

REMEDIES—TOXIC TORTS—RECOVERY DENIED FOR UNQUANTIFIED “ENHANCED RISK” OF DISEASE UNDER NEW JERSEY TORT CLAIMS ACT AND PROSPECTIVE APPLICATION OF A COURT-SUPERVISED FUND FOR MEDICAL SURVEILLANCE COMPENSATION REQUIRED—*Ayers v. Township of Jackson*, 106 N.J. 557, 525 A.2d 287 (1987).

In recent years, courts have faced the dilemma of determining adequate compensation for victims injured by exposure to toxic chemicals in accordance with common law tort principles.¹

¹ G. NOTHSTEIN, TOXIC TORTS § 11.01 (1984). The common law theories of liability upon which most toxic tort litigation is premised include trespass, nuisance, negligence, strict liability and warranty. *Id.* at §§ 11.01-11.17. See also Note, *The Inapplicability of Traditional Tort Analysis to Environmental Risks: The Example of Toxic Waste Pollution Victim Compensation*, 35 STAN. L. REV. 575, 579-88 (1983).

Two major characteristics of toxic tort injuries that distinguish them from traditional personal injury torts, thereby rendering resolution of these cases more difficult are: (1) the prolonged time period between the tortious act and the manifestation of injury and (2) the indeterminacy of the cause of injury. *Id.* at 587. Furthermore, time is one of the foremost problems confronting both toxic tort victims and the courts. Ginsberg & Weiss, *Common Law Liability For Toxic Torts: A Phantom Remedy*, 9 HOFSTRA L. REV. 859, 925 (1981). Even if plaintiffs are able to overcome the technical obstacles presented by statutes of limitation and legal causation proofs, adequate compensation can hardly be obtained from an unidentifiable or financially irresponsible defendant. *See id.* at 925-26. These difficulties occur more frequently in toxic tort litigation primarily because of the extended time span between the act of contamination and the discovery or manifestation of injury. *See* SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS, 96th Cong., 2d Sess., SIX CASE STUDIES OF COMPENSATION FOR TOXIC SUBSTANCES POLLUTION: ALABAMA, CALIFORNIA, MICHIGAN, MISSOURI, NEW JERSEY, AND TEXAS, xii-xvi (Comm. Print 1980) [hereinafter SIX CASE STUDIES]. A research team, comprised of scientists, economists, lawyers, legal researchers and policy analysts, conducted an interdisciplinary study of the tort law systems of six representative states. *Id.* at 1. The area of primary concentration involved the compensation sought, awarded, or potentially available for toxic chemical related injuries. *Id.* The results of the study indicated that the legal mechanisms available in the specific states studied were generally inadequate as a means for compensating the victims of toxic chemical exposure cases. *Id.* at xii-xv. For example, traditional tort law requires proof that exposure to the toxic chemicals proximately caused the alleged harm. *See id.* at xv. The prolonged latency periods of the diseases associated with toxic chemical exposure render this requisite proof virtually impossible. *See id.* The study team further determined that individuals exposed to toxic substances rarely filed suit, and of the suits instituted, very few reached final judgment. *Id.* This was primarily attributed to the complex technical issues and the high costs of litigating toxic tort cases. *Id.* The final conclusion of the researchers was that in most instances, the injured parties were undercompensated. *Id.* For example, most settlement agreements generally prohibited subsequent suits if the latent diseases eventually manifested themselves. *Id.* at xvi.

The inadequacy of compensation in these cases is further demonstrated by a review of the case study conducted in New Jersey. In 1974, waste disposed of by Union Carbide in Dover Township, New Jersey, caused the toxic chemical contami-

Our judicial system has been struggling, in the absence of legislative assistance,² to adapt conventional tort doctrines to the unique characteristics of toxic tort litigation.³ The major enigma confronting courts is the determination of compensable damages

nation of the groundwater and subsequently the pollution of 148 private wells. *Id.* at xiv. The chemicals were determined to be carcinogenic, mutagenic and teratogenic. *Id.* While the amount of recovery requested by the plaintiffs was kept confidential, the case settled for only \$200,000. *Id.*

² See Zazzali & Grad, *Hazardous Wastes: New Rights and Remedies?*, 13 SETON HALL L. REV. 446, 458-463 (1983). The authors acknowledged the non-existence of federal statutory private rights of action for personal injuries resulting from hazardous chemical exposure. *Id.* at 458.

See also Spill Compensation and Control Act, N.J. STAT. ANN. § 58:10-23.11(g) (West Supp. 1988) (imposing liability for cleanup costs and damage to property but not including a compensation scheme for personal injuries); Water Pollution Control Act, N.J. STAT. ANN. § 58:10A-10 (West Supp. 1988) (authorizing the commissioner to bring a civil action for specified types of relief); Environmental Cleanup Responsibility Act, N.J. STAT. ANN. § 13:1K-13(a) (West Supp. 1988) (providing for strict liability but only regarding cleanup costs and failure to implement a cleanup plan); Environmental Rights Act, N.J. STAT. ANN. § 2A:35A-4 (West 1987) (creating a private cause of action limited to the enforcement of the environmental laws).

A similar omission is exemplified in the federal legislation. See, e.g., The Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9601-9657 (1982) (no provisions for the compensation of personal injuries caused by exposure to toxic substances).

³ Trauberman, *Statutory Reform of "Toxic Torts": Relieving Legal, Scientific, and Economic Burdens On The Chemical Victim*, 7 HARV. ENVTL. L. REV. 177, 188-202 (1983). Many victims of toxic chemical exposure do not know that they have been injured, and therefore, do not seek compensation until they have physical manifestations of symptoms. See *id.* at 191. This could potentially be as long as 15-30 years after exposure. See *id.* A few states still retain the traditional rule which starts the running of the statute of limitations at the time of initial exposure to the toxic substances. See *id.* at 192 & n.68. The majority of jurisdictions, however, have enacted some form of the "discovery rule" either by statute or judicial interpretation which tolls the statute until an injured party discovers or reasonably should have discovered the injury. *Id.* at 191 & n.65.

A further hindrance to toxic tort plaintiffs is the traditional concept of *reasonableness* which pervades actions under negligence and nuisance. *Id.* at 192-197. In general, a determination of reasonableness requires the balancing of risks and benefits of a behavior. See *id.* & nn.69-78. A plaintiff has the burden to prove that the defendant's conduct unreasonably exposed him to a toxic substance. *Id.* at 194. The absence of regulatory standards concerning many toxic substances at the time of their disposal is taken into consideration on the issue of reasonableness. *Id.*

A plaintiff must also overcome the obstacle of causation. *Id.* at 197. A plaintiff is required to prove by a preponderance of the evidence that the conduct of the defendant proximately caused his injury. See W. KEETON, D. DOBBS, R. KEETON & D. OWEN, PROSSER AND KEETON ON THE LAW OF TORTS § 41 (5th ed. 1984) [hereinafter PROSSER & KEETON]. In toxic tort litigation, the proof of causation necessitates the use of experts in the fields of toxicology, epidemiology and other related disciplines. Trauberman, *supra*, at 198. These scientific experts generally couch their opinions in terms of statistical probabilities. See *id.* The judicial system, how-

based on post-exposure, pre-symptom injuries.⁴ Historically, there has been a reluctance to recognize claims for potential injury unless there is substantial proof that the injury will occur.⁵ Notwithstanding the advancements of scientific and medical knowledge in the area of toxic chemical exposure and its implications on human health, proof of potential future disease remains unquantifiable and will continue to be a recurring issue.⁶

In *Ayers v. Township of Jackson*,⁷ the New Jersey Supreme Court addressed the viability of four distinct damage claims under the New Jersey Tort Claims Act for injuries caused by exposure to toxic chemicals.⁸ In 1972, Jackson Township commenced operation of the Legler landfill pursuant to a conditional permit issued by the New Jersey Department of Environmental Protection (DEP).⁹ The township, however, failed to operate the landfill in compliance with the permit conditions imposed by the

ever, has been reluctant to accept such probalistic evidence as sufficient proof of causation. *See id.* at 198-99 & nn.103-12.

For a general discussion of the major obstacles confronting toxic tort victims see G. NOTHSTEIN, *supra* note 1, § 23.07, at 693-97.

⁴ *Ayers v. Township of Jackson*, 106 N.J. 557, 587-88, 525 A.2d 287, 302-03 (1987). The injury occurs at the time of exposure to the toxic chemicals since the genetic material within individual cells is affected at that time. *Id.* at 589, 525 A.2d at 303. The exposure begins a process which 20 to 30 years later manifests itself as a cancer or other disease. *See id.* at 589 n.8, 525 A.2d at 303 n.8. *See generally* G. NOTHSTEIN, *supra* note 1, § 17.02, at 495-97; § 26.07 at 695-97 (discussion of reasonable certainty requirement, proof of injury and latency periods).

⁵ *See* G. NOTHSTEIN, *supra* note 1, at 495. Traditionally, the standard of proof on the issue of damages required that damages be established with certainty. *See id.* This harsh standard has been modified to its present state of requiring that the element of damages be established with *reasonable certainty*. *See id.* at 496 (emphasis in original). *See also* Evers v. Dollinger, 95 N.J. 399, 417, 471 A.2d 405, 415 (1984) (holding that plaintiff should be permitted to demonstrate "within a reasonable degree of medical probability" that the defendant's malpractice did in fact increase her risk of cancer recurrence and that the increased risk was a substantial cause of her present condition).

⁶ *Ayers*, 106 N.J. at 579, 525 A.2d at 298. *See generally* G. NOTHSTEIN, *supra* note 1, § 16.05 (discussion of compensation for possible future injuries).

⁷ 106 N.J. 557, 525 A.2d 287 (1987).

⁸ *See id.* at 565-66, 525 A.2d at 291. The claims considered were damages for emotional distress, deterioration of the quality of life, enhanced risk of disease and the cost of future medical surveillance. *Id.* The New Jersey Tort Claims Act provides in pertinent part that "public entities shall only be liable for their negligence within the limitations of this act and in accordance with the fair and uniform principles established herein." N.J. STAT. ANN. § 59:1-2 (West 1982).

