

Recently, courts faced with toxic tort litigation have begun to accept theories of liability that allow plaintiffs to recover damages without having to satisfy the traditional causal nexus between exposure and disease.⁴¹ In some jurisdictions, plaintiffs have recovered emotional distress damages for "cancerphobia."⁴² Such plaintiffs must prove that they have a reasonable, serious fear of contracting cancer from their exposure.⁴³ They also must prove that the defendant caused their exposure and is legally responsible for the exposure.⁴⁴ Successful plaintiffs will recover compensation for their fear of contracting cancer, but not necessarily compensation for the cancer itself.⁴⁵

In addition, in some jurisdictions, plaintiffs can recover the costs of medical monitoring.⁴⁶ In an action for medical monitoring damages, a plaintiff can recover the costs of medical examinations even though it can not prove that the threatened disease will occur.⁴⁷ To establish a claim for medical monitoring costs, the plaintiff must

³⁸ Leslie S. Gara, Article, *Medical Surveillance Damages: Using Common Sense and the Common Law to Mitigate the Dangers Posed by Environmental Hazards*, 12 HARV. ENVTL. L. REV. 265, 278 (1988).

³⁹ *Id.*

⁴⁰ *Id.* at 292. For example, the people who experience the highest exposure to formaldehyde are generally those who live in trailers. *Id.* at 292, n. 115 (citing Dworkin, *Fear of Disease and Delayed Manifestation Injuries: A Solution or a Pandora's Box?*, 53 FORDHAM L. REVIEW 527, 571-72 (1984)).

⁴¹ *In re Paoli Railroad Yard PCB Litigation*, [1991] 21 Env'tl. L. Rep. (Env'tl. L. Inst.) 20184, 20195 (3d. Cir. Sept. 20, 1990, amended Oct. 29, 1990 and Nov. 23, 1990); see also D. Alan Rudlin, *Burdens of Proof*, in TOXIC TORTS, *supra* note 11, at 451-52, 473.

⁴² *In re Paoli*, 21 Env'tl. L. Rep. at 20,195; see also Rudlin, *supra* note 41, at 475-77.

⁴³ *In re Paoli*, 21 Env'tl. L. Rep. at 20,195; see also Rudlin, *supra* note 41, at 475-77.

⁴⁴ Rudlin, *supra* note 41, at 476, citing *Arnett v. Dow Chemical Co.*, slip op. 82-901S (Sup. Ct. Cal. Mar. 21 1983). The "legally responsible" element requires that there is an independent basis of liability in tort. *Id.*

⁴⁵ See *In re Paoli*, 21 Env'tl. L. Rep. 20,195; Rudlin, *supra* note 41, at 476.

⁴⁶ See, e.g., *In re Paoli*, 21 Env'tl. L. Rep. at 20,205 (plaintiffs exposed to defendant's PCBs allowed to recover medical monitoring damages); *Ayers v. Township of Jackson*, 525 A.2d 287, 313 (N.J. 1987) (plaintiffs entitled to damages for costs of medical surveillance). See generally Gara, *supra* note 38, at 279-85.

⁴⁷ Gara, *supra* note 38, at 281.

prove that the defendant tortiously exposed him or her to a hazardous substance.⁴⁸ This exposure must have caused the plaintiff to suffer an increased risk of contracting a serious, latent disease.⁴⁹ Medical examinations must be reasonably necessary, and there must exist procedures for early detection and treatment of the disease.⁵⁰

Although these innovations enable plaintiffs to recover certain types of damages, they do not provide personal injury damages for a plaintiff's actual disease.⁵¹ To recover personal injury damages for their diseases, plaintiffs still must identify both the substance that caused the harm and the defendant that caused the harm.⁵²

2. Identifying the Defendant that Caused the Harm

Plaintiffs in hazardous substance litigation have difficulty identifying the particular party that released the hazardous substance that allegedly caused their disease.⁵³ Many hazardous substances take the form of fairly generic products.⁵⁴ Moreover, substances may combine synergistically with other substances in the air, ground, or water to produce new and more dangerous compounds.⁵⁵ Linking the original substance to a particular defendant is made even more difficult by the multitude of different producers, anyone of whom could have produced the substance that caused the plaintiff's harm.⁵⁶

In linking a particular defendant to a plaintiff's harm, courts have altered and expanded traditional theories of liability, thereby easing the plaintiff's burden of proof.⁵⁷ Under an alternative liability theory, for example, courts hold defendants liable until they exculpate themselves.⁵⁸ Other related theories include the "concerted action" the-

⁴⁸ *In re Paoli*, 21 Env'tl. L. Rep. at 20,196. Although the Third Circuit Court in *Paoli* stated that the defendant's actions that caused the exposure must be negligent, it is possible that non-negligent activity could also give rise to medical monitoring damages. *See id.*; *cf. Gara*, *supra* note 38 at 267 (negligent or other tortious defendants should be liable for medical monitoring damages).

⁴⁹ *In re Paoli*, 21 Env'tl. L. Rep. at 20,196; *Ayers*, 525 A.2d at 312.

⁵⁰ *In re Paoli*, 21 Env'tl. L. Rep. at 20,196.

⁵¹ *See supra* notes 42-50 and accompanying text.

⁵² *See supra* notes 31-32 and accompanying text.

⁵³ Forstrom, *supra* note 36, at 155; *Developments*, *supra* note 26, at 1624.

⁵⁴ *Developments*, *supra* note 26, at 1625.

⁵⁵ Forstrom, *supra* note 36, at 155.

⁵⁶ *See Rudlin*, *supra* note 41, at 477.

⁵⁷ *See, e.g., Ferrigno v. Eli Lilly & Co.*, 420 A.2d 1305, 1313 (N.J. Super. Ct. Law Div. 1980) (burden shifted to joined manufacturers of DES to exculpate themselves from liability); *see also Lynn E. Pollan, Theories of Liability, in TOXIC TORTS, supra* note 11, at 329.

⁵⁸ *See, e.g., Ferrigno*, 420 A.2d at 1313 (burden shifted to joined manufacturers of DES to exculpate themselves from liability); *see also, Pollan, supra* note, 57, at 331-32.

ory, the "enterprise liability" theory, and the "market share liability" theory.⁵⁹ Courts have used these theories of liability where any one of a number of potential defendants, all of whom produce the same generic product, could have caused the plaintiff's harm.⁶⁰

The tort system has expanded to take account of the recent increase in chemical production and the accompanying increase in personal injuries from hazardous substances.⁶¹ Proving causation, however, is still a substantial bar for plaintiffs seeking to recover personal injury damages under any of the traditional toxic torts.⁶²

III. THE TRADITIONAL TOXIC TORTS

A. *The Property Torts as Toxic Torts*

Trespass and nuisance causes of action address interferences with a plaintiff's property interest.⁶³ Because many toxic tort plaintiffs own property and sue defendants in trespass or nuisance for the property damage that accompanies their personal injuries, this section will discuss briefly these two property torts.

1. Trespass as a Toxic Tort

Trespass is an intentional interference with a person's possession of property.⁶⁴ To succeed in an action in trespass, a plaintiff must show that the defendant intentionally entered its property, either in person or through some agent or instrumentality.⁶⁵ When the entry

⁵⁹ See, e.g., *Hall v. E.I. DuPont de Nemours & Co.*, 345 F. Supp 353, 376-78 (E.D.N.Y. 1972) (to establish enterprise liability, plaintiffs must demonstrate defendants' joint awareness of risks and their capacity to reduce or affect risks); *Sindell v. Abbott Labs*, 607 P.2d 924, 937 (Cal.), cert. denied 449 U.S. 912 (1980) (each defendant held liable for proportion of judgment represented by share of market for DES); *Bichler v. Eli Lilly and Co.*, 436 N.E.2d 182, 188 (1982) (jury inferred concerted action from evidence of consciously parallel behavior that defendant and other DES manufacturers agreed not to test the drug on mice before marketing and encouraged other manufacturers to do the same); see also Pollan, *supra* note 57, at 332-33.

⁶⁰ See, e.g., *Sindell*, 607 P.2d at 928-38. Courts have applied these theories of liability in very limited circumstances. *Id.* Yet, courts developed these theories to meet the novel legal challenges posed by latent injuries caused by mass produced drugs, much in the same way that courts are now faced with the legal challenges posed by latent injuries from exposure to hazardous substances. *Id.* The expanding nature of tort law theory does not bar recovery merely because the claim is novel. See W. PAGE KEETON ET AL., PROSSER AND KEETON ON THE LAW OF TORTS § 1, at 4 (5th ed. 1984).

⁶¹ See *supra* notes 26-30, 41-50, 57-60 and accompanying text.

⁶² *Ayers v. Township of Jackson*, 525 A.2d 287, 301 (N.J. 1987).

⁶³ See KEETON ET AL., *supra* note 60, § 13, at 77, § 86, at 617.

⁶⁴ *Id.*, § 13, at 70.

⁶⁵ RESTATEMENT (SECOND) OF TORTS § 158 (1965) [hereinafter RESTATEMENT].

is by an instrumentality, such as discarded refuse or waste water, the plaintiff must show that the defendant intentionally acted in such a way that the reasonably foreseeable result of that action was an invasion of the plaintiff's property. The plaintiff also must show that such an invasion did result.⁶⁶ Finally, the invasion must have affected the plaintiff's right to exclusive possession of property by causing substantial damage to the plaintiff's property.⁶⁷

Trespass causes of action, however, have severe limitations. Some jurisdictions require that the invading instrumentality have greater substance than smoke, dust, gas, or fumes.⁶⁸ In *Ryan v. City of Emmetsburg*,⁶⁹ for example, the plaintiff brought a nuisance action complaining of the stench invading his property from the defendant's neighboring sewage treatment plant.⁷⁰ In dicta, the Iowa Supreme Court interpreted trespass to encompass only physical invasions by tangible matter.⁷¹ Because many hazardous substances are intangible—taking the form of smoke, dust, gas, or fumes—the application of a traditional trespass cause of action may pose considerable problems to potential plaintiffs.⁷²

Moreover, an action in trespass does not help a plaintiff who does not have exclusive possession of real property.⁷³ The property interest element of trespass would bar claims by plaintiffs who do not possess the land that the defendant allegedly invaded.⁷⁴

2. Nuisance as a Toxic Tort

Similar to a trespass cause of action, a nuisance cause of action also protects property interests.⁷⁵ Plaintiffs can bring nuisance ac-

⁶⁶ *Borland v. Sanders Lead Co.*, 369 So. 2d 523, 529 (Ala. 1979).