⁹ *Ayers*, 106 N.J. at 567, 525 A.2d at 292. The permit issued by the DEP prohibited the disposal of liquid and soluble industrial wastes at the Legler landfill. *Id.* The DEP further imposed depth limitations restricting the depth of refuse deposits to a specified grade above the groundwater level. *Id.*

DEP.¹⁰ Consequently, the township's conduct resulted in contamination of the surrounding groundwater and the residents' wells with a variety of toxic chemicals.¹¹ In November 1978, six years after the township began operation of the Legler landfill, residents in the area were informed by the board of health that their well water was unsafe for consumption.¹² They were further cautioned by the board to limit their bathing and washing in order to reduce their exposure to the contaminated water.¹³

In response to the problem, Jackson Township provided tanks of potable water at various neighborhood locations.¹⁴ The township soon replaced this initial system with a home delivery arrangement, whereby barrels of clean water were delivered to the residents' homes as needed.¹⁵ The plaintiffs obtained water in this manner for a period of nearly two years.¹⁶

Three hundred thirty-nine residents of Jackson Township instituted suit in the New Jersey Superior Court, Law Division, against the municipality for damages resulting from the contamination of their well water.¹⁷ The plaintiffs asserted damage claims for emotional distress,¹⁸ diminished quality of life,¹⁹ en-

¹⁰ *Id.* The township failed to monitor the wastes deposited at the Legler landfill and ignored the depth limitations specifically required by the DEP permit. *Id.*

¹¹ *Id.* at 567-68, 525 A.2d at 292. The chemicals found in the plaintiffs' well water included: "acetone; benzene; chlorobenzene; chloroform; dichlorofluoromethane; ethylbenzene; methylene chloride; methyl isobutyl ketone; 1,1,2, 2-tetrachloroethane; tetrahydrofuran; 1,1,1-trichloroethane; and trichloroethylene." *Id.* An expert in the field of geohydrology testified at trial concerning the manner in which the substances deposited at the landfill migrated to the plaintiffs' wells. *Id.* at 568, 525 A.2d at 292.

¹² *Id.* at 569, 525 A.2d at 293. See *infra* notes 37-54 and accompanying text for a discussion of claims for diminished quality of life.

¹³ *Ayers*, 106 N.J. at 569, 525 A.2d at 293.

¹⁴ *Id.* Those residents in need of water brought their own containers, filled them from the water tanks, and then transported the water to their homes. *Id.*

¹⁵ *Id.* The water was delivered in 40 gallon barrels weighing over 100 pounds each. *Id.* The residents frequently had to relocate the barrels to protected areas either inside their homes or garages. *Id.* Occasionally, replacement barrels were required because of debris in the water. *Id.* Additionally, the water stored in garages often froze in cold weather. *Id.*

¹⁶ *Id.* at 570, 525 A.2d at 293.

¹⁷ See *id.* at 565, 525 A.2d at 291.

¹⁸ *Id.* at 572-73, 525 A.2d at 294-95. The plaintiffs alleged emotional distress resulting from the knowledge that they had ingested contaminated water for six years. *Id.* A clinical psychologist found that increased levels of depression, stress, concern for physical health and psychological disorders existed in a group of 88 plaintiffs. *Id.* at 573, 525 A.2d at 295.

¹⁹ *Id.* at 565, 525 A.2d at 291. The plaintiffs asserted a diminished quality of life charge, caused by their deprivation of running water for a period of 20 months. *Id.*

hanced risk of disease,²⁰ and medical surveillance.²¹ The jury found that Jackson Township had operated the Legler landfill in a "palpably unreasonable" manner, thereby fulfilling an essential condition of recovery under the New Jersey Tort Claims Act.²²

²⁰ *Id.* at 566, 525 A.2d at 291. The plaintiffs alleged an enhanced risk of disease resulting from their prolonged exposure to the toxic chemicals. *See id.* at 568, 525 A.2d at 292. Toxicologist testimony identified the potential physiological effects of toxic chemical exposure, which included kidney and liver damage, genetic mutations, blood disorders, injury to the reproductive system, neurological damage, skin irritations and varying types of cancer. *See id.*

²¹ *Id.* at 599, 525 A.2d at 308-09. The plaintiffs requested damages for the cost of future medical care necessary to monitor their health for early detection of cancer and other diseases resulting from their exposure to the toxic chemicals. *Id.*, 525 A.2d at 308. Testimony supplied by a medical expert recommended periodic medical testing for a period of one to three years after exposure in order to establish baseline data. *Id.*, 525 A.2d at 309. Thereafter, annual medical exams would not be necessary until ten years after the exposure, which is representative of the latency period. *See id.* at 599 n.12, 525 A.2d at 309 n.12.

²² *Id.* at 565, 525 A.2d at 291. In order to recover under the New Jersey Tort Claims Act, the defendant's conduct must be found "palpably unreasonable." *See* N.J. STAT. ANN. § 59:4-2 (West 1982). The statute provides that:

A public entity is liable for injury caused by a condition of its property if the plaintiff establishes that the property was in dangerous condition at the time of the injury, that the injury was proximately caused by the dangerous condition, that the dangerous condition created a reasonably foreseeable risk of the kind of injury which was incurred, and that . . .

. . . .
b. a public entity had actual or constructive notice of the dangerous condition under section 59:4-3 a sufficient time prior to the injury to have taken measures to protect against the dangerous condition.

Nothing in this section shall be construed to impose liability upon a public entity for a dangerous condition of its public property if the action the entity took to protect against the condition or the failure to take such action was not *palpably unreasonable*.

Id. (emphasis added). This represents a more stringent requirement than ordinary negligence. *See* J. FITZPATRICK, GOVERNMENTAL LIABILITY UNDER THE NEW JERSEY TORT CLAIMS ACT 29 (1981) (quoting *Williams v. Phillipsburg*, 171 N.J. Super. 278, 408 A.2d 827 (App. Div. 1979)). In *Williams*, the appellate division stated that "the duty of ordinary care, the breach of which is termed negligence, differs in degree from the duty to refrain from palpably unreasonable conduct. The latter standard implies a more obvious and manifest breach of duty and imposes a more onerous burden on the plaintiff." *Williams v. Phillipsburg*, 171 N.J. Super. 278, 286, 408 A.2d 827, 831 (App. Div. 1979).

The New Jersey Supreme Court originated the term "palpably unreasonable" in the pre-Act case of *Bergen v. Koppelman*, 52 N.J. 478, 480, 246 A.2d 442, 444 (1968), but failed to offer an explanation of its meaning. The term is also not defined in the Tort Claims Act; however, the Law Division presented a definition in *Polyard v. Terry*, 148 N.J. Super. 202, 372 A.2d 378 (Law Div. 1978), *rev'd on other grounds*, 160 N.J. Super. 497, 390 A.2d 653 (App. Div. 1978), *aff'd*, 79 N.J. 547, 401 A.2d 532 (1979). In his charge to the jury, the trial judge stated

[t]he term "palpably unreasonable" in this particular context means plainly, obviously, patently, distinctly or manifestly unreasonable. For a

The jury further determined that the township's conduct created a "dangerous condition," constituted a "nuisance," and proximately caused the contamination of the plaintiffs' well water.²³ Damages were awarded as compensation for emotional distress, diminished quality of life, and future medical surveillance costs.²⁴ The trial court dismissed the claim for enhanced risk of disease.²⁵

On appeal, the appellate division affirmed the damage award for diminished quality of life and upheld the trial court's rejection

public entity to have acted or failed to act in a fashion which is palpably unreasonable, it must be manifest and obvious that no prudent person would approve of its course of action or inaction.

Polyard, 148 N.J. Super. at 216, 372 A.2d at 385.

For additional applications of the term "palpably unreasonable" see *Birchwood Lakes Colony Club, Inc. v. Borough of Medford Lakes*, 90 N.J. 582, 596, 449 A.2d 472, 479 (1982) (public entity's conduct or omission to act must be shown to be palpably unreasonable); *Brown v. Brown*, 86 N.J. 565, 575, 432 A.2d 493, 498 (1981) (even if requisite conditions to liability are established, plaintiff could not prevail unless it was also shown that defendant's acts or omissions were "palpably unreasonable"); *Fox v. Parsippany-Troy Hills Twp.*, 199 N.J. Super. 82, 90-91, 488 A.2d 557, 562 (App. Div. 1985) (plaintiff bears burden to prove that defendant's action was "palpably unreasonable"); *McGowan v. Borough of Eatontown*, 151 N.J. Super. 440, 448, 376 A.2d 1327, 1331 (App. Div. 1977) (court determined that the issue was "whether the [s]tate's failure to salt and sand when having constructive notice from the local police of the formation of the ice in cold weather [was] 'palpably unreasonable'").

²³ *Ayers*, 106 N.J. at 565, 525 A.2d at 291. "Dangerous condition" is defined by the Act as "a condition of property that creates a substantial risk of injury when such property is used with due care in a manner in which it is reasonably foreseeable that it will be used." N.J. STAT. ANN. § 59:4-1(a) (West 1982). See *supra* note 22 for the text of § 59:4-2 setting forth the requisite proofs necessary to establish the liability of a public entity. See also *Birchwood Lakes Colony Club*, 90 N.J. at 593, 449 A.2d at 478 (1982) (municipality can be held liable under a nuisance cause of action for water pollution). See generally PROSSER & KEETON, *supra* note 3, §§ 87-88 (discussion of the nuisance doctrine).