⁶⁷ *Id.*

⁶⁸ *See, e.g., Maddy v. Vulcan Materials Co.*, 737 F. Supp. 1528, 1540 (D. Kan. 1990) (chemicals falling on neighboring farm did not support a trespass action for even nominal damages); *Ryan v. City of Emmetsburg*, 4 N.W. 2d 435, 438 (Iowa 1942) (trespass requires actual physical invasions by tangible matter); *see also* Jay Zinns, "Close Encounters of the Toxic Kind"—*Toward an Amelioration of Substantive and Procedural Barriers for Latent Toxic Injury Plaintiffs*, 54 TEMP. L.Q. 822, 831 (1981).

⁶⁹ 4 N.W. 2d 435 (Iowa 1942).

⁷⁰ *Id.* at 437-38.

⁷¹ *Id.* at 438.

⁷² Zinns, *supra* note 68, at 833.

⁷³ *See Borland v. Sanders Lead Co.*, 369 So. 2d 523, 529 (Ala. 1979); *Developments*, *supra* note 26, at 1610.

⁷⁴ *See Borland*, 369 So. 2d at 529; *see also*, Margaret Z. Johns & Richard A. Seltzer, *Toxic Torts: Theories of Liability*, in PREPARATION AND TRIAL OF A COMPLEX TOXIC CHEMICAL OR HAZARDOUS WASTE CASE 1986 317, 334 (1986).

⁷⁵ RESTATEMENT, *supra* note 65, § 821D.

tions, however, to protect public as well as private interests in property.⁷⁶

a. Public Nuisance

A public nuisance is a substantial or unreasonable interference with the public's interest in real property.⁷⁷ The public's interest in real property includes personal health, safety, and use of the land.⁷⁸ For a private citizen to bring a public nuisance action, the citizen must have suffered a harm, resulting from the defendant's activity, that is different in kind—not just in degree—from the harm the public at large has suffered.⁷⁹

Some courts may not allow plaintiffs to recover for personal injuries in public nuisance.⁸⁰ In one case, *Page v. Niagara Chemical Division*,⁸¹ railroad workers sued a neighboring chemical plant in public nuisance to recover damages for the personal injuries they sustained when the plant released hazardous gases.⁸² Because all members of the public would have suffered from the defendant's toxic emissions in the same way as the plaintiffs did, however, the Florida Supreme Court dismissed the workers' public nuisance claim.⁸³

b. Private Nuisance

Private nuisance addresses intentional or unreasonable interferences with an individual's use and enjoyment of its private property.⁸⁴ In determining whether an alleged interference is compensable, courts typically consider whether the interference's harm outweighs the utility of the defendant's activity.⁸⁵ They also may consider whether the defendant could continue the activity after compensating the plaintiff for the harm.⁸⁶ In addition, in this bal-

⁷⁶ KEETON ET AL., *supra* note 60, § 86 at 618.

⁷⁷ *Id.*

⁷⁸ *Id.*, § 90, at 643-44.

⁷⁹ RESTATEMENT, *supra* note 65, at § 821C. *See, e.g.*, *Spur Industries, Inc. v. Del Webb Dev. Co.*, 494 P.2d 700, 706 (Ariz. 1972) (plaintiff's loss of sales was a special injury entitling him to sue).

⁸⁰ *See Ryan v. City of Emmetsburg*, 4 N.W.2d 435, 438 (Iowa 1942) (actions for bodily injuries in public nuisance actions are not allowed).

⁸¹ 68 So. 2d 382 (Fla. 1953).

⁸² *Id.* at 383.

⁸³ *Id.* at 384.

⁸⁴ RESTATEMENT, *supra* note 65, § 822.

⁸⁵ *Id.* § 826.

⁸⁶ *Id.*

ancing of burdens and benefits, courts often consider the character of the neighborhood in which the nuisance occurs.⁸⁷

Because a nuisance is an invasion of property, plaintiffs who do not possess a property interest in the burdened land cannot bring suit for private nuisance.⁸⁸ The railroad workers in *Page v. Niagara Chemical Division*⁸⁹ also sued the defendant chemical plant on a private nuisance claim for personal injuries caused by the plant's release of hazardous gases.⁹⁰ Because the workers did not have a property interest in the land that the emission affected, the court denied them recovery under private nuisance.⁹¹

Purely personal injuries are not a compensable harm under a private nuisance theory because the private nuisance cause of action exists to compensate for harms resulting from interferences with an individual's use and enjoyment of land.⁹² In *George v. Standard Slag Co.*,⁹³ the residents of an area surrounding a slag plant sued the plant in nuisance for the air pollution that the plant generated.⁹⁴ The Kentucky Supreme Court set aside a jury verdict for the plaintiffs because the jury considered the plaintiffs' personal injury in determining the amount of damages to award.⁹⁵ According to the court, evidence of personal injury is admissible only to show how the nuisance effects property value.⁹⁶

In determining if a plaintiff has suffered a compensable injury, courts may consider the character of the neighborhood where the nuisance occurs and the value of the offensive activity to society.⁹⁷

⁸⁷ See, e.g., *George v. Standard Slag Co.*, 431 S.W.2d 711, 715 (Ky. 1968) (in determining if defendant was liable under nuisance cause of action, court instructed jury to consider importance and influence of defendant's factory, respective situations of parties, and character and development of neighborhood), *overruled in part by*, *Southeast Coal Co. v. Ed Combs*, 760 S.W.2d 83, 84 (Ky. 1988).

⁸⁸ See, e.g., *Page v. Niagara Chem. Div.*, 68 So.2d 382, 384 (Fla. 1953) (railroad workers without possessory interest in employer's property not allowed to recover in private nuisance); see also RESTATEMENT, *supra* note 65, § 821E.

⁸⁹ 68 So. 2d 382.

⁹⁰ *Id.* at 383-84.

⁹¹ *Id.* at 384. The court also denied the plaintiffs' claim under a public nuisance theory. See *id.*

⁹² See, e.g., *Brown v. Petrolane Inc.*, 162 Cal. Rptr. 551, 555 (Cal. Ct. App. 1980) (plaintiffs failed to allege perceptible injury to property interests from activity of neighboring liquefied petroleum gas facilities).

⁹³ 431 S.W.2d 711 (Ky. 1968), *overruled in part by*, *Southeast Coal Co. v. Ed Combs*, 760 S.W.2d 83, 84 (Ky. 1988).

⁹⁴ *Id.* at 712.

⁹⁵ *Id.* at 713-14.

⁹⁶ *Id.* at 716.

⁹⁷ See, e.g., *id.* at 715 (jury instructed to consider importance and influence of defendant

In *Bove v. Donner-Hanna Coke Corp.*,⁹⁸ for example, the defendant installed a coke oven that spewed steam, gas, and dirt particles onto the plaintiff's neighboring property.⁹⁹ Complaining of damage to her property, her health, and her family's health, the plaintiff sued the defendant corporation in nuisance.¹⁰⁰ The New York Supreme Court, however, denied the plaintiff's claim for relief, reasoning that even though the plaintiff moved into the area first, when it was a hickory grove, the region "was never fitted for a residential district."¹⁰¹

Because plaintiffs recognize that they usually can recover only property damages in nuisance actions,¹⁰² they sometimes add claims in negligence or strict liability to recover personal injury damages.

B. Negligence as a Toxic Tort

Plaintiffs traditionally have used a negligence cause of action in personal injury cases.¹⁰³ In order to make out a *prima facie* case of negligence, a plaintiff must show that the defendant owed him or her a duty of reasonable care, and that the defendant breached this duty.¹⁰⁴ The plaintiffs must also show that the defendant's breach caused the plaintiff's actual harm.¹⁰⁵

The determination of whether the defendant owed a duty of reasonable care to the plaintiff requires a balancing test. Courts must balance the probability that an accident will occur, the severity of harm from that accident, and the cost to prevent the accident.¹⁰⁶ This balancing requires a court to undertake a sophisticated study of the technology available to avert the accident, the cost of this technology, and the effectiveness of the technology in preventing such accidents.¹⁰⁷

The difficulty of demonstrating the defendant's duty of reasonable care was shown in *Dillon v. Acme Oil Co.*,¹⁰⁸ where a neighboring landowner sued an oil refinery for negligently contaminating the

factory, respective situations of the parties, and character and development of the neighborhood).

⁹⁸ 258 N.Y.S. 229 (N.Y. App. Div. 1932).

⁹⁹ *Id.* at 230.

¹⁰⁰ *Id.* at 231.

¹⁰¹ *Id.* at 233-34.

¹⁰² See *supra* notes 92-96 and accompanying text.

¹⁰³ PLATER, *supra* note 34, at 136.

¹⁰⁴ RESTATEMENT, *supra* note 65, § 291; WILLIAM L. PROSSER ET AL., CASES AND MATERIALS ON TORTS 136 (8th ed. 1988).

¹⁰⁵ RESTATEMENT, *supra* note 65, § 291; PROSSER ET AL., *supra* note 104, at 136.

¹⁰⁶ See *United States v. Carroll Towing Co.*, 159 F.2d 169, 173 (2d Cir. 1947).

¹⁰⁷ See *Developments*, *supra* note 26, at 1611-12.

¹⁰⁸ 2 N.Y.S. 289 (N.Y. Sup. Ct. 1888).

plaintiff's well.¹⁰⁹ The defendant spilled oil that seeped into the soil on its land and contaminated the groundwater that flowed into the plaintiff's well.¹¹⁰ The court considered it unreasonable to expect the oil refinery to foresee, at the time of the spills, that the oil would soak through the ground and contaminate the groundwater.¹¹¹ Consequently, according to the court, the plaintiff could not recover under negligence for the contamination of his well, because the defendant's pollution did not constitute a breach of its duty of reasonable care.¹¹²

Once a plaintiff has shown that a defendant breached the duty of reasonable care, the plaintiff also must identify both the chemical that caused the injury and the defendant that discharged the chemical.¹¹³ For example, in *Greyhound Corp. v. Blakely*,¹¹⁴ the plaintiff sued the defendant for injuries she sustained as a result of carbon monoxide poisoning she suffered while riding on the defendant's bus.¹¹⁵ The plaintiff could prove that carbon monoxide from the defendant's bus caused her harm because she exhibited symptoms of carbon monoxide poisoning during the bus ride, and because her physician confirmed the poisoning soon after the trip.¹¹⁶ Plaintiffs rarely are able to satisfy the causation requirement this easily.