²⁴ *Ayers*, 106 N.J. at 565-66, 525 A.2d at 291. The jury established varying individual damage awards based on such factors as degree and duration of exposure, proximity to the landfill, and age of the plaintiff. *Id.* at 565, 525 A.2d at 291. Damages were awarded in the amounts of \$2,056,480 for the emotional distress claim, \$5,396,940 for impairment of their quality of life, \$8,204,500 for future costs of medical surveillance and \$196,500 for miscellaneous expenses. *Id.* at 565-66, 525 A.2d at 291. The trial court reduced the total award by \$850,000, the amount of a pre-trial settlement with the Jackson Township engineer. *Id.* at 566, 525 A.2d at 291.

²⁵ *Id.* The court determined that the risk of future disease was far too speculative. *Ayers v. Township of Jackson*, 189 N.J. Super. 561, 568, 461 A.2d 184, 187 (Law Div. 1983), *aff'd in part, rev'd in part*, 202 N.J. Super. 106, 493 A.2d 1314 (App. Div. 1985), *aff'd in part, rev'd in part*, 106 N.J. 557, 525 A.2d 287 (1987). The court noted that none of the plaintiffs' experts offered an opinion on the probability that any of the individual plaintiffs would develop the diseases for which they were at risk. *Id.* at 566-67, 461 A.2d at 187 (emphasis added).

tion of the plaintiffs' claim for enhanced risk of disease.²⁶ The appellate division, however, reversed the lower court's judgments for emotional distress damages and future medical surveillance expenses.²⁷ The court affirmed the judgment reduction based on a pre-trial settlement.²⁸

The New Jersey Supreme Court granted certification to examine the claims dismissed by the appellate division and to reconsider the trial court's award of damages.²⁹ The court affirmed the dismissal of the claims for emotional distress and enhanced risk of disease.³⁰ Additionally, the court sustained the judgment for diminished quality of life damages³¹ and reinstated the jury verdict for medical surveillance damages.³²

Conventional tort law damage awards are intended to provide compensation for injury proximately caused by a defendant's conduct.³³ Determination of damages requires application of judicially established rules for the specific type of injury incurred.³⁴ While common law tort theories have continued to evolve in response to societal changes,³⁵ they are uniquely challenged by the damage claims emanating from toxic tort injuries.³⁶ In order to facilitate a fundamental understanding of the distinct field of legal development represented by each of the four damage claims of the *Ayers* plaintiffs, each principle area of compensation will be addressed independently.

²⁶ *Ayers*, 106 N.J. at 566, 525 A.2d at 291.

²⁷ *Id.* The appellate division concluded that emotional distress was equivalent to "pain and suffering," thereby precluding recovery under the New Jersey Tort Claims Act. *Ayers*, 202 N.J. Super. at 116, 493 A.2d at 1319. The Act specifically prohibits recovery from a public entity for pain and suffering unless the litigation involves "permanent loss of a bodily function, permanent disfigurement or dismemberment where the medical treatment expenses are in excess of \$1,000.00." N.J. STAT. ANN. § 59:9-2(d) (West 1982). The court's rejection of the award for future medical surveillance was premised upon its conclusion that the probability of the plaintiffs' contracting cancer or some other related disease was too remote to warrant imposition of extensive medical costs on the defendant. *Ayers*, 202 N.J. Super. at 122, 493 A.2d at 1323.

²⁸ *Ayers*, 106 N.J. at 566, 525 A.2d at 291.

²⁹ *Ayers v. Township of Jackson*, 102 N.J. 306, 508 A.2d 191 (1985).

³⁰ *Ayers*, 106 N.J. at 577, 598-99, 525 A.2d at 297, 308.

³¹ *Id.* at 572, 525 A.2d at 294.

³² *Id.* at 611, 525 A.2d at 315.

³³ See D. DOBBS, HANDBOOK ON THE LAW OF REMEDIES § 3.1 (1973); *Towards a Jurisprudence of Injury: The Continuing Creation of a System of Substantive Justice in American Tort Law*, Report to the A.B.A., 4-29 - 4-37 (1984).

³⁴ See D. DOBBS, *supra* note 33, at 138.

³⁵ See Ginsberg & Weiss, *supra* note 1, at 899.

³⁶ See *supra* notes 1-6 and accompanying text.

I. DIMINISHED QUALITY OF LIFE

The disposal of toxic substances frequently results in an interference with individual property interests.³⁷ The law of nuisance, therefore, represents a valid cause of action for those claims emanating from interferences with proprietary interests.³⁸ Historically, the doctrine of nuisance was considered an intentional tort; however, the *Restatement (Second) of Torts* has extended the doctrine beyond the intentional interference category³⁹ to include accidental invasions which would be actionable under theories of negligence⁴⁰ and strict liability.⁴¹ In essence, toxic tort damage claims premised upon a nuisance theory require establishment of both the tortious nature of the defendant's conduct and the substantial invasion of a property right.⁴²

³⁷ See G. NOTHSTEIN, *supra* note 1, at 325-27; PROSSER & KEETON, *supra* note 3, at 627; Ginsberg & Weiss, *supra* note 1, at 883-886.

³⁸ *Ayers*, 106 N.J. at 571-72, 525 A.2d at 294.

In order for a cause of action to be maintained under a private nuisance theory, it must be shown that:

- (1) The defendant acted with the intent of interfering with the use and enjoyment of the land by those entitled to that use;
- (2) There was some interference with the use and enjoyment of the land of the kind intended, although the amount and extent of that interference may not have been anticipated or intended;
- (3) The interference that resulted and the physical harm, if any, from that interference proved to be substantial . . . ;
- (4) The interference that came about under such circumstances was of such a nature, duration or amount as to constitute unreasonable interference with the use and enjoyment of the land.

PROSSER & KEETON, *supra* note 3, at 622-23.

³⁹ See RESTATEMENT (SECOND) OF TORTS § 822 (1977). The Restatement provides that:

One is subject to liability for a private nuisance if, but only if, his conduct is a legal cause of an invasion of another's interest in the private use and enjoyment of land, and the invasion is either

- (a) intentional and unreasonable, or
- (b) unintentional and otherwise actionable under the rules controlling liability for negligent or reckless conduct, or for abnormally dangerous conditions or activities.

Id.

Environmental pollution is an example of a nuisance claim which involves an interference with a property interest and yet is most likely unintended. Even though a landfill is intentionally created, the harm caused by the migration of contaminants is an unintended occurrence. See Ginsberg & Weiss, *supra* note 1, at 885.

⁴⁰ See RESTATEMENT (SECOND) OF TORTS § 282 (1965); Ginsberg & Weiss, *supra* note 1, at 886-88.

⁴¹ See RESTATEMENT (SECOND) OF TORTS § 519 (1976) which provides for strict liability for abnormally dangerous activities. The determination of whether an activity is abnormally dangerous requires a balancing of risk-utility factors. *Id.*

⁴² See Ginsberg & Weiss, *supra* note 1, at 884 nn.100-03. See also *New Jersey Dep't Env'tl Protection v. Exxon Corp.*, 151 N.J. Super. 464, 482, 376 A.2d 1339,

Diminished quality of life has long been recognized as an appropriate item of damages under the law of nuisance.⁴³ In *Dixon v. New York Trap Rock Corp.*,⁴⁴ the court determined that the defendant's blasting operation unreasonably interfered with the plaintiff's property rights.⁴⁵ The plaintiff in *Dixon* sought recovery for her state of anxiety directly caused by the nuisance.⁴⁶ The New York Court of Appeals held that such damages were appropriate since "discomfort and inconvenience caused by the disturbance of the property are valid grounds of recovery in an action for a nuisance."⁴⁷

The rationale behind this well-established legal principle⁴⁸ was explained in *Sterling v. Velsicol Chemical Corp.*⁴⁹ Velsicol Chemical Corp. owned and operated a chemical waste landfill which caused personal injuries and damage to the plaintiffs' property when hazardous chemicals escaped from the burial site and contaminated the plaintiffs' well water.⁵⁰ The plaintiffs premised

1348 (Ch. Div. 1977) (stating that in order to establish a nuisance, the plaintiff must demonstrate that "there has been an unreasonable, unwarranted or unlawful use by a person of his real property which is resulting in a material annoyance, inconvenience or hurt.") (citation omitted).

⁴³ See D. DOBBS, *supra* note 33, § 5.3, at 334; PROSSER & KEETON, *supra* note 3, § 89, at 639; RESTATEMENT (SECOND) OF TORTS § 929 (1977) (creating a category of compensation for "discomfort and annoyance" as a result of interference with a property interest). See, e.g., *Kornoff v. Kingsburg Cotton Oil Co.*, 45 Cal. 2d 265, 273-275, 288 P.2d 507, 512-13 (1955) (the disbursement of fumes, dust, dirt, lint and sediment from the defendant's cotton gin, which traveled into the plaintiffs' home, caused them discomfort and annoyance); *Miller v. Carnation Co.*, 39 Colo. App. 1, 4, 564 P.2d 127, 130 (Colo. Ct. App. 1977) (holding that the plaintiffs suffered annoyance and discomfort from the continual invasion of their property by flies and rodents from the defendant's adjoining poultry ranch).

⁴⁴ 293 N.Y. 509, 58 N.E.2d 517 (1944).

⁴⁵ *Id.* at 513, 58 N.E.2d at 517. The defendant's blasting vibrated the earth and caused actual damage to the plaintiffs' home. *Id.* The damage not only diminished the value of the property but also interfered with the plaintiffs' enjoyment of it. *Id.*

⁴⁶ *Id.* at 514, 58 N.E.2d at 518. The plaintiff was in a constant state of anxiety and fear over the blasting and its effect on her home. *Id.*

⁴⁷ *Id.*

⁴⁸ See *Alonso v. Hills*, 95 Cal. App. 2d 778, 214 P.2d 50 (Cal. Ct. App. 1950) (stating that plaintiff's fear for the safety of himself and his family caused by the defendant's blasting were a type of discomfort recoverable under a nuisance theory); *Nitram Chems. Inc. v. Parker*, 200 So. 2d 220 (Fla. Dist. Ct. App. 1967) (holding that recovery for annoyance, inconvenience, discomfort and illness was permitted where it was determined that the fumes, dust and noises from the defendant's plant constituted a nuisance); *Vestal v. Gulf Oil Corp.*, 149 Tex. 487, 235 S.W.2d 440 (1951) (holding that recovery for personal discomfort and annoyance included the fear and anxiety caused by the presence of gasoline fumes in their home which escaped from defendant's property).

⁴⁹ 647 F. Supp. 303 (W.D. Tenn. 1986).

⁵⁰ *Id.* at 306. The plaintiffs claimed that Velsicol was grossly negligent in the

their damage claims on the doctrines of nuisance, trespass, negligence and strict liability.⁵¹ Upon consideration of the nuisance theory, the court determined that Velsicol's actions constituted an interference with the plaintiffs' property rights of use and enjoyment.⁵² In analyzing the compensable elements of the damage claims, the *Sterling* court reasoned that the gravamen of the nuisance doctrine was the interference with the everyday lives of the residents.⁵³ Therefore, the court held that damages "for the disruption in the quality of [the plaintiffs'] lives caused by the wrongdoing of defendants" were recoverable.⁵⁴

II. EMOTIONAL DISTRESS

The concept of recovery for emotional distress, while continuing to be a subject of controversy, has undergone a substantial metamorphosis.⁵⁵ In those instances where a defendant's conduct causes an immediate physical injury to the plaintiff, the courts have allowed compensation for the purely psychological elements of damage.⁵⁶ An early New Jersey decision exemplifying the principle that in the absence of physical injury a plaintiff could not recover for emotional distress is *Ward v. West Jersey & Seashore R.R.*⁵⁷ *Ward* involved a claim for damages arising from the emotional distress injury sustained by the plaintiff when he

manner in which it selected the location for the landfill. *Id.* at 308. They further contended that the defendant's failure to contain the chemicals in corrosion resistant drums enhanced the leaking and migration of the pollutants into the groundwater. *Id.*

⁵¹ *Id.* at 309. The plaintiffs asserted that the operation of the toxic landfill constituted an abnormally dangerous activity and was an unnatural use of the property. *Id.* They also claimed that Velsicol permitted the toxic chemicals to escape from the landfill site which resulted in harm to the plaintiffs' persons and property. *Id.*

⁵² *Id.* at 319. The court acknowledged that a claim of nuisance could be established by showing "that the defendant has created or continued the condition causing the nuisance with full knowledge that the harm to the plaintiffs' interest [was] substantially bound to follow therefrom." *Id.* at 320. The court further noted that a nuisance could result from merely negligent conduct where the defendant failed to implement precautions against a danger which a reasonable man would have protected against. *Id.* Lastly, the court maintained that a nuisance could result from abnormally dangerous activities. *Id.*

⁵³ *Id.* at 321.

⁵⁴ *Id.*

⁵⁵ See PROSSER & KEETON, *supra* note 3, § 54, at 359-67.

⁵⁶ See PROSSER & KEETON, *supra* note 3, at 363 & nn.33-37. The rationale behind permitting this recovery is that the physical injury presents assurances that the emotional injury is real. *Id.*

⁵⁷ 65 N.J.L. 383, 47 A. 561 (Sup. Ct. 1900), *overruled*, 45 N.J. 559, 214 A.2d 12 (1965). The *Falzone* court specifically concluded that *Ward* "should no longer be followed in New Jersey." *Id.* at 569, 214 A.2d at 17.

was permitted, through the negligence of the defendant's employee, to drive on a railroad crossing into the path of an approaching train.⁵⁸ Although the plaintiff feared for his safety, he was not actually physically injured.⁵⁹ He did, however, experience physical symptoms as a result of his emotional trauma.⁶⁰ In resolving the issue of "whether, in an action for negligence, the mere apprehension of personal injuries, which are not in fact received, [would] support an action, when physical suffering follows as a consequence of the mental disturbance" the court relied on the decisions of neighboring jurisdictions.⁶¹ Based on the consensus of opinion, the court ruled that such injuries were non-actionable.⁶²

The traditional rule requiring physical impact as a pre-requisite to recovery for emotional distress damages⁶³ was rejected by the New Jersey Supreme Court in *Falzone v. Busch*.⁶⁴ The plaintiff

⁵⁸ *Ward*, 65 N.J.L. at 383, 47 A. at 561. The defendant railroad's gatekeeper lowered the railroad crossing gates before the plaintiff's vehicle was completely over the railroad tracks. *Id.*

⁵⁹ *Id.* at 384, 47 A. at 561.

⁶⁰ *Id.* at 383, 47 A. at 561.

⁶¹ *Id.* at 384-85, 47 A. at 561-62 (citing *Wyman v. Leavitt*, 71 Me. 227 (1880) (mental anxiety without physical injury is not an element of damages); *Spade v. Lynn & Boston R.R.*, 168 Mass. 285, 47 N.E. 88 (1897) (no recovery for a personal injury caused merely by fright and psychological disturbance); *Mitchell v. Rochester Ry. Co.*, 151 N.Y. 107, 45 N.E. 354 (Ct. App. 1896) (defendant's negligent operation of a horse-car which subjected the plaintiff to fright which subsequently caused the plaintiff to suffer a miscarriage held insufficient to maintain a cause of action since unaccompanied by immediate physical injury)).

⁶² *Id.* at 386, 47 A. at 562.

If the right of recovery in this class of cases should be once established, it would naturally result in a flood of litigations in cases where the injury complained of may be easily feigned without detection, and where the damages must rest upon mere conjecture and speculation. The difficulty which often exists in cases of alleged physical injuries, in determining whether they exist, and, if so, whether they were caused by the negligent act of the defendant, would not only be greatly increased, but a wide field would be opened for unrighteous or speculative claims.

Id. (quoting *Mitchell v. Rochester Ry. Co.*, 151 N.Y. 107, 110, 45 N.E. 354, 354-55 (Ct. App. 1896)).

⁶³ See *Tuttle v. Atlantic City R.R.*, 66 N.J.L. 327, 332, 49 A. 450, 451 (1901) (holding that if a defendant negligently places the plaintiff "under a reasonable apprehension of personal physical injury, and plaintiff, in a reasonable effort to escape, sustains physical injury," recovery is permitted for the physical injury plus the emotional distress which naturally flows from the physical injury); *Greenberg v. Stanley*, 51 N.J. Super. 90, 105-06, 143 A.2d 588, 597 (App. Div. 1958), *modified on other grounds*, 30 N.J. 485, 153 A.2d 833 (1959) (concluding that where some physical injury to a person results from defendant's negligence, no matter how slight, the individual may recover for her entire physical and emotional injuries).

⁶⁴ 45 N.J. 559, 214 A.2d 12 (1965).

in *Falzone* was seated in her parked car when the defendant's motor vehicle veered across the roadway heading directly towards the plaintiff's car.⁶⁵ Although no physical impact actually occurred, the plaintiff feared for her safety.⁶⁶ The court ruled that recovery for emotional distress would be appropriate so long as the defendant's negligence created the potential for physical harm.⁶⁷

One year later, in *Caputzel v. The Lindsay Co.*,⁶⁸ the court distinguished between emotional harm resulting from the reasonable fear of physical injury and unnatural psychological trauma, which causes unforeseeable physical consequences.⁶⁹ In *Caputzel*, the plaintiff suffered a heart attack after he became emotionally distraught as a result of consuming discolored water, which he feared was poisoned.⁷⁰ The court, in explaining its *Falzone* holding, stated that recovery should be permissible in cases involving emotional injury without physical impact only if the emotional harm was a reasonably foreseeable consequence of the defendant's conduct.⁷¹

A slightly different aspect of emotional distress injury was addressed in *Berman v. Allan*.⁷² In *Berman*, the parents of a Down's Syndrome child brought an action for wrongful birth.⁷³ Specifically, the parents sought recovery for the emotional trauma they sustained upon discovering that their child was afflicted with Down's Syndrome.⁷⁴ Their claim was unique in that it was not based on any causal relationship between the child's condition and the physician's treatment, but rather on the theory

⁶⁵ *Id.* at 561, 214 A.2d at 13.

⁶⁶ *Id.*

⁶⁷ *Id.* at 569, 214 A.2d at 17. The court specifically held that "where negligence causes fright from a reasonable fear of immediate personal injury . . . the injured person may recover if such bodily injury or sickness would be regarded as proper elements of damage had they occurred as a consequence of direct physical injury rather than fright." *Id.*

⁶⁸ 48 N.J. 69, 222 A.2d 513 (1966).

⁶⁹ *Id.* at 73-74, 222 A.2d at 515. The *Caputzel* court relied upon the general elements of negligence "duty, and the breach thereof, and proximate, or legal, cause of the injury . . ." *Id.* at 74, 222 A.2d at 516. The court accepted the following formula: "liability should depend on the defendant's foreseeing fright or shock severe enough to cause substantial injury in a person normally constituted, thus then bringing the plaintiff within the 'zone of risk.'" *Id.* at 76, 222 A.2d at 517 (citation omitted).

⁷⁰ *Id.* at 72, 222 A.2d at 514.

⁷¹ *Id.* at 74, 222 A.2d at 517.

⁷² 80 N.J. 421, 404 A.2d 8 (1979).

⁷³ *Id.* at 423, 404 A.2d at 10.

⁷⁴ *Id.* at 433, 404 A.2d at 14.

that the defendant physician negligently failed to inform them of the availability of amniocentesis and the potential risk of birth defects.⁷⁵ Recognizing that psychological harm is an injury separate from physical injury, the court decided that emotional distress damages were recoverable.⁷⁶ The court further acknowledged that the special circumstances involved supported the genuineness of the claim.⁷⁷

The significance of recognizing emotional distress as a distinct injury was further analyzed in *Portee v. Jaffee*.⁷⁸ In *Portee*, a mother witnessed her child's suffering and subsequent death when her son became trapped in an elevator shaft.⁷⁹ The court was presented with the novel issue of whether liability for negligent conduct should be extended to include the emotional trauma sustained by a person who witnessed the accident but was not in any danger of personal harm.⁸⁰ In holding that such injuries were actionable, the court determined that the appropriate standard would be reasonable foreseeability rather than the more tenuous zone of risk requirement.⁸¹

While the law in New Jersey remains in a state of flux on the issue of compensation for emotional distress,⁸² some jurisdic-

⁷⁵ *Id.*

⁷⁶ *See id.*, 404 A.2d at 15.