Problems of disease latency, linking a common disease to a particular substance, and identifying a single responsible defendant from a field of possible defendants makes proving causation difficult for the plaintiff bringing a negligence cause of action in hazardous substance litigation.¹¹⁷ The problems with proving causation are demonstrated clearly in *Davis v. DuPont*.¹¹⁸ In *Davis*, the plaintiff painted cars at automobile repair shops for twenty-five years: an occupation that exposed him to various toxic fumes from the defendants' paint products.¹¹⁹ The plaintiff sued the defendants in negligence, alleging that the fumes from the defendants' paint products caused his liver damage.¹²⁰ The United States District Court for the Southern District of Iowa granted the defendants' motion for sum-

¹⁰⁹ *Id.* at 289.

¹¹⁰ *Id.* at 290.

¹¹¹ *Id.* at 291.

¹¹² *Id.* at 291-92.

¹¹³ *Developments, supra* note 26, at 1617.

¹¹⁴ 262 F.2d 401 (9th Cir. 1958).

¹¹⁵ *Id.* at 403-04.

¹¹⁶ *Id.*

¹¹⁷ See *supra* notes 22-56 and accompanying text.

¹¹⁸ 729 F. Supp. 652 (E.D. Ark. 1989).

¹¹⁹ *Id.* at 653.

¹²⁰ *Id.* at 653-54.

mary judgment because the plaintiff could show neither that he was exposed to the substance known to cause liver damage nor that his exposure to one of the defendants' products caused his injury.¹²¹

Traditionally, plaintiffs have been able to use the *res ipsa loquitur* doctrine to show that a particular defendant caused their harm.¹²² *Res ipsa loquitur* allows a jury to infer the defendant's liability where the plaintiff has shown both that his or her harm is of a type that usually does not occur without someone's negligence, and that there are no other possible contributing causes.¹²³ Plaintiffs probably will not be able to invoke the *res ipsa loquitur* doctrine in hazardous substance litigation because of the many different substances that could have caused the plaintiff's disease.¹²⁴ Typically, the toxic tort plaintiff will be unable both to exclude all other potential causes and show that his or her disease results from a particular defendant's negligence.¹²⁵

Even when a plaintiff establishes both the defendant's duty and causation, the plaintiff's negligence action is still susceptible to a wide range of defenses. For example, a court can completely bar a plaintiff's negligence cause of action where the plaintiff's own negligence contributed to the accident¹²⁶ or where the plaintiff assumed the risk of the accident.¹²⁷ A plaintiff's negligence also may reduce his or her recovery from a defendant under the theory of comparative negligence.¹²⁸ In *Yates v. Norton Co.*,¹²⁹ for example, a worker wearing a gas mask died after breathing the fumes in a varnish holding

¹²¹ *Id.* at 655. Although the plaintiff's doctor was able to testify that toxic agents caused the plaintiff's liver damage, she was unable to testify that the defendant was responsible for the toxic agents. *Id.* at 654.

¹²² See RESTATEMENT, *supra* note 65, § 328D.

¹²³ *Id.* *Res ipsa loquitur* creates an inference of negligence when the plaintiff shows the event ordinarily does not occur without someone's negligence or fault; other responsible causes, including the acts of third parties, are sufficiently eliminated; and the plaintiff did not contribute to the injury. *Id.*

¹²⁴ See Zinns, *supra* note 68, at 837.

¹²⁵ See *id.*, at 836-37.

¹²⁶ See RESTATEMENT, *supra* note 65, § 467. "Contributory negligence is conduct on the part of the plaintiff which falls below the standard to which he should conform for his own protection, and which is a legally contributing cause co-operating with the negligence of the defendant in bringing about the plaintiff's harm." *Id.*, § 463.

¹²⁷ See RESTATEMENT, *supra* note 65, § 496A. Assumption of the risk requires risk of harm to the plaintiff caused by the defendant; the plaintiff has actual knowledge of the risk and appreciates its magnitude; and the plaintiff voluntarily chooses to stay within the area of risk. *Id.*, § 496C.

¹²⁸ See generally PROSSER ET AL., *supra* note 104, at 577-78 (discussing the application of comparative negligence theories in different jurisdictions).

¹²⁹ 525 N.E.2d 1317 (Mass. 1988).

tank.¹³⁰ When the worker's administratrix sued the mask's manufacturer in a negligence action, the trial court instructed the jury that any improper use of the gas mask by the deceased would lead to a verdict for the defendant.¹³¹ Although the Massachusetts Supreme Judicial Court reversed the trial court because of this improper jury instruction, the court did note that the deceased's improper use of the respirator could raise the issue of comparative negligence and reduce the plaintiff's recovery.¹³²

Although plaintiffs traditionally have used negligence actions to recover damages for personal injuries, the tort is poorly suited for use in hazardous substance litigation. Plaintiffs using negligence as the basis for a toxic tort action must prove that the defendant's activity was unreasonable and caused the plaintiff's latent, nonspecific disease.¹³³ Some, though not all, of these difficulties are eliminated under strict liability.

C. Strict Liability as a Toxic Tort

Under a strict liability theory, a person engaged in an "abnormally dangerous" activity may be liable for harms resulting from that activity regardless of fault.¹³⁴ When deciding whether an activity is abnormally dangerous courts will consider the activity's risk of harm to others, the gravity of that potential harm, and the defendant's inability to eliminate the risk by the exercise of reasonable care.¹³⁵ Courts also will consider the activity's commonness in that particular community, the activity's appropriateness in that particular community, and the activity's value to that community.¹³⁶

Courts examine the individual circumstances of each case to determine whether they should apply strict liability to a defendant's activity.¹³⁷ Activities that warranted strict liability in a certain community at a certain time may no longer warrant such liability because of an advance in technology or a change in location to an area where

¹³⁰ *Id.* at 1318-19.

¹³¹ *Id.* at 1321.

¹³² *Id.*

¹³³ See *supra* notes 103-25 and accompanying text.

¹³⁴ See *RESTATEMENT*, *supra* note 65, § 519.

¹³⁵ *Id.*, § 520.

¹³⁶ *Id.*; see, e.g., *Branch v. Western Petroleum, Inc.*, 657 P.2d 267, 274 (Utah 1982) (facts supported application of strict liability because of defendant's abnormally dangerous dumping activity and inappropriate use of land).

¹³⁷ See *Bennett v. Mallinckrodt, Inc.*, 698 S.W.2d 854, 869 & n.16 (Mo. Ct. App. 1985), citing *Clinic & Hospital, Inc. v. McConnell*, 236 S.W. 2d 384, 391 (Mo. App. 1951).

the activity is either safer or more common.¹³⁸ In some circumstances, the legislature or executive branch of government already may have decided questions of the activity's degree of risk and its appropriateness to the community in which it is conducted.¹³⁹ In *Bennett v. Mallinckrodt, Inc.*,¹⁴⁰ the Missouri Court of Appeals noted that the defendant could oppose the imposition of strict liability on its radiopharmaceutical processing plant by arguing that the federal licensing process already had determined that the plant's social benefit outweighed the social risk.¹⁴¹

In toxic tort cases, plaintiffs use strict liability theory to recover damages for personal injury where it is too difficult to prove the defendant's negligence.¹⁴² In *Ferebee v. Chevron Chemical Co.*,¹⁴³ the family of a deceased agricultural research center worker sued an insecticide manufacturer in strict liability for failure to warn consumers of the dangers from the insecticide.¹⁴⁴ Although the decedent was overweight, suffered from high blood pressure, and had a sinus problem, the Circuit Court for the District of Columbia upheld the trial court's judgment for the plaintiff.¹⁴⁵ The court reasoned that a jury could reasonably conclude that the insecticide's use fulfilled the elements of strict liability and caused the death.¹⁴⁶

Courts do not always consistently apply strict liability standards to the same activity.¹⁴⁷ In *Branch v. Western Petroleum*,¹⁴⁸ the Supreme Court of Utah held the defendant oil company strictly liable for the damage caused by its stored waste water.¹⁴⁹ In *Turner v. Big Lake Oil Co.*,¹⁵⁰ however, the Supreme Court of Texas did not consider the defendant's storage of waste water to be an ultrahazardous activity for which courts should hold defendants strictly liable.¹⁵¹

¹³⁸ See *Bennett*, 698 S.W.2d at 868, n.14.

¹³⁹ See *id.* at 869, n.17.

¹⁴⁰ 698 S.W.2d 854 (Mo. App. 1985).

¹⁴¹ *Id.* at 869, n.17.

¹⁴² See PLATER, *supra* note 34, at 134.

¹⁴³ 736 F.2d 1529 (D.C. Cir.), *cert. denied* 469 U.S. 1062 (1984).

¹⁴⁴ *Id.* at 1531-32.

¹⁴⁵ *Id.* at 1532, 1543.

¹⁴⁶ See *id.* at 1539.

¹⁴⁷ Compare *Langan v. Valicopters, Inc.*, 567 P.2d 218, 223 (Wash. 1977) (aerial crop spraying found abnormally dangerous) with *SKF Farms v. Superior Court*, 153 Cal. App. 3d 902, 905-06 (Cal. Ct. App. 1984) (court refused to decide if crop dusting was ultra hazardous).

¹⁴⁸ 657 P.2d 267 (Utah 1982).

¹⁴⁹ *Id.* at 275.

¹⁵⁰ 96 S.W.2d 221 (Tex. 1936).

¹⁵¹ *Id.* at 226.

In addition to the problems associated with establishing a strict liability cause of action, there are also limitations on the type of damages a plaintiff can recover. A plaintiff in a strict liability suit can recover damages only for the type of harm that makes the defendant's activity abnormally dangerous.¹⁵² In hazardous substance litigation, however, plaintiffs usually have difficulty linking their harm to a particular activity.¹⁵³ Thus, plaintiffs using a strict liability theory in hazardous substance litigation are faced with the problem of proving that the defendant's activity is abnormally dangerous because of the type of harm that they have suffered, even though there may be no direct, causal nexus between their harm and the defendant's activity.¹⁵⁴ In addition, this restriction on damages often will make consequential, economic, and punitive damages unrecoverable.¹⁵⁵

Although strict liability actions allow plaintiffs to recover damages from defendants without proving the defendants' fault, there are other restrictions on the cause of action. Plaintiffs must be able to prove that the defendant's activity is abnormally dangerous and that this activity caused their harm. Despite strict liability's innovations, many tort plaintiffs still may be unable to recover personal injury damages.