⁷⁷ *Id.*, 404 A.2d at 14. In his separate opinion, Justice Handler discussed the unique nature of parenthood as constituting a special circumstance supporting the genuineness of the claim. *Id.* at 438-40, 404 A.2d at 17-18 (Handler, J., concurring in part and dissenting in part).

⁷⁸ 84 N.J. 88, 417 A.2d 522 (1980).

⁷⁹ *Id.* at 91, 417 A.2d at 522-23. Police officers tried for over four hours to rescue the child. *Id.*, 471 A.2d at 522. During this time, the child's mother "watched as her son moaned, cried out and flailed his arms. Much of the time she was restrained from touching him, apparently to prevent interference with the attempted rescue. . . . He died while still trapped, his mother a helpless observer." *Id.*, 417 A.2d at 522-23.

⁸⁰ *Id.* at 90, 417 A.2d at 522. The court held that in order to maintain a cause of action for negligent infliction of emotional distress the following elements must be proven: "(1) the death or serious physical injury of another caused by defendant's negligence; (2) a marital or intimate, familial relationship between plaintiff and the injured person; (3) observation of the death or injury at the scene of the accident; and (4) resulting severe emotional distress." *Id.* at 101, 417 A.2d at 528.

⁸¹ *See id.* at 95-96, 417 A.2d at 525. The court reasoned that the zone of risk requirement was as arbitrary a standard as the former physical impact rule. *Id.* at 96, 417 A.2d at 525. Therefore, the court concluded that the "interest in personal emotional stability is worthy of legal protection against unreasonable conduct." *Id.* at 101, 417 A.2d at 528. The court further determined that it was reasonably foreseeable that a mother who witnesses the agonizing death of her child would suffer emotional trauma. *Id.* at 95, 417 A.2d at 525.

⁸² *See Portee*, 84 N.J. at 101, 417 A.2d at 528 (rejecting the physical injury requirement in bystander cases); *Berman*, 80 N.J. at 433-34, 404 A.2d at 15 (noting the

tions have permitted recovery for severe emotional distress alone, without regard to resulting physical injury or illness.⁸³ More significantly, a further judicial change appears to be taking place in the area of emotional distress damages in toxic tort litigation.⁸⁴ Some courts have relaxed the physical injury requirement and have found that the element of physical harm is satisfied when the plaintiff sustains injury to his immune system caused by exposure to and ingestion of toxic chemicals.⁸⁵

special factual circumstances of the case, physical manifestation of emotional distress not required). See also *Strachan v. John F. Kennedy Memorial Hosp.*, 109 N.J. 523, 538 A.2d 346 (1988). In *Strachan*, the New Jersey Supreme Court recently considered the issue of emotional distress damages. The plaintiffs suffered extreme emotional harm as a direct result of the defendant hospital's failure to release the body of their brain-dead son which the hospital kept connected to a respirator for a period of three days. *Id.* at 534, 538 A.2d at 351. While considering the issue of recovery for emotional distress without proof of physical manifestations of injury, the court declined to decide whether the "abandonment of the physical injury requirement for emotional distress claims should extend to all 'direct' claims for emotional distress." *Id.* at 538, 538 A.2d at 353. The court's analysis reiterated the purpose of the physical injury requirement as a limitation on fabricated claims, and further acknowledged the compelling evidence of emotional distress in the present situation. *Id.* at 534, 537, 538 A.2d at 351, 353. However, since the factual situation of *Strachan* was within the recognized exception for "negligent handling of a corpse," the court avoided a ruling which would permit recovery for emotional distress injuries not accompanied by physical manifestations. *Id.* at 538, 538 A.2d at 353.

⁸³ See, e.g., *Molien v. Kaiser Found. Hosps.*, 27 Cal. 3d 916, 929-30, 616 P.2d 813, 821, 167 Cal. Rptr. 831, 839 (1980) (abandoning the physical injury requirement of recovery for emotional distress since the jury could adequately determine the validity and extent of emotional distress injury); *Rodrigues v. State*, 52 Haw. 156, 173, 472 P.2d 509, 520 (1970) (abolishing the physical injury requirement and conditioning recovery upon the following standard: "serious mental distress may be found where a reasonable man, normally constituted, would be unable to adequately cope with the mental distress engendered by the circumstances of the case").

⁸⁴ See S. BIRNBAUM & D. GROSS, *PROOF OF CAUSATION AND DAMAGES IN TOXIC CHEMICAL, HAZARDOUS WASTE, AND DRUG CASES* 425-426 (1987).

⁸⁵ See, e.g., *Barth v. Firestone Tire & Rubber Co.*, 661 F. Supp. 193, 196 (N.D. Cal. 1987) (immune system injury, resulting from exposure to toxic chemicals, was held sufficient to satisfy requirement of physical injury on motion to dismiss); *Anderson v. W.R. Grace & Co.*, 628 F. Supp. 1219, 1226-27 (D. Mass. 1986) (requirement of physical harm may be satisfied by subcellular harm and injury to the plaintiffs' immune systems caused by their exposure to and ingestion of toxic chemicals).

Furthermore, recognition of recovery for emotional distress injuries without resulting physical consequences has been justified in toxic tort cases on the theory that the "impact" satisfied the physical injury requirement. *Hagerty v. L & L Marine Servs., Inc.*, 788 F.2d 315, 318 n.1 (5th Cir. 1986). In *Hagerty*, the plaintiff was accidentally drenched with toxic chemicals. *Id.* at 316. The court found that the plaintiff "did suffer a 'physical injury' from the drenching which constitute[d] an 'impact.'" *Id.* at 318.

III. ENHANCED RISK OF DISEASE

Judicial uncertainty is even more apparent regarding the issue of damages for enhanced risk of disease.⁸⁶ It has long been accepted that damages may be obtained for the future consequences of a present tortious injury.⁸⁷ In an effort to avoid awarding damages based on speculation and conjecture, the courts have developed the standard of reasonable certainty.⁸⁸

In *Coll v. Sherry*,⁸⁹ the New Jersey Supreme Court held that a plaintiff was entitled to recover for the future consequences of an injury if a reasonable probability of occurrence existed.⁹⁰ The plaintiff in *Coll* sustained injuries when the defendant's automobile negligently collided with his truck.⁹¹ At trial, the plaintiff's counsel was precluded from ascertaining, through expert medical testimony, the probability of future surgery.⁹² This was held to be reversible error and the case was remanded for a new trial on the issue of damages.⁹³

In *Laswell v. Brown*,⁹⁴ the mere possibility that the plaintiffs

⁸⁶ See G. NOTHSTEIN, *supra* note 1, §§ 16.04-16.11, at 457-77.

⁸⁷ See D. DOBBS, *supra* note 33, § 8.1, at 551; G. NOTHSTEIN, *supra* note 1, §§ 17.06, 17.11, at 502-04, 510-11. See also *Kimble v. Degenring*, 116 N.J.L. 602, 604, 186 A. 451 (Sup. Ct. 1936) (stating that in a tort action, the measure of damages includes "the total physical injuries suffered—not merely those up to the time of the trial, but also those prospective damages which can be estimated as reasonably certain to occur").

⁸⁸ See G. NOTHSTEIN, *supra* note 1, § 17.02, at 495-97. The rule of reasonable certainty "[p]ermits recovery of damages only for such future pain and suffering as is reasonably certain to result from the injury received. To authorize recovery under such rule for permanent injury, permanency of injury must be shown with reasonable certainty, which is not mere conjecture or likelihood or even a probability of such injury." BLACK'S LAW DICTIONARY 1138 (5th ed. 1979) (citations omitted).

⁸⁹ 29 N.J. 166, 148 A.2d 481 (1959).

⁹⁰ *Id.* at 175, 148 A.2d at 486. The court specifically ruled that "[i]f the prospective consequences may, in reasonable probability, be expected to flow from the past harm, plaintiff is entitled to be indemnified for them." *Id.* See also *Martin v. City of New Orleans*, 678 F.2d 1321, 1327 (5th Cir. 1982) (enhanced risk damages were awarded where bullet lodged in neck would continue to present a risk of serious future complications); *Starlings v. Ski Roundtop Corp.*, 493 F. Supp. 507, 510 (N.D. Pa. 1980) (increased risk of arthritis was compensable as part of plaintiff's knee injury award).

⁹¹ *Coll*, 29 N.J. at 169-71, 148 A.2d at 483-84.

⁹² *Id.* at 173-74, 148 A.2d at 485. Upon objection to the questioning of the plaintiff's medical expert witness concerning the probabilities of necessary future surgery and the recuperation period and expense of such surgery, the trial judge stated that: "What the future may present this jury cannot speculate on." *Id.* at 174, 148 A.2d at 485.

⁹³ *Id.* at 176-77, 148 A.2d at 486-87.

⁹⁴ 683 F.2d 261 (8th Cir. 1982), *cert. denied*, 459 U.S. 1210 (1983).

would suffer future injury was insufficient to sustain their claim for enhanced risk of disease. The plaintiffs in *Laswell* were children of a deceased serviceman who had been exposed to low-level radiation while on active duty in the army.⁹⁵ The plaintiffs sought damages for their alleged increased risk of latent cellular or genetic defects.⁹⁶ The court of appeals affirmed the lower court's dismissal of the claim, holding that the plaintiffs had not sustained any present damages.⁹⁷ The court ruled that more than "the mere possibility of some future harm" was required to sustain a claim for damages.⁹⁸

The specific issues concerning enhanced risk of disease damages were addressed by the New Jersey Supreme Court in *Evers v. Dollinger*.⁹⁹ The defendant physician's misdiagnosis of Mrs. Evers' cancer resulted in a seven-month delay between the noticeable presence of her breast tumor and its subsequent surgical removal.¹⁰⁰ The plaintiff alleged in her complaint that the delay in treatment caused by the defendant's misdiagnosis enhanced the risk of cancer recurrence.¹⁰¹ The trial court refused admission of expert testimony on the issue of enhanced risk and directed a verdict in favor of the defendant at the close of the plaintiff's case.¹⁰² The supreme court acknowledged that this case presented an extraordinary set of circumstances in that by the time it heard arguments on the case, Mrs. Evers' cancer had recurred.¹⁰³ The New Jersey Supreme Court, in addressing the issue of enhanced risk of disease damages, held that on remand, Mrs. Evers should be allowed to demonstrate "within a reasonable degree of medical probability" that the delay increased her

⁹⁵ *Laswell*, 683 F.2d at 262. The decedent participated in three nuclear bomb tests while stationed in the South Pacific. *Id.*

⁹⁶ *Id.* at 263. The children alleged that the harm sustained by their father was genetically transferred to them. *See id.* All the children were born after their father's discharge from the army. *Id.*

⁹⁷ *See id.* at 269.

⁹⁸ *Id.*

⁹⁹ 95 N.J. 399, 471 A.2d 405 (1984).

¹⁰⁰ *Id.* at 402-04, 471 A.2d at 407-08.

¹⁰¹ *Id.* at 404, 471 A.2d at 408.

¹⁰² *Id.* at 405-06, 471 A.2d at 408-09. In discussing the specific form of cancer from which the plaintiff suffered, one medical expert opined that one out of four patients would have a recurrence of the cancer. *Id.* at 405, 471 A.2d at 408. The trial judge refused to admit the testimony into evidence determining that "the experts were unable to quantify the increased risk of recurrence of cancer." *Id.* He ruled that "it has to be more probable than not or within a reasonable degree of medical probability that, as a proximate result of any malpractice . . . [plaintiff] would fall within the 25 percentile." *Id.*

¹⁰³ *Id.* at 417, 471 A.2d at 415.

risk of recurrence of cancer.¹⁰⁴ While *Evers* recognized the legitimacy of damages for increased risk of disease when the risk had materialized, the court avoided deciding the issue of abstract risk.¹⁰⁵

A claim of recovery for abstract enhanced risk of disease was rejected in *Devlin v. Johns-Manville Corp.*¹⁰⁶ *Devlin* involved an action brought by workers exposed to asbestos.¹⁰⁷ In denying the enhanced risk of disease damage claim on the basis that it was unquantifiable, the court maintained that the plaintiffs retained their right to sue at a future time if they in fact, developed cancer from such exposure.¹⁰⁸

A slightly different aspect of the enhanced risk of disease claim was examined in *Anderson v. W.R. Grace & Co.*¹⁰⁹ The plaintiffs in *Anderson* were exposed to and ingested toxic chemicals found in their well water which was allegedly contaminated by the defendants.¹¹⁰ In seeking recovery for their enhanced risk of disease, the plaintiffs asserted that their claims were merely an element of compensable damages stemming from a present injury.¹¹¹ The court was willing to award the plaintiffs' general tort law compensation but conditioned the recovery for future resulting harm on two factors: first, a "reasonable probability" that the harm will occur,¹¹² and second, an accrual of a cause of action for the future harm at the time compensation is sought.¹¹³ The court

¹⁰⁴ *Id.* More specifically, the court stated that the plaintiff should be permitted to demonstrate, within a reasonable degree of medical probability, that the seven months delay resulting from defendant's failure to have made an accurate diagnosis and to have rendered proper treatment increased the risk of recurrence or of distant spread of plaintiff's cancer, and that such increased risk was a substantial factor in producing the condition from which plaintiff currently suffers.

Id.

¹⁰⁵ *See id.* at 406, 471 A.2d at 409. "[W]e need not determine whether the unquantified (and unquantifiable) but nevertheless certain increase in the risk, standing alone, is sufficient injury to sustain plaintiff's cause of action." *Id.*

¹⁰⁶ 202 N.J. Super. 556, 495 A.2d 495 (Law Div. 1985).

¹⁰⁷ *Id.* at 559, 495 A.2d at 497.

¹⁰⁸ *Id.* at 565, 495 A.2d at 500.

¹⁰⁹ 628 F. Supp. 1219 (D. Mass. 1986).

¹¹⁰ *Id.* at 1222. The defendants allegedly contaminated the ground water and consequently the wells with toxic chemicals including trichloroethylene and tetrachloroethylene. *Id.*

¹¹¹ *Id.* at 1230. Massachusetts law permits a plaintiff to recover for "all damages that reasonably are to be expected to follow but not to those that possibly may follow the injury which he has suffered." *Id.*

¹¹² *Id.* at 1231.

¹¹³ *Id.* at 1230-31. Under present Massachusetts law, a cause of action accrues at

thus perceived the issue as "whether, upon the manifestation of one or more diseases, a cause of action accrues for all prospective diseases so that a plaintiff may seek to recover for physically distinct and separate diseases which may develop in the future."¹¹⁴ In resolving this question, the court held that if the diseases which the plaintiffs claimed to be at an increased risk of developing, "[were] part of the same disease process" as the illnesses from which they were presently suffering, then damages for the future disease would be recoverable upon "showing a 'reasonable probability' that they [would] occur."¹¹⁵ Further, the court determined that if there was no connection between the future diseases and the present illnesses, the plaintiffs' cause of action would not accrue until the manifestation of the disease.¹¹⁶

In *Sterling v. Velsicol Chemical Corp.*,¹¹⁷ the court viewed enhanced risk of disease as a present existing condition rather than as a speculative future injury.¹¹⁸ The defendant in *Sterling* operated a toxic chemical dump site which adjoined the plaintiffs' property.¹¹⁹ The chemicals deposited at the landfill infiltrated the groundwater and ultimately polluted the water utilized by the plaintiffs.¹²⁰ On the issue of liability, the court concluded that Velsicol's activity was both "ultrahazardous" and "abnormally dangerous," thereby subjecting the company to strict liability for all damages.¹²¹ In finding for the plaintiffs, the *Velsicol* court rec-

the time the disease manifests itself. *Id.* at 1231 (citing *Olsen v. Bell Tel. Laboratories, Inc.*, 388 Mass. 171, 175, 445 N.E.2d 609, 612 (1983)).

¹¹⁴ *Id.* at 1231. See *id.* at 1227 n.4 (listing of the plaintiffs' present illnesses).

¹¹⁵ *Id.* at 1231.

¹¹⁶ *Id.* Relying on public policy, the court maintained that it would not be judicially sound to permit lawsuits on the speculation that a serious disease would manifest itself in the future. *Id.* at 1232 (quoting *Gore v. Daniel O'Connell's Sons, Inc.*, 17 Mass. App. Ct. 645, 648, 461 N.E.2d 256, 259 (1984)). A further justification advanced by the court was the potential unfairness which would result by present compensation. *Id.* The court reasoned that those who later developed the cancer would have been undercompensated, while those who did not would receive a windfall. *Id.*

¹¹⁷ 647 F. Supp. 303 (W.D. Tenn. 1986).

¹¹⁸ *Id.* at 322. Scientific experts testified that "to a reasonable degree of scientific certainty," each of the plaintiffs currently has a condition commonly referred to as "'enhanced or increased susceptibility' to disease." *Id.* at 321-22. These experts further opined that the condition directly resulted from the consumption of contaminated water. *Id.* at 322.

¹¹⁹ *Id.* at 308.

¹²⁰ *Id.* at 311.

¹²¹ *Id.* at 315-16. The reasons advanced by the court for its imposition of strict liability included:

1. There was a high degree of risk of some harm to the person, land or chattels of others, particularly after the 1967 USGS report;

ognized the present cellular damage and biological changes caused by the ingestion, inhalation and contact exposure with the toxic chemicals to be the genesis of the present condition of enhanced risk of disease.¹²²

IV. MEDICAL SURVEILLANCE

Stemming from the claim for enhanced risk of disease is the damage claim for medical surveillance costs.¹²³ In *Friends for All*

2. There was a likelihood that the harm that results would be great, such as the increased risk of many diseases including cancer, and the destruction of plaintiffs' quality of life;
3. The inability to eliminate the risk by the exercise of reasonable care;
4. The extent to which the activity at the dump was not a matter of common usage and as a means of disposal and violated the state of the art;
5. The inappropriateness of the location of the dump where it was carried out; and
6. The extent to which its value to the community (none) was outweighed by its dangerous attributes (great).

Id. at 316. The court further determined that Velsicol's conduct was negligent. *Id.* Additionally, the court found that Velsicol had trespassed on the plaintiffs' property and that by intentionally interfering with the plaintiffs' use and enjoyment of their land, Velsicol's conduct created a nuisance. *Id.* at 319.

¹²² *Id.* at 322. The court attempted to explain the unique nature of the enhanced risk of disease claim.

It is imperative at the outset to set forth the exact nature of the item of damages commonly known as "increased susceptibility" or "increased risk." For once it is understood what that item of damages consists of, it becomes clear those damages are recoverable under traditional principles of damage law

To begin with, it must be emphasized that the increased susceptibility to kidney and liver disease and cancer is a presently existing condition in each plaintiff who suffered exposure to the various toxins. Plaintiffs produced scientific experts who testified, that, to a reasonable degree of scientific certainty, each plaintiff now has a presently existing condition known as "enhanced or increased susceptibility" to disease. Finally, they testified that the condition resulted from consuming the Velsicol chemicals in the water.

Id. at 321-22.

¹²³ See G. NOTHSTEIN, *supra* note 1, § 17.11, at 510-11. See also C. McCORMICK, *supra* note 5, § 90, at 323-27 (damages include reasonable medical expenditures, both past and future, which are the result of a demonstrated injury).