IV. THE WORKERS' COMPENSATION SYSTEM

The workers' compensation system attempts to remedy the difficulties workers experience in trying to recover personal injury damages from their employers for work-related injuries through tort law.¹⁵⁶ The system, however, fails to compensate adequately those workers who contract occupational diseases.¹⁵⁷

A. A Brief History of Workers' Compensation

Workers were unable to recover from their employers at common law for workplace injuries because of the common law defenses

¹⁵² RESTATEMENT, *supra* note 65, § 519(2); *see, e.g.*, *Kenny v. Scientific, Inc.*, 497 A.2d 1310, 1327-28 (N.J. Super. Ct. Law Div. 1985) (haulers of toxic waste not strictly liable for damage caused by waste after delivery).

¹⁵³ *See supra* notes 31-57 and accompanying text.

¹⁵⁴ *See Zinns, supra* note 68, at 843.

¹⁵⁵ *Johns & Seltzer, supra* note 74, at 333.

¹⁵⁶ *See Occupational Disease, supra* note 21, at 917.

¹⁵⁷ *See generally id.* at 916-25; *see also* Charles C. Caldart, *Are Workers Adequately Compensated for Injury Resulting from Exposure to Toxic Substances?*, in *CHEMICAL SAFETY REGULATION AND COMPLIANCE* 92, 92-98 (Homburger & Marquis, eds., 1985).

available to employers.¹⁵⁸ For example, courts denied recovery to workers under the "fellow servant" doctrine by declaring that workers were responsible for their co-workers' negligence because they should have known of and reformed the bad work habits of their fellow employees.¹⁵⁹ Under the assumption of the risk defense, courts would deny recovery to workers who complained of their dangerous working conditions but continued to work out of fear of losing their jobs.¹⁶⁰ Finally, under the contributory negligence defense, courts rejected the claims of workers who contributed in some way to the cause of their injuries.¹⁶¹ The effectiveness of these defenses resulted in only fifteen percent of injured workers recovering personal injury damages from their employers, even though the nature of the work or the employer's negligence caused seventy percent of the workplace accidents.¹⁶²

In an effort to avoid the injustices that resulted from these easy defenses to employee tort claims, states adopted workers' compensation statutes.¹⁶³ Workers' compensation statutes guarantee employees compensation without requiring the employee to prove the employer's negligence or fault.¹⁶⁴ To receive this compensation, workers must show that their injury arose out of and in the course of employment.¹⁶⁵

This guaranteed compensation, however, is not without cost. The workers' compensation system sets the amount of compensation at a level below that which a worker-plaintiff could recover in tort law.¹⁶⁶ This lower amount of compensation is in exchange for the

¹⁵⁸ See JAMES WEINSTEIN, *THE CORPORATE IDEAL IN THE LIBERAL STATE, 1900-1918* at 41 (1968).

¹⁵⁹ *Id.* A court denied a day shift steel worker who was killed when a new employee on the night shift negligently plugged an open hearth. *Id.* at 41-42.

¹⁶⁰ *Id.* at 42. A court denied a worker's claim for damages when her arm was torn off by the exposed gears of a machine after she complained to her employer about the danger. *Id.* See *supra* notes 130-35 and accompanying text.

¹⁶¹ WEINSTEIN, *supra* note 158, at 42. A court denied a railroad engineer's claim for damages for injuries resulting from a train accident. The engineer had fallen asleep after working thirty hours straight under threat of losing his job if he stopped working. *Id.*

¹⁶² *Id.* at 41.

¹⁶³ See Nothstein, *supra* note 14, at 148.

¹⁶⁴ *Id.*

¹⁶⁵ *Id.* A minority of workers' compensation statutes drop the "arising in the course of employment" requirement and only require that the injury occur in the course of employment. *Id.* at 149.

¹⁶⁶ See L. Boden, *Workers' Compensation*, cited in NICHOLAS A. ASHFORD & CHARLES C. CALDART, *TECHNOLOGY, LAW AND THE WORKING ENVIRONMENT* 455, 456 (1991); *Occupational Disease*, *supra* note 21, at 925. Recovery under workers' compensation is often lower than recovery under a tort theory because workers' compensation does not award damages

swift and guaranteed recovery the system promises.¹⁶⁷ In addition, in exchange for guaranteed compensation, employees give up their right to sue their employers in tort actions.¹⁶⁸ Workers' compensation is the exclusive remedy for injured workers, thereby barring employees from bringing costly tort actions against their employers for injuries sustained as a result of accidents in the usual course of business.¹⁶⁹ This "exclusivity" provision bars injured workers from suing their employers in negligence and potentially recovering the higher compensation available under tort law.¹⁷⁰

*B. The Application of Workers' Compensation to
Hazardous Substance Injuries*

Approximately 390,000 new cases of occupational disease and 100,000 deaths from occupational disease occur every year.¹⁷¹ Workers' compensation statutes apply to employees' claims against their employers for occupational diseases allegedly caused by exposure to hazardous substances in the work place.¹⁷² The workers' compensation system, however, breaks down when confronted with the problems of causation and disease latency.¹⁷³

Injured workers have difficulty proving that their diseases arose from work place conditions because occupational diseases are virtually indistinguishable from diseases that occur outside the work place.¹⁷⁴ Because workers' compensation systems compensate injured employees only for injuries caused by workplace activity, many employees do not recover damages when it is difficult to prove that their work conditions, and not an intervening factor, caused their disease.¹⁷⁵ This uncertainty regarding causation leads employers to challenge two out of three occupational disease claims.¹⁷⁶ Diseased

for pain and suffering and because disability payments are often much less than lost income. Boden, *supra*, at 456.

¹⁶⁷ See *Occupational Disease*, *supra* note 21, at 919, 925.

¹⁶⁸ See *id.* at 917.

¹⁶⁹ Nothstein, *supra* note 14, at 148-49.

¹⁷⁰ Nothstein, *supra* note 14, at 151. The exclusivity provision of workers' compensation acts may also bar other non-intentional causes of action. See, e.g., *Cunningham v. Anchor Hocking Corp.*, 558 So.2d 93, 96-97 (Fla. Dist. Ct. App. 1990) (dismissing workers' strict liability claims but allowing the intentional tort claims).

¹⁷¹ See Nothstein, *supra* note 14, at 150.

¹⁷² *Occupational Disease*, *supra* note 21, at 916.

¹⁷³ See *Caldart*, *supra* note 157, at 94. See generally Peter S. Barth, *A Proposal for Dealing with the Compensation of Occupational Diseases*, 13 J. LEGAL STUD. 569, 570-73 (1980).

¹⁷⁴ See *supra* part II.B. (discussing problem of causation in tort system).

¹⁷⁵ See Barth, *supra* note 173, at 572; *Occupational Disease*, *supra* note 21, at 922.

¹⁷⁶ *Occupational Disease*, *supra* note 21, at 923.

workers injured by hazardous substances are successful in winning compensation in less than one-third of the estimated number of hazardous substance fatalities and in only one-thirteenth of the estimated number of disabling occupational diseases.¹⁷⁷

In addition, the long latency period of many occupational diseases makes damages for these diseases unrecoverable under some workers' compensation systems.¹⁷⁸ Because of the possibility of intervening causes during the latency period, it is difficult for plaintiffs to pinpoint the cause of their disease.¹⁷⁹ In addition, statutes of limitations in some workers' compensation acts bar claims for latent diseases that do not manifest themselves within a specified period of time after the last day the claimant worked for the defendant employer.¹⁸⁰

Finally, some workers' compensation statutes require that an employer have exposed a plaintiff employee to the hazardous substance for a specified length of time.¹⁸¹ This mandatory period of exposure is often much longer than the time necessary to enable an occupational disease to develop from an exposure to the hazardous substance.¹⁸² Because of these limitations in the workers' compensation system, few claims for hazardous substance diseases enter the system, and even fewer claims win any compensation.¹⁸³

When an injured employee's workers' compensation claim successfully surmounts the problems of causation and latency, the damages awarded to the employee do not fully compensate the employee.¹⁸⁴ Many workers' compensation systems replace less than forty percent of wages lost due to injury.¹⁸⁵ In fact, a Syracuse University study has found that seventy-two percent of wage loss from workplace injuries went uncompensated, with workers' compensation providing recovery for only nine percent of total wage

¹⁷⁷ *Id.* at 925.

¹⁷⁸ *Id.* at 924; Barth, *supra* note 173, at 572.

¹⁷⁹ Barth, *supra* note 173, at 572. *See supra* part II.A. (discussing problem of latent disease in the tort system).

¹⁸⁰ *Occupational Disease, supra* note 21, at 924. *See, e.g.,* ME. REV. STAT. ANN. tit. 39, § 189 (West 1989).

¹⁸¹ *Occupational Disease, supra* note 21, at 923. *See, e.g.,* KAN. STAT ANN. § 44-5a10 (1986).

¹⁸² *See Occupational Disease, supra* note 21, at 923. The specified length of time for exposure is often five to ten years. Exposure to beryllium, however, has caused an occupational disease in one worker after only two months of exposure. Exposure to asbestos for even one day can increase the risk of cancer. *Id.* at 923-24 & n.59.

¹⁸³ *Id.* at 925.

¹⁸⁴ Caldart, *supra* note 157, at 93.

¹⁸⁵ *Occupational Disease, supra* note 21, at 925.

loss.¹⁸⁶ Moreover, because compensation is calculated at the worker's last wage rate, workers who develop an occupational disease several years after they worked may see years of inflation reduce their compensation payment to almost nothing.¹⁸⁷

Workers' compensation statutes enable injured employees to recover damages without having to resort to tort law.¹⁸⁸ When applied to occupational disease, however, these statutes still require the injured party to overcome the same difficulties of causation and latent disease that plaintiffs encounter when proceeding under one of the traditional torts.¹⁸⁹

V. BATTERY AS A TOXIC TORT

The battery cause of action addresses the personal indignities resulting to one person from another's wrongful acts.¹⁹⁰ Today, battery compensates victims for nonconsensual violations of their interest in physical security and bodily integrity.¹⁹¹ The essence of a battery cause of action continues to be an offense to personal dignity.¹⁹² Battery's focus on bodily invasions makes the tort uniquely adapted to hazardous substance injuries.