This traditional tort law damage rule has long been accepted by the New Jersey courts. See, e.g., *Shroeder v. Perkel*, 87 N.J. 53, 71, 432 A.2d 834, 842 (1981) (damages awarded for the future medical expenses required for a child with cystic fibrosis); *Coll v. Sherry*, 29 N.J. 166, 175, 148 A.2d 481, 486 (1959) (cost of future operation held a proper element of damages); *Work v. Philadelphia Supply Co.*, 95 N.J.L. 193, 196, 112 A. 185, 186 (1920) (recovery permitted for "such reasonable outlay in the future as may be necessary [for plaintiff] to heal herself and her injuries").

Children, Inc. v. Lockheed Aircraft Corp.,¹²⁴ the court held that the defendant's negligence proximately caused the need for medical surveillance.¹²⁵ The plaintiffs in *Friends for All Children* were Vietnamese orphaned children who survived a plane crash during "Operation Babylift."¹²⁶ The children endured decompression and loss of oxygen both of which could have potentially caused brain damage.¹²⁷ The court addressed the issue of whether the costs of diagnostic neurological examinations were compensable without confirmation of other injury.¹²⁸ In sustaining the claim, the court reasoned that the comprehensive medical examinations would not have been necessary "but for" the decompression and hypoxia which the children endured aboard the defendant's aircraft.¹²⁹

Compensation for future medical costs without the presence of existing injury was similarly upheld in *Hagerty v. L & L Marine Services, Inc.*¹³⁰ While on duty as a tankerman, Hagerty was soaked with toxic chemicals due to an equipment malfunction which occurred while loading chemicals onto a barge.¹³¹ Because of the carcinogenic effect of the chemicals, Hagerty sought recovery for the costs of future periodic diagnostic tests and medical examinations necessary to ensure early detection of a cancerous condition.¹³² The court held that the claim for future medical surveillance expenses could be included in a damage award if they were reasonably necessary and medically advisable.¹³³

¹²⁴ 746 F.2d 816 (D.C. Cir. 1984).

¹²⁵ *Id.* at 825. The court reasoned that the comprehensive medical examinations would not have been necessary "but for" the decompression and hypoxia which the children endured aboard the defendant's plane which ultimately crashed. *Id.*

¹²⁶ *Id.* at 819. "Operation Babylift" was a mission undertaken during the final days of the United States' presence in South Vietnam for the purpose of transporting Vietnamese orphans to the United States. *Id.*

¹²⁷ *Id.*

¹²⁸ *Id.* at 824.

¹²⁹ *Id.* at 825. The court further concluded that the two principal tort law purposes of deterrence and compensation would be served by the recognition of the claim as a proper element of damages. *Id.*

¹³⁰ 788 F.2d 315 (5th Cir. 1986).

¹³¹ *Id.* at 317. Hagerty was employed as a tankerman on a barge owned by L. & L. Marine Services, Inc. *Id.* The chemical which completely drenched Hagerty was dripolene, a chemical containing toluene, benzene and xyolene. *Id.*

¹³² *Id.* at 319. Presently, Hagerty does not have cancer, nor has he exhibited any physical manifestations of cancer symptoms. *Id.* at 317. The physical symptoms immediately resulting from his exposure consisted of a brief episode of dizziness and leg cramps, followed a day later by a stinging sensation in his extremities. *Id.*

¹³³ *Id.* at 319. The court further acknowledged the validity of the claim under the "avoidable consequences rule," since a plaintiff is required to obtain medically recommended treatment so that any future recovery for a condition, which could have

The necessity of future medical monitoring for early detection of disease was acknowledged by the court in *Barth v. Firestone Tire & Rubber Co.*¹³⁴ as a significant justification for imposing liability on a defendant.¹³⁵ The plaintiffs in *Barth* instituted suit against their employer, the Firestone Tire & Rubber Company, seeking recovery for injuries caused by exposure to various chemicals used in the manufacture of its tires.¹³⁶ The specific relief sought included the creation of a medical monitoring fund.¹³⁷ Noting the irreparable harm that may result from the postponement of diagnosis and treatment, the court recognized the claim for equitable relief.¹³⁸

*Ayers v. Township of Jackson*¹³⁹ marks the New Jersey Supreme Court's attempt to reconcile traditional tort law damage principles with the unique circumstances presented in toxic tort litigation.¹⁴⁰ The *Ayers* court analyzed the plaintiffs' damage claims for diminished quality of life, emotional distress, enhanced risk of disease and medical surveillance costs in conjunction with the limitations imposed by the New Jersey Tort Claims Act.¹⁴¹

In examining the plaintiffs' claims for diminished quality of life damages, the court acknowledged that such claims were within the categories of compensation created for a private nuisance.¹⁴² Furthermore, the court concurred with the appellate court's conclusion that the discomfort and inconvenience endured by the plaintiffs resulted from the interference with their right to obtain uncontaminated water from their wells.¹⁴³ The

been avoided or alleviated, would not be barred. *Id.* For a discussion of the avoidable consequences rule, see D. DOBBS, *supra* note 33, § 3.7, at 186-91 and C. McCORMICK, *supra* note 5, § 36, at 136-37.

¹³⁴ 661 F. Supp. 193 (N.D. Cal. 1987).

¹³⁵ *See id.* at 205.

¹³⁶ *Id.* at 195. The plaintiff and others like him were exposed to benzene as well as other heavy metals. *Id.*

¹³⁷ *Id.* at 203. One purpose of the fund would be the collection and dissemination of information concerning the potential diseases relating to the specific chemicals to which the plaintiffs were exposed. *Id.*

¹³⁸ *See id.* at 203-05. *See also In re "Agent Orange" Prod. Liab. Litig.*, 611 F. Supp. 1396 (E.D.N.Y. 1985), *aff'd*, 818 F.2d 179 (2d Cir. 1987) (creation of a fund for distribution of settlement).

¹³⁹ 106 N.J. 557, 525 A.2d 287 (1987).

¹⁴⁰ *See id.* at 587-88, 525 A.2d at 302-03.

¹⁴¹ *See id.* at 565, 525 A.2d at 291.

¹⁴² *Id.* at 571, 525 A.2d at 294. The court determined that the plaintiffs' diminished quality of life was directly associated with damage to their property. *Id.* These damages represented a distinct interference with the use and enjoyment of the plaintiffs' property. *Id.* at 571-72, 525 A.2d at 294.

¹⁴³ *Id.* at 570-71, 525 A.2d at 293-94.

court also agreed with the appellate division's conclusion that the inconvenience and disruption of the plaintiffs' lifestyles were not a type of pain and suffering ordinarily barred by the New Jersey Tort Claims Act.¹⁴⁴ In interpreting the statutory language, the court ruled that the intention of the Act was not to prohibit claims associated with the interference of an interest in property, but was rather aimed at limiting the recovery for pain and suffering associated with personal injuries.¹⁴⁵ Accordingly, the court affirmed the judgment awarding compensation for the diminished quality of life.¹⁴⁶

In evaluating the plaintiffs' request for emotional distress damages,¹⁴⁷ the court first qualified emotional distress as being within the New Jersey Tort Claims Act's definition of injury.¹⁴⁸ The court acknowledged that New Jersey case law has eliminated the physical impact requirement for recovery of emotional dis-

¹⁴⁴ *Id.*, 525 A.2d at 294. The bar against recovery for pain and suffering was interpreted by the court "to apply to the intangible, subjective feelings of discomfort that are associated with personal injuries." *Id.* at 571, 525 A.2d at 294. See also *supra* note 27 (discussing the New Jersey Tort Claims Act's limitation on recovery for pain and suffering).

¹⁴⁵ *Ayers*, 106 N.J. at 571, 525 A.2d at 294. The property interest invaded by defendant's conduct was the right of the plaintiffs to obtain drinkable running water from their own wells. *Id.* at 570-71, 525 A.2d at 293-94. The appellate division, in rejecting the township's assertion that the plaintiffs' aggravation, discomfort and annoyance, caused by the loss of their water supply, was a form of "pain and suffering," concluded that a clear distinction existed between

the subjectively measured damages for pain and suffering, which are not compensable by the Tort Claims Act, and those which objectively affect quality of life by causing an interference with the use of one's land through inconvenience and the disruption of daily activities.

Ayers v. Township of Jackson, 202 N.J. Super 106, 118, 493 A.2d 1314, 1320 (App. Div. 1985), *aff'd in part, rev'd in part*, 106 N.J. 557, 525 A.2d 287 (1987).

¹⁴⁶ *Ayers*, 106 N.J. at 572, 525 A.2d at 294.

¹⁴⁷ *Id.* at 572-77, 525 A.2d at 294-97. Many of the plaintiffs testified that they experienced feelings of fear, anxiety and depression because of the knowledge that they were exposed to and ingested contaminated water for a long period of time. *Id.* at 572, 525 A.2d at 294.

In support of the legitimacy of their emotional distress injuries, the plaintiffs presented, as an expert witness, a clinical psychologist who had conducted psychological testing on 88 of the plaintiffs. *Id.* at 573, 525 A.2d at 295. The expert testified that the sample group "manifested abnormally high levels of stress, depression, health concerns and psychological problems." *Id.* She further opined that these psychological conditions "were causally related to the contamination of plaintiffs' water supply." *Id.*

¹⁴⁸ *Id.* at 575, 525 A.2d at 296. The New Jersey Tort Claims Act defines injury as "death, injury to a person, damage to or loss of property or any other injury that a person may suffer that would be actionable if inflicted by a private person." N.J. STAT. ANN. § 59:1-3 (West 1982).

gress.¹⁴⁹ The court further recognized that the Act prohibits recovery for "pain and suffering" associated with any injury and is not limited to the pain and suffering stemming from purely physical injuries.¹⁵⁰ In construing the Act's meaning of "pain and suffering," the court relied on the legislative intent to limit the liability of government entities.¹⁵¹ The court posited that the legislature, in accord with this policy, specifically prohibited compensation for the non-objective elements of damages, such as pain and suffering.¹⁵² The court concluded that the symptoms experienced by the plaintiffs, such as depression, stress, and anxiety constituted "pain and suffering" consequential to their emotional distress injury.¹⁵³ Interpreting the statutory definition of injury to include emotional distress,¹⁵⁴ and concluding that the plaintiffs' symptoms were equivalent to pain and suffering resulting from such injury,¹⁵⁵ the court resolved the issue of emotional distress damages by holding that recovery for such damages was barred by the Act.¹⁵⁶

In analyzing the damage claims for enhanced risk of disease, the court recognized the necessity of a legislative resolution of the distinct problems associated with toxic exposure cases.¹⁵⁷ The court acknowledged that absent statutory intervention, the issues necessitated application of conventional tort remedies.¹⁵⁸ Noting the obstacles confronting litigants in toxic chemical exposure cases,¹⁵⁹ the court declared that the discovery rule was an

¹⁴⁹ *Id.* at 574, 525 A.2d at 295.

¹⁵⁰ *See id.*

¹⁵¹ *Id.* at 574-75, 525 A.2d at 295-96. Since "pain and suffering" was not specifically defined in the Act, the court ascertained its meaning by examining the legislative purpose and intent. *Id.* at 576, 525 A.2d at 296. The policy judgments in support of limited governmental liability reflect the economic burdens which face public entities. *Id.* (citing N.J. STAT. ANN. § 59:9-2 comment (West 1982)).

¹⁵² *See id.* at 576, 525 A.2d at 296.

¹⁵³ *Id.*

¹⁵⁴ *Id.* at 575, 525 A.2d at 296.

¹⁵⁵ *Id.* at 576, 525 A.2d at 296.

¹⁵⁶ *Id.* at 577, 525 A.2d at 297.

¹⁵⁷ *Id.* at 581, 525 A.2d at 299. Congress created the Superfund Study Group, 42 U.S.C. § 9651(e) (1982) to research the unique difficulties associated with compensation of toxic-tort injuries. *See Zazzali & Grad, supra* note 2, at 464. The Group recommended a no-fault fund similar to the workmen's compensation laws. *Id.* at 464-65. To date, however, none of the Group's proposals have been adopted. *Ayers*, 106 N.J. at 580-81, 525 A.2d at 299.

¹⁵⁸ *See Ayers*, 106 N.J. at 581, 525 A.2d at 299 (citing Ginsberg & Weiss, *Common Law Liability For Toxic Torts: A Phantom Remedy*, 9 HOFSTRA L. REV. 859, 920-30 (1981)).

¹⁵⁹ *Id.* at 581-83, 525 A.2d at 299-300. These obstacles include: the identification of the responsible party; the possibility that the accountable individuals are judg-

appropriate device to remedy the problems presented by the personal injury statute of limitations and the single controversy rule.¹⁶⁰

The court acknowledged that proof of causation was the major hindrance facing toxic tort plaintiffs.¹⁶¹ After studying the obstacles which would confront plaintiffs if they were forced to litigate a claim twenty to thirty years after the actual tortious conduct, the court proceeded to analyze the enhanced risk of disease claim in conjunction with the provisions of the Tort Claims Act.¹⁶² The court concluded that exposure to toxic chemicals which causes an increased risk of disease was undoubtedly an

ment-proof; the litigation expenses associated with complex multi-party actions and compensation of specialized expert witnesses; and procedural obstacles including statutes of limitation and the single controversy rule. *Id.*

¹⁶⁰ *Id.* at 582-83, 525 A.2d at 299-300. New Jersey's discovery rule tolls the statute of limitations until discovery of the injury and the facts indicating that a third party may be accountable. *Id.* at 582, 525 A.2d at 300.

The court noted that in toxic substance exposure cases, the state statutes of limitation for personal injury and property damage have been pre-empted by federal legislation which provides that the statute does not begin to run until "the date plaintiff knew (or reasonably should have known) that the personal injury or property damages . . . were caused or contributed to by the hazardous substance . . . concerned." Superfund Amendments and Authorization Act of 1986, Pub. L. No. 99-499, 100 Stat. 1613, 1695-1696 (codified at 42 U.S.C. § 9658 (Supp. V 1987)). The court posited the inapplicability of the single controversy rule to toxic tort claims since the "cause of action does not accrue until the disease is manifested; hence, it could not have been joined with the earlier claims." *Ayers*, 106 N.J. at 583, 525 A.2d at 300.

¹⁶¹ *Id.* at 585, 525 A.2d at 301 (citing Note, *The Inapplicability of Traditional Tort Analysis to Environmental Risks: The Example of Toxic Waste Pollution Victim Compensation*, 35 STAN. L. REV. 575, 583-84 (1983)).

A compelling discursive on the issue of causation in toxic tort litigation was given by Judge Jenkins in *Allen v. United States*, 588 F. Supp. 247 (D. Utah 1984), *rev'd on other grounds*, 816 F.2d 1417 (10th Cir. 1987), a case involving the causal connection between nuclear fallout and cancer.

The great length of time involved . . . allows the possible involvement of "intervening causes," sources of injury wholly apart from the defendant's activities, which obscure the factual connection between the plaintiff's injury and the defendant's purportedly wrongful conduct. The mere passage of time is sufficient to raise doubts about "cause" in the minds of a legal system accustomed to far more immediate chains of events.

Allen, 588 F. Supp. at 406.

¹⁶² *Ayers*, 106 N.J. at 591, 525 A.2d at 304. The court reexamined the Act's definition of injury which includes "damage to or loss of property or any other injury that a person may suffer that would be actionable if inflicted by a private person." *Id.* (quoting N.J. STAT. ANN. § 59:1-3 (West 1982)). The court also looked to the RESTATEMENT (SECOND) OF TORTS which defines injury as "the invasion of any legally protected interest of another." *Id.* (quoting RESTATEMENT (SECOND) OF TORTS § 7(1) (1965)).

“injury” under the Act.¹⁶³

The court next addressed the issue of whether such injury was compensable.¹⁶⁴ In so doing, the court contemplated the advantages and disadvantages of recognizing a cause of action for an unquantified risk of disease.¹⁶⁵ Irrespective of the difficulties that would confront plaintiffs in future litigation, the court refused to award recovery based on the absence of evidence substantiating the occurrence of future harm.¹⁶⁶ The majority reasoned that non-recognition of the enhanced risk claim was most aligned with the legislative purpose in enacting the New Jersey Tort Claims Act.¹⁶⁷

In considering the claim for medical surveillance costs, the court relied on the expert testimony presented at trial which established that regular medical evaluations were reasonably neces-

¹⁶³ *Id.* at 592, 525 A.2d at 305.

¹⁶⁴ *Id.* at 592-96, 525 A.2d at 305-07.

¹⁶⁵ *Id.* at 597-98, 525 A.2d at 307-08. The court reasoned that recognition of the unquantified increased risk cause of action would require litigation and compensation for injuries which may never occur. *Id.* at 597, 525 A.2d at 308. Furthermore, the court noted that juries would be burdened with the task of determining fair compensation without clear guidelines, thereby resulting in arbitrary awards and further escalation of insurance rates. *Id.* In addition to these disadvantages, the court acknowledged that the denial of the cause of action may preclude recovery for injured plaintiffs because of the difficulties of future litigation years after the exposure to toxic chemicals. *Id.* at 598, 525 A.2d at 308.

¹⁶⁶ *See id.* at 598-99, 525 A.2d at 308. The court premised its decision on the fact that the plaintiff's enhanced risk of disease was unquantified, and specifically reserved for a later time, the question of whether a valid cause of action for enhanced risk of disease exists where the claim is supported by evidence establishing that the occurrence of future disease is reasonably probable. *Id.*

¹⁶⁷ *Id.* at 598, 525 A.2d at 308 (citing N.J. STAT. ANN. § 59:2-1 comment (West 1982) (“courts will exercise restraint in the acceptance of novel causes of action against public entities”)).

It is interesting to note that even though the New Jersey Supreme Court relied upon the Tort Claims Act's limitation of public entity liability as a primary reason for its non-recognition of the enhanced risk of disease claim, this holding has recently been extended by the appellate division to apply to private tortfeasors as well. *See Mauro v. Owens-Corning Fiberglas Corp.*, 225 N.J. Super. 196, 542 A.2d 16 (App. Div. 1988). *Mauro* involved a claim for enhanced risk of lung cancer premised on a 15-20 year period of exposure to asbestos. *Id.* at 199, 542 A.2d at 17. Plaintiff's medical expert testified that there was a “high probability” that he had an enhanced susceptibility to cancer. *Id.* at 200, 542 A.2d at 18. In affirming the trial court's rejection of this claim, the appellate division reasoned that the public policy considerations advanced in *Ayers*, “expos[ing] the tort system, and the public it serves, to the task of litigating vast numbers of claims for compensation based on threats of injuries that may never occur” were also applicable in actions against private defendants. *Id.* at 202, 542 A.2d at 19 (citing *Ayers v. Township of Jackson*, 106 N.J. 557, 597, 525 A.2d 287, 307 (1987)).

sary for early detection and treatment of disease.¹⁶⁸ The court found recovery for reasonable future medical expenses consistent with both public policy and conventional legal remedies.¹⁶⁹ Additionally, the court determined that permitting recovery for medical surveillance costs would serve two purposes: deterrence of tortious conduct, and reduction of future liability costs by possibly mitigating or preventing future illnesses.¹⁷⁰ In sustaining the damage claim for medical surveillance costs, the majority relied most heavily on the public health interest of early detection of diseases.¹⁷¹ Furthermore, the court opined that it would clearly be unjust to require the plaintiffs to assume the medical costs which would be unnecessary "but for" the defendant's tortious conduct.¹⁷²

After recognizing a valid