In order to establish a *prima facie* case for battery, a plaintiff must show that the defendant intended to cause a harmful or offensive touching, and that such an offensive contact occurred.¹⁹³ Defendants act with the intent requisite for a battery action not only when they intend to cause a harmful or offensive contact to the plaintiff or a third person, but also when they intend only to cause the apprehension of such a contact.¹⁹⁴ The contact the defendant causes does not have to be direct physical contact, but can be the result of the defendant putting some force into motion that causes the contact.¹⁹⁵ The plaintiff does not even have to be conscious of the contact when it occurs.¹⁹⁶ Therefore, plaintiffs can fulfill this extended con-

¹⁸⁶ Caldart, *supra* note 157, at 93.

¹⁸⁷ *Occupational Disease*, *supra* note 21, at 925.

¹⁸⁸ See *supra* notes 160-67 and accompanying text.

¹⁸⁹ See *supra* notes 175-91 and accompanying text.

¹⁹⁰ See *Davis v. Hubbard*, 506 F.Supp. 915, 931 (N.D. Ohio 1980).

¹⁹¹ *Id.*; see also RESTATEMENT, *supra* note 65, §§ 13, 18, 19.

¹⁹² RESTATEMENT, *supra* note 65, § 18 cmt. c.

¹⁹³ *Id.* § 18.

¹⁹⁴ KEETON ET AL., *supra* note 60, § 9, at 39.

¹⁹⁵ *Id.* § 9, at 40.

¹⁹⁶ *Id.* § 9, at 40.

tact requirement when the defendant sets out poisoned food for the plaintiff to eat.¹⁹⁷

These broad definitions of intent and contact allow plaintiffs to use battery as a toxic tort. Although a court may be reluctant to recognize this novel approach to toxic tort liability,¹⁹⁸ the expanding nature of tort law does not bar recovery merely because the claim is novel.¹⁹⁹ Despite the fact that plaintiffs rarely use battery in environmental torts, the traditional tort of battery is well suited to hazardous substance litigation because it provides liability any time an actor intentionally causes another to come into contact with an offensive foreign substance.²⁰⁰

A. Intent

Plaintiffs satisfy the intent element of a battery cause of action when they show that the defendant acted in a manner that was substantially or virtually certain to bring about an injury.²⁰¹ For example, in *Werlein v. United States*²⁰² the defendant, a munitions producer, dumped highly toxic substances into sandy ground above a regional aquifer.²⁰³ Reasoning that there was sufficient evidence to show that the defendant knew the dumping activity was substantially certain to cause an offensive contact between the hazardous substances and the area's residents, the United States District Court for the District of Minnesota denied the defendant's motion for summary judgment.²⁰⁴

Undoubtedly, proving intent is the most difficult aspect of a toxic battery claim. This difficulty, however, is not as arduous as it may appear at first blush. The intent element of a battery cause of action does not require that the defendant specifically intended to cause the resulting harm.²⁰⁵ In a battery action, plaintiffs must show only that the defendant intended to bring about a contact between the

¹⁹⁷ *Id.*

¹⁹⁸ *See, e.g.,* *Adelung v. Township of Jackson*, 21 Env't Rep. Cas. (BNA) 1118, 1132 (D.N.J. 1982).

¹⁹⁹ KEETON ET AL., *supra* note 60, § 1, at 4.

²⁰⁰ *See* RESTATEMENT, *supra* note 65, § 18 cmt. c.

²⁰¹ *Cunningham v. Anchor Hocking Corp.*, 558 So.2d 93, 96-97 (Fla. Dist. Ct. App. 1990); RESTATEMENT, *supra* note 65, § 8A.

²⁰² 746 F. Supp. 887 (D. Minn. 1990).

²⁰³ *Id.* at 907.

²⁰⁴ *Id.*

²⁰⁵ *See, e.g.,* *Mink v. University of Chicago*, 460 F. Supp. 713, 718 (N.D. Ill. 1978).

substance and a person.²⁰⁶ In *Mink v. University of Chicago*,²⁰⁷ the defendant administered diethylstilbestrol (DES) to the plaintiffs as part of a medical experiment.²⁰⁸ According to the court, the defendant's intention to administer DES to the plaintiffs was sufficient to satisfy the intent element of the plaintiffs' battery action.²⁰⁹ In other words, the plaintiffs satisfied the intent element without showing that the defendant intended to cause their harm.²¹⁰

While there are no cases on point, there is no reason why, under modern tort law, a defendant's intent not to act could not be the basis of a battery cause of action.²¹¹ Intent refers to the deliberateness of the actor's conduct.²¹² In *Gulden v. Crown Zellerbach Corp.*,²¹³ an employer failed to hire specialists to clean up a polychlorinated biphenyl (PCB) spill and instead ordered his employees to do the job.²¹⁴ The court determined that, in deciding how to clean the spill, the employer had an opportunity to make a conscious choice from several possible courses of action. Therefore, according to the court, a jury would be able to conclude that the employer possessed the requisite intent for a battery cause of action when he chose not to hire the experts.²¹⁵

Courts, however, will not infer intent every time someone is hurt. The plaintiff still must show some conduct on the part of the defendant.²¹⁶ In *Hennessy v. Commonwealth Edison Company*,²¹⁷ for example, the plaintiff, contaminated by radiation, sued the operator of a nuclear power station in battery.²¹⁸ Although the United States District Court for the Northern District of Illinois recognized that a battery action could address such an intentional offensive contact,

²⁰⁶ *Id.*

²⁰⁷ 460 F. Supp. 713 (N.D. Ill. 1978).

²⁰⁸ *Id.* at 715.

²⁰⁹ *Id.* at 718.

²¹⁰ *Id.*; see also, e.g., *Barber v. Pittsburg Corning Corp.*, 529 A.2d 491, 501 (Pa. Super. 1987), *rev'd on other grounds*, 555 A.2d 766 (1989) (intent in asbestos suit satisfied even though defendant may not have actually desired the resulting harm).

²¹¹ See RESTATEMENT, *supra* note 65, § 14, cmt. c. See generally, e.g., David B. Ezra, Note, *Smoker Battery: An Antidote to Second-Hand Smoke*, 63 S. CAL. L. REV. 1061, 1090-92 (1990) (intent element of battery satisfied where smoker continues to smoke after being told to stop).

²¹² See RESTATEMENT, *supra* note 65, § 8A.

²¹³ 890 F.2d 195 (9th Cir. 1989).

²¹⁴ *Id.* at 196.

²¹⁵ *Id.* at 196-97.

²¹⁶ See, e.g., *Hennessy v. Commonwealth Edison Co.*, 764 F. Supp. 495, 507 (N.D. Ill. 1991) (worker failed to explain event that led to his radiation contamination).

²¹⁷ 764 F. Supp. 495 (N.D. Ill. 1991).

²¹⁸ *Id.* at 496.

the court granted the defendant summary judgment because the plaintiff failed to allege with particularity what intentional act led to his exposure.²¹⁹

B. Offensive Contact

To prove the second element of a battery cause of action, a plaintiff must show that the defendant's intentional conduct constituted a harmful or offensive touching.²²⁰ This touching may be either direct physical contact between the plaintiff and the defendant or indirect physical contact between the plaintiff and an instrumentality controlled by the defendant.²²¹ For example, plaintiffs have sued defendants on the basis of contact with asbestos dust,²²² radiation,²²³ toxic waste,²²⁴ and various chemicals.²²⁵ A battery cause of action focuses on the fact that a touching has violated the plaintiff's interest in dignity and bodily integrity, not the method of touching.²²⁶

In hazardous substance litigation, a violation of bodily integrity can occur when the hazardous substance comes into contact with the plaintiff's internal organs.²²⁷ That is, the touching element of a battery cause of action occurs when the plaintiff suffers an exposure to toxic chemicals.²²⁸ Medical observation, however, cannot always determine whether an individual has suffered a toxic exposure.²²⁹ Plaintiffs can show that they have suffered a touching by offering as

²¹⁹ *Id.* at 507.

²²⁰ RESTATEMENT, *supra* note 65, § 18.

²²¹ *See, e.g.*, Mink v. University of Chicago, 460 F. Supp. 713, 718 (N.D. Ill. 1978) (act of administering drug supplied contact with plaintiff's person); *see also* RESTATEMENT, *supra* note 65, § 18 cmt. c.

²²² *See, e.g.*, Barber v. Pittsburg Corning Corp., 529 A.2d 491, 498-99 (Pa. Super. 1987), *rev'd on other grounds*, 555 A.2d 766 (1989).

²²³ *See, e.g.*, Bennett v. Mallinckrodt, Inc., 698 S.W.2d 854, 857 (Mo. Ct. App. 1985), *cert. denied*, 476 U.S. 1176 (plaintiffs sued radiopharmaceutical processing plant in battery for exposure to radioactive emissions).

²²⁴ *See, e.g.*, Werlein v. United States, 746 F. Supp. 887, 907 (D. Minn. 1990) (plaintiff sued in battery for exposure to toxic waste).

²²⁵ *See, e.g.*, Barth v. Firestone Tire and Rubber Co., 661 F. Supp. 193, 195 (N.D. Cal. 1987) (plaintiff sued in battery for exposure to Benzene, heavy metal compounds and other industrial toxins); Martin v. Granite City Steel Div. of Nat. Steel, 607 F. Supp. 1430, 1431 (S.D. Ill. 1985) (plaintiffs sued steel manufacturer for intentionally exposing them to toxins and carcinogens); Cunningham v. Anchor Hocking Corp., 558 So.2d 93, 94, 95 (Fla. Dist. Ct. App. 1990) (plaintiffs sued glass manufacturer in battery for exposure to toxic substances used in glass manufacturing process).

²²⁶ *See* RESTATEMENT, *supra* note 65, § 18 cmt. c, § 19.

²²⁷ *See, e.g.*, Ezra, *supra* note 211, at 1093 (advocating a battery cause of action when second hand cigarette smoke enters the body).

²²⁸ Carl B. Meyer, *The Environmental Fate of Toxic Wastes, The Certainty of Harm, Toxic Torts, and Toxic Regulation*, 19 ENVTL. L. 321, 350 (1988).

²²⁹ *Id.* at 351.

evidence chemical analyses of the substance, that take into account the plaintiff's sensitivity to the substance, the duration of the exposure, the concentration of the substance, and the method of exposure.²³⁰ Plaintiffs also can satisfy battery's touching requirement by demonstrating that the defendant exposed them to a hazardous substance at concentrations greater than the legally established threshold limits for exposure.²³¹ In *Gulden*,²³² the plaintiffs showed that they had suffered an offensive touching by offering evidence that they worked in a room that had a PCB level greater than the standards the United States Environmental Protection Agency set.²³³ The United States Court of Appeals for the Ninth Circuit found a reasonable jury could conclude that this evidence was sufficient to show that the plaintiffs had suffered the harmful contact necessary for recovery under a battery cause of action.²³⁴

Plaintiffs do not have to prove physical injury to satisfy the harmful contact element of a battery cause of action.²³⁵ A plaintiff only needs to show that the defendant's action caused an alteration of his or her body.²³⁶ The essence of a battery cause of action is an offense to an individual's dignity from an invasion of that individual's person, not the physical harm done to the body.²³⁷ In *Bennett v. Mallinckrodt, Inc.*,²³⁸ plaintiffs sued the defendant nuclear plant in battery for damage caused by the defendant's radiation striking their bodies.²³⁹ Although the complaint made only a vague statement of the resulting damage, it withstood a motion to dismiss.²⁴⁰ Under a battery theory, proof of an intentional, offensive bodily invasion—even if it is completely harmless—entitles the plaintiff to an award of nominal damages.²⁴¹ Plaintiffs do not have to demonstrate the extent of their injury with as great a degree of certainty as the degree of proof plaintiffs must use to show the defendant caused their harm.²⁴²

²³⁰ *Id.* at 350–51.

²³¹ *Id.* at 351–52.

²³² 890 F.2d 195 (9th Cir. 1989).

²³³ *Id.* at 196.

²³⁴ *Id.*

²³⁵ *See id.* at 273 (no need for physical harm to recover for an injury in tort law).

²³⁶ RESTATEMENT, *supra* note 65, § 15 cmt. a; *see, e.g.*, *Barth v. Firestone Tire and Rubber Co.*, 661 F. Supp. 193, 196 (N.D. Cal. 1987) (plaintiff claimed injury to immune system without showing clinically diagnosed symptoms).

²³⁷ RESTATEMENT, *supra* note 65, § 18 cmt. c.

²³⁸ 698 S.W. 2d 854 (Mo. Ct. App. 1985).

²³⁹ *Id.* at 857.

²⁴⁰ *Id.* at 865.

²⁴¹ *Id.* at 865, n.9; *KEETON ET AL.*, *supra* note 60, § 9, at 40.

²⁴² *See* RESTATEMENT, *supra* note 65, § 912 cmt. a. Proof of causation is governed by a reasonable certainty standard. *Id.*

Although it is true that, in the modern world, some contact is unavoidable, and that therefore courts assume plaintiffs have consented to ordinary contacts, toxic touching is not an ordinary contact.²⁴³ The potential severity of the disease that could result from a toxic contact makes the contact more than one of the inconveniences that citizens of a modern industrial society must bear.²⁴⁴

C. Damages

As noted, plaintiffs can recover nominal damages under a battery cause of action for intentional, offensive invasions of their bodies, with or without harm.²⁴⁵ Plaintiffs also can recover punitive damages under a battery cause of action.²⁴⁶ Courts award punitive damages where defendants desired to harm the plaintiffs or where the defendants knew that their actions were substantially certain to cause harm.²⁴⁷ Because battery actions usually involve matters with the worst kind of intentions, a battery cause of action frequently justifies punitive damages.²⁴⁸

Punitive damages not only punish defendants but also can compensate plaintiffs for otherwise noncompensable injuries.²⁴⁹ Recovering damages for otherwise noncompensable injuries is particularly important in suits in which the monetary value of the personal injury is difficult to measure accurately or effectively compensate.²⁵⁰ In such cases, plaintiffs can base their claim for punitive damages on their recovery of nominal damages.²⁵¹ Punitive damages are available even in toxic tort cases where the court has not settled fully the issue of actual compensatory damages.²⁵²

²⁴³ See KEETON ET AL., *supra* note 60, § 9, at 42.

²⁴⁴ Gara, *supra* note 38 at 281.

²⁴⁵ See *supra* notes 239-46 and accompanying text.

²⁴⁶ See, e.g., Peete v. Blackwell, 504 So.2d 222, 223 (Ala. 1986) (plaintiff recovered punitive damages for slap on arm); Fowler v. Mantoath, 683 S.W.2d 250, 251-52, 254 (Ky. 1984) (plaintiff recovered punitive damages for punch).

²⁴⁷ Arthur F. Roeca, *Damages*, in TOXIC TORTS, *supra* note 11, at 516.

²⁴⁸ See KEETON ET AL., *supra* note 60, § 9, at 40.

²⁴⁹ See *id.*, § 2, at 9; see also Dorsey D. Ellis, Jr., *Fairness and Efficiency in the Law of Punitive Damages*, 56 S. CAL. L. REV. 1, 3 (1982).

²⁵⁰ See Ellis, *supra* note 249, at 30.

²⁵¹ See, e.g., Peete v. Blackwell, 504 So.2d 222, 223 (Ala. 1986) (one dollar nominal damage award sufficient to support ten thousand dollar punitive damage award in battery action); see also KEETON ET AL., *supra* note 60, § 2, at 14; Griffin B. Bell & Perry E. Pearce, *Punitive Damages and the Tort System*, 22 U. RICH. L. REV. 1, 6, 11 (1987).

²⁵² See, e.g., Sterling v. Velsicol Chemical Corp., 855 F.2d 1184, 1216-17 (6th Cir. 1988) ("District court need not defer its award of punitive damages prior to determining compensatory damages for the entire class").

Because of disease latency, plaintiffs in toxic tort actions base their personal injury and punitive damage claims on the defendant's activity from many years ago.²⁵³ The defendant must take the jurors back to the time the injury-causing activity occurred and make them forget all that they now know of the dangers of hazardous substances.²⁵⁴ It is difficult to set aside the modern jury's awareness of environmental pollution and health hazards and make them agree with the defendants' course of conduct.²⁵⁵

Although often overlooked as a toxic tort, battery is uniquely suited to hazardous substance litigation. In fact, the tort's simple *prima facie* case and amenability to punitive damages may allow plaintiffs to recover damages under a battery cause of action where they would be unsuccessful using another cause of action.

VI. WHERE THE STANDARD THEORIES OF RECOVERY FAIL, A BATTERY CAUSE OF ACTION SUCCEEDS

A. *Battery as a Solution to Toxic Tort Problems*

One of the most difficult aspects of any toxic tort action is proving that a certain hazardous substance caused the plaintiff's harm.²⁵⁶ The harms experts associate with hazardous substances usually manifest themselves after a long latency period.²⁵⁷ When such a harm does manifest itself, it typically takes the form of a disease that either occurs naturally or has many possible causes.²⁵⁸ Without an identifiable causal link between the substance and the disease, the plaintiff may be unable to recover personal injury damages for his or her disease.²⁵⁹

Battery, however, may relieve plaintiffs of the need to prove that a particular toxic substance caused their disease.²⁶⁰ The body's coming into contact with certain substances by itself can constitute an

²⁵³ Roeca, *supra* note 247, at 519-20.

²⁵⁴ *See id.* at 520-21.

²⁵⁵ *See id.* at 520-21. Most courts in asbestos litigation allowed the juries, with their knowledge of the dangers of asbestos and the number of asbestos injuries, to determine whether the defendant's conduct in the 1930s and 1940s amounted to a conscious disregard for safety necessary to justify imposing punitive damages in the 1980s. *See id.* at 520.

²⁵⁶ *See supra* notes 33-53 and accompanying text.

²⁵⁷ *See supra* notes 23-27 and accompanying text.

²⁵⁸ *See Putzrath et al., supra* note 23, at 105; *Developments, supra* note 26, at 1618.

²⁵⁹ *See supra* part II.

²⁶⁰ The difficulties plaintiffs encounter in trying to prove their disease's causation partially justifies a cause of action that provides damages after exposure but before manifestation of the symptoms of the disease. *See Gara, supra* note 38, at 275.

injury.²⁶¹ This injury, even without proof of harm, may entitle plaintiffs in battery actions to a justification of their legal rights by an award of nominal damages.²⁶² Courts may award nominal damages in a battery action once a plaintiff proves that the defendant's intentional activity caused the plaintiff's body to come into contact with a hazardous substance—the court does not have to wait for the plaintiff to demonstrate a causal link between his or her disease and the invading substance.

Nominal damages, however, will not cover future medical bills or otherwise compensate a plaintiff for pain and suffering. Punitive damages, on the other hand, may compensate the plaintiff for these otherwise noncompensable injuries.²⁶³ The intentional nature of the activity giving rise to the battery, and the invasion of bodily integrity make a battery cause of action more likely to result in a punitive damage award than a cause of action claiming a non-intentional harm.²⁶⁴

A skillful description of the severity of the plaintiff's injuries could encourage a jury to award punitive damages.²⁶⁵ With the public's increased hostility towards environmental offenses,²⁶⁶ the jurors could see the defendant's activity as reflecting the conscious and deliberate disregard of others necessary for an award of punitive damages.²⁶⁷ Jurors' fear of cancer, combined with recent juries' increasing tendency to impose large verdicts against businesses and other institutional defendants²⁶⁸ could result in the plaintiff winning a large damage award.²⁶⁹ The plaintiff could use this money to pay the medical costs for the harm that he or she could not link causally

²⁶¹ See, e.g., *Gulden v. Crown Zellerbach Corp.*, 890 F.2d 195, 196 (1989) (exposure to PCB levels greater than EPA standards held sufficient to constitute injury).

²⁶² See *Bennett v. Mallinckrodt, Inc.*, 698 S.W.2d 854, 865 n.9 (Mo. Ct. App. 1985); see also *KEETON ET AL.*, *supra* note 60, § 9, at 40.

²⁶³ See *supra* notes 251–53 and accompanying text.

²⁶⁴ See *KEETON ET AL.*, *supra* note 60, § 2 at 10–11, § 9 at 40–41.

²⁶⁵ See Gary T. Schwartz, Comment, *Deterrence and Punishment in the Common Law of Punitive Damages: A Comment*, 56 S. CAL. L. REV. 133, 152 (1982).

²⁶⁶ Steven L. Humphreys, Comment, *An Enemy of the People: Prosecuting the Corporate Polluter as a Common Law Criminal*, 39 AM. U.L. REV. 311, 313 (1990). According to a 1986 study, the public considers industrial criminal polluters to be worse than armed robbers. Judson W. Starr, *Countering Environmental Crimes*, 13 B.C. ENVTL. AFF. L. REV. 379, 379 n.1 (1987).

²⁶⁷ See *Roeca*, *supra* note 247, at 520. See generally *KEETON ET AL.*, *supra* note 60, § 2, at 9–10.

²⁶⁸ See Deborah R. Hensler, *Trends in Tort Litigation: Findings from the Institute for Criminal Justice's Research*, 48 OHIO ST. L.J. 478, 491 (1987).

²⁶⁹ See *Rudlin*, *supra* note 41, at 463.

to the exposure. The mere threat of punitive damages in connection with a cause of action that usually produces them, such as battery, may be sufficient to promote a large settlement offer or possibly a concession regarding liability.²⁷⁰

In addition to nominal and punitive damages, plaintiffs in battery actions also may be able to recover damages for "cancerphobia" and medical monitoring.²⁷¹ Battery can serve as the underlying theory of liability for both cancerphobia and medical monitoring damages.²⁷² Although cancerphobia and medical monitoring damages do not compensate plaintiffs for their disease, they do provide some measure of recovery where causation is too difficult to prove.²⁷³

Furthermore, plaintiffs who are able to prove a causal nexus between their disease and the defendant's activity after they have recovered other damages in a previous suit may be able to recover personal injury damages for the latent disease under a modified claim preclusion rule.²⁷⁴ Because a plaintiff does not have to allege actual harm to recover under a battery cause of action, he or she may be able to sue the defendant immediately after exposure to the hazardous substance and win a justification of their legal rights through an award of nominal damages.²⁷⁵ By suing at this early stage, the plaintiff will be able to discover evidence of the defendant's liability that might otherwise be lost by the time the plaintiff's latent disease manifests itself.²⁷⁶ Years later, when the disease does manifest itself, the plaintiff already will have proven the defendant's liability, thereby avoiding the problem of stale evidence and enabling the plaintiff to recover personal injuries.²⁷⁷

Thus, plaintiffs in battery actions can recover damages both in those jurisdictions that recognize innovative methods of recovery in toxic tort cases²⁷⁸ and in traditional jurisdictions that allow for punitive damages.²⁷⁹ By enabling plaintiffs to recover damages without having to prove causation, battery surmounts the primary problem that all plaintiffs encounter when seeking to recover personal injury

²⁷⁰ See Schwartz, *supra* note 265, at 134, n.6.

²⁷¹ See *supra* notes 42-50 and accompanying text.

²⁷² See *supra* notes 44, 48 and accompanying text.

²⁷³ See *supra* notes 42-51 and accompanying text.

²⁷⁴ See *supra* notes 28-30 and accompanying text.

²⁷⁵ See *Bennett v. Mallinckrodt, Inc.*, 698 S.W.2d 854, 865 n.9 (Mo. Ct. App. 1985); see also KEETON ET AL., *supra* note 60, § 9, at 40.

²⁷⁶ See *Developments*, *supra* note 26, at 1612.

²⁷⁷ See *Claim Preclusion*, *supra* note 28, at 2007.

²⁷⁸ See *supra* notes 28-30, 42-47 and accompanying text.

²⁷⁹ See *supra* notes 264-69 and accompanying text.

damages under any theory of liability in hazardous substance litigation.

*B. Battery as a Solution to the Problems of
Trespass and Nuisance*

Battery is particularly effective as an alternative to the property torts of trespass and nuisance in actions for personal injury damages. Both trespass and nuisance actions address invasions of real property.²⁸⁰ A trespass is an intentional invasion of the plaintiff's right to exclusive possession of real property.²⁸¹ A nuisance is an intentional or unreasonable invasion of the plaintiff's right to use and enjoy real property.²⁸² A battery cause of action addresses bodily invasions and is thus better adapted to the recovery of personal injury damages.²⁸³

To be successful in a trespass or nuisance suit, plaintiffs in hazardous substance litigation must own property that the defendant has harmed either by invading the land with some substantial instrumentality²⁸⁴ or by unreasonably interfering with the plaintiff's use and enjoyment of the land.²⁸⁵ These property interest requirements exclude plaintiffs who lack a possessory interest in the property at issue.²⁸⁶ Plaintiffs who do not discover their injury until after they have moved from the affected land may not be able to recover under nuisance or trespass. Because these unfortunate plaintiffs no longer own the property the defendant invaded, they no longer have a claim under the property-based torts. A similar fate befalls those plaintiffs who, due to the bad luck of being in the wrong place at the wrong time, are harmed by a toxic discharge while on someone else's property. Hazardous substances do not differentiate in their choice of victims between those with a property interest and those without.²⁸⁷

In addition, courts in trespass and nuisance actions may require that the invading agent have a tangible substantiality,²⁸⁸ or that the

²⁸⁰ See KEETON ET AL., *supra* note 60, § 13, at 77, § 86, at 617.

²⁸¹ See *id.*, § 13, at 70.

²⁸² See RESTATEMENT, *supra* note 65, § 822.

²⁸³ See *supra* part V.

²⁸⁴ See RESTATEMENT, *supra* note 65, § 158.

²⁸⁵ See RESTATEMENT, *supra* note 65, § 822.

²⁸⁶ See *supra* notes 72-74, 88-96 and accompanying text.

²⁸⁷ See Zinns, *supra* note 68, at 851.

²⁸⁸ See *supra* notes 68-72 and accompanying text.

interference with the plaintiff's land be unreasonable.²⁸⁹ Many hazardous substances lack immediately tangible qualities yet still cause harms.²⁹⁰ Moreover, the reasonableness standard under nuisance allows courts to consider the character of the affected neighborhood in deciding whether the plaintiff deserves compensation.²⁹¹ An activity that courts would consider a nuisance in one neighborhood might not be a nuisance in a less aesthetically appealing neighborhood. As a result, lower income neighborhoods may find it more difficult to enjoin a nuisance or win damages.²⁹²

A battery action does not require the plaintiff to own property, nor does it require the defendant's invasion of the plaintiff's body to be substantial or unreasonable.²⁹³ Because plaintiffs in battery actions do not have to hold a possessory interest in land, they may be able to recover for their personal injuries without owning land.²⁹⁴ Battery focuses on invasions of a person's right of bodily integrity, not any property right.²⁹⁵

Battery's focus on bodily integrity rather than property rights opens up avenues of recovery that courts deny to plaintiffs suing under a property-based tort. Plaintiffs may be more likely to recover damages for psychic injuries such as emotional distress and mental anguish in a battery cause of action because there is an accompanying physical impact or injury.²⁹⁶ Courts may be reluctant to award damages for psychic injuries in trespass and nuisance actions that lack evidence of a physical impact.

Finally, because battery is not concerned with what touched the plaintiff, only with the fact that the plaintiff has been touched, it

²⁸⁹ See *supra* notes 84–87, 97–101 and accompanying text.

²⁹⁰ See, e.g., *Werlein v. United States*, 746 F. Supp. 887, 907 (D. Minn. 1990) (plaintiff sued in battery for exposure to toxic waste); *Barth v. Firestone Tire and Rubber Co.*, 661 F. Supp. 193, 195 (N.D. Cal. 1987) (plaintiff sued in battery for exposure to benzene, heavy metal compounds, and other industrial toxins); *Martin v. Granite City Steel Div. of Nat. Steel*, 607 F. Supp. 1430, 1431 (S.D. Ill. 1985) (plaintiffs sued steel manufacturer for intentionally exposing them to toxins and carcinogens); *Cunningham v. Anchor Hocking Corp.*, 558 So.2d 93, 94, 95 (Fla. Dist. Ct. App. 1990) (plaintiffs sued glass manufacturer in battery for exposure to toxic substances used in glass manufacturing process); *Bennett v. Mallinckrodt, Inc.*, 698 S.W.2d 854, 857 (Mo. Ct. App. 1985), *cert. denied*, 476 U.S. 1176 (plaintiffs sued radiopharmaceutical processing plant in battery for exposure to radioactive emissions).

²⁹¹ See *supra* notes 97–101 and accompanying text.

²⁹² See, e.g., *Bove v. Donner-Hanna Coke Corp.*, 256 N.Y.S. 229, 233–34 (N.Y. App. Div. 1932) (court denied plaintiff's claim for relief under nuisance cause of action because her neighborhood was "never fitted for a residential district").

²⁹³ See RESTATEMENT, *supra* note 65, § 18.

²⁹⁴ See *supra* part V.

²⁹⁵ See *supra* part V.

²⁹⁶ See *Roeca*, *supra* note 247, at 506–07.

may be the more successful cause of action in those circumstances where the plaintiff has been harmed by some intangible substance.²⁹⁷ This is particularly important in toxic tort where many of the harmful substances are not immediately detectable.²⁹⁸

C. Battery as a Solution to the Problems of Negligence

The cornerstone of a negligence suit is the plaintiff's proof that the defendant breached a duty of reasonable care that it owed to the plaintiff.²⁹⁹ Determining what constitutes reasonable care involves a balancing of the risk of an accident, the costs to avoid that accident, and the potential harm from the accident.³⁰⁰ Therefore, the standard of reasonableness associated with negligence typically precludes recovery where the defendant's activity is important to society³⁰¹ or where the defendant has complied with industry standards.³⁰²

In addition, because plaintiffs bring environmental suits on account of the defendant's past activity that has recently become a problem, courts must decide whether the defendant's activity was reasonable in the past.³⁰³ Courts often lack the expertise needed to determine whether a particular activity was unreasonable in the past.³⁰⁴ Activity that is unreasonable now may have been perfectly reasonable in the past.³⁰⁵ Determining a clear standard of reasonableness is almost impossible in light of the multitude of highly complex factors involved in an environmental suit.³⁰⁶ For example, plaintiffs would have difficulty demonstrating the different levels of technology and options available to the defendant at the time of the exposure, not to mention the defendant's knowledge of any existing medical test at the time of the exposure.³⁰⁷

A battery cause of action, however, avoids the difficulties of balancing tests. The *prima facie* case for battery presents a simple

²⁹⁷ See *supra* notes 223-38 and accompanying text.

²⁹⁸ See *supra* notes 68-72 and accompanying text.

²⁹⁹ See KEETON ET AL., *supra* note 60, § 30 at 164-65.

³⁰⁰ See, e.g., *United States v. Carroll Towing Co.*, 159 F.2d 169, 173 (2d Cir. 1947) (court weighed factors such as probability, actual injury, and burden of preventing injury in determining liability).

³⁰¹ See generally *supra* part III.B.

³⁰² See *supra* notes 104-14 and accompanying text.

³⁰³ See, e.g., *Dillon v. Acme Oil Co.*, 2 N.Y.S. 289, 291 (N.Y. Sup. Ct. 1888) (court considered it unreasonable to expect oil company to know, at the time of a spill, that the spilled oil would seep through the land and contaminate the ground water); see also *supra* notes 108-14 and accompanying text.

³⁰⁴ *Developments*, *supra* note 26, at 1611-12.

³⁰⁵ See Hurwitz, *supra* note 31, at 67.

³⁰⁶ See *Developments*, *supra* note 26, at 1611-12.

³⁰⁷ See *id.*

objective test, devoid of any subjective determinations regarding whether the defendant's activity was unreasonable in the past.³⁰⁸ To succeed in a battery claim, a plaintiff only need show that the defendant intended to cause an unconsented bodily contact, and that such a contact occurred.³⁰⁹

Davis v. Du Pont,³¹⁰ presents a scenario in which a plaintiff that lost on his negligence claim might have succeeded under a battery cause of action.³¹¹ The plaintiff in *Davis* was able to show that his work environment exposed him to toxic fumes, and that he was suffering from liver damage caused by exposure to toxic agents in the workplace.³¹² The plaintiff also was able to show that he used the defendants' products, which released toxic fumes.³¹³ He was unable to recover under a negligence theory, however, because he was unable to prove that the defendants' toxic products were the proximate cause of his liver damage.³¹⁴

The plaintiff in *Davis* could have established a *prima facie* case for battery.³¹⁵ The defendants caused a harmful or offensive contact by exposing the plaintiff to toxic fumes through the paint products the plaintiff used at work. The plaintiff could have tried to prove that the defendants acted intentionally by submitting evidence such as the material safety data sheet (MSDS) that was submitted to the district court. The MSDS showed that one of the defendants was aware that at least one of its products could cause liver damage.³¹⁶ The defendant might have claimed that the plaintiff consented to the exposure by using the products for twenty-five years. The plaintiff would have been able to counter this charge by asserting that he just painted the cars and had no way of knowing twenty-five years ago that he was being exposed to hazardous substances. Upon showing that the defendant intentionally caused an unconsented, harmful contact by exposing him to hazardous substances, the plaintiff probably could have recovered nominal damages under a battery cause of action.³¹⁷

Once the plaintiff established his battery cause of action, he also might have been able to recover punitive damages to compensate

³⁰⁸ See *supra* part V.

³⁰⁹ RESTATEMENT, *supra* note 65, § 18.

³¹⁰ 729 F. Supp. 652 (E.D. Ark. 1989).

³¹¹ See *id.* at 655.

³¹² *Id.* at 654-55.

³¹³ *Id.* at 653, 654.

³¹⁴ *Id.* at 655.

³¹⁵ See *supra* notes 197-201 and accompanying text.

³¹⁶ See *Davis v. DuPont*, 729 F. Supp. 652, 653 (E.D. Ark. 1989).

³¹⁷ See KEETON ET AL., *supra* note 60, § 9, at 40.

him for his liver damage.³¹⁸ The MSDS demonstrated that the defendant marketed a dangerous product without warning consumers of its danger until several years after the product was first in use.³¹⁹ Courts award punitive damages in similar cases where the defendant has acted in a way that is substantially certain to cause harm.³²⁰

D. Battery as a Solution to the Problems of Strict Liability

Similar to negligence, strict liability requires courts to consider both the risk and potential harm from a defendant's activity and the defendant's ability to avoid the harm.³²¹ As in negligence, a court will deny a plaintiff recovery in a strict liability action where society values the defendant's activity more highly than it values the plaintiff's right to be left alone.³²² Some courts, however, may be reluctant to impose liability without fault on a defendant who may have been unable to prevent the damage.³²³

In strict liability actions, courts also consider the appropriateness and value of the defendant's activity to the community.³²⁴ For example, Utah courts have found defendants strictly liable for damages from water storage used in oil production,³²⁵ while courts in the oil-producing state of Texas have refused to find defendants strictly liable for damages from stored water used in oil production.³²⁶ Recovery in strict liability can be uncertain because a strict liability cause of action requires courts to make a subjective determination of whether the defendant's activity is abnormally dangerous because of the place where it is conducted.³²⁷

A battery action, however, does not consider the place where the complained of activity occurred. The right to the inviolability of the body extends to everyone, regardless of where they live. Furthermore, battery is an intentional tort. A court that is reluctant to hold

³¹⁸ See *supra* part V.C.

³¹⁹ See *Davis*, 729 F. Supp. at 653. There may be a problem with using this MSDS if the court finds that it is barred under Federal Rule of Evidence 407 as a subsequent remedial measure. The court in *Davis*, however, did not state that the MSDS necessarily would be inadmissible. *Id.*

³²⁰ See *Roeca*, *supra* note 247, at 516.

³²¹ See RESTATEMENT, *supra* note 65, § 520.

³²² See *supra* part III. C.

³²³ See William R. Ginsberg & Lois Weiss, *Common Law Liability for Toxic Torts: A Phantom Remedy*, 9 HOFSTRA L. REV. 859, 920 (1981).

³²⁴ RESTATEMENT, *supra* note 65, § 520.

³²⁵ *Branch v. Western Petroleum, Inc.*, 657 P.2d 267, 275 (Utah 1982).

³²⁶ *Turner v. Big Lake Oil Co.*, 96 S.W.2d 221, 226 (Tex. 1936).

³²⁷ See *supra* notes 151-55 and accompanying text.

defendants strictly liable for their activity without considering their fault may be more receptive to a battery cause of action, which gives weight to the defendant's fault by requiring plaintiffs to prove intent.³²⁸

*E. Battery as a Solution to the Problem of
Workers' Compensation*

Even though most plaintiffs in toxic tort cases may choose which cause of action is best suited for winning them the largest amount of personal injury damages, employees do not have this luxury when they try to recover damages from their employers. The exclusivity provision in workers' compensation statutes bar workers' common law actions against their employers for injuries arising out of workplace accidents.³²⁹ Where workers' compensation covers the injured worker, the problem is the low amount of damages available through the workers' compensation system.³³⁰ A battery cause of action may enable an injured worker to recover the higher damage awards available at common law through the "intentional act" exception to the exclusivity provision. Plaintiffs bring battery actions to recover damages for intentional acts. Because an intentional act cannot be the cause of accidental injury, employees in some jurisdictions can sue their employers in battery and escape the workers' compensation bar.³³¹ Courts imply this intentional tort exception to workers' compensation where the statute in question does not explicitly provide for an exception.³³²

In cases of occupational disease resulting from exposure to hazardous substances, it may be in an employee's best interest to seek a remedy outside of the workers' compensation system. Fighting an employer's challenge to a workers' compensation claim can be a costly endeavor, even if the worker does win.³³³ Employer challenges to claims for occupational disease have converted a nonadversarial system into a system plagued by the same delays as traditional litigation.³³⁴ Due to the high rate of challenges by employers to

³²⁸ See *supra* note 320, 203-18 and accompanying text.

³²⁹ See *Occupational Disease*, *supra* note 21, at 917.

³³⁰ See *supra* notes 188-91 and accompanying text.

³³¹ See *id.* at 157.

³³² See *generally id.* at 158-63 (discussing application of implied and statutory exceptions to workers' compensation).

³³³ Barth, *supra* note 173, at 571.

³³⁴ See *id.*

workers' compensation claims for occupational disease,³³⁵ the swift and guaranteed recoveries that were supposed to justify the lower awards have disappeared.³³⁶ Moreover, when the employee does win compensation, it is at a lower level than would be possible at common law.³³⁷

Injured workers may decide that if they must fight with their employers over the issue of what caused their disease, they might as well recover the higher damages available at common law. Arguing that an occupational disease arose out of and during the course of employment, and not some other course of conduct, is similar to arguing that a defendant's activity and not some other factor or natural occurrence caused a plaintiff's disease. The primary difference is that by winning the first argument the worker recovers only the reduced damages available under workers' compensation, whereas by winning the second argument the plaintiff can win the greater damages available at common law.

To ensure that the injured worker is able to recover these greater damages, the worker must proceed against the employer under a cause of action that avoids the exclusivity provision of workers' compensation. Battery, because it is an intentional tort, is a cause of action that would allow the injured worker to escape the exclusivity bar of workers' compensation. Although only a minority of jurisdictions accept the intentional tort exception to the workers' compensation bar, there is a growing trend towards employees recovering from their employers in intentional tort actions.³³⁸

VII. CONCLUSION

Battery as a toxic tort theory presents plaintiffs in hazardous substance litigation with a unique opportunity to recover damages. A battery cause of action offers potential solutions to the problems of causation, property ownership, and various torts' standards of reasonableness. This is not to say, however, that battery actions do not have their own weaknesses. Courts may be troubled by the intent element, or the avoidance of causation issues through an award of punitive damages on top of nominal damages, or simply the novelty of using battery as a toxic tort. A battery cause of action

³³⁵ See *Occupational Disease*, *supra* note 21, at 923.

³³⁶ *Id.*, at 925.

³³⁷ See *supra* notes 188-91 and accompanying text.

³³⁸ Nothstein, *supra* note 14, at 168.

does present at least a possibility of winning damages in an area of the law where personal injury damages can be difficult for plaintiffs to win. This possibility of recovery should be sufficient reason for plaintiffs to include a toxic battery cause of action in their claims for personal injury damages in this developing and uncertain area of the law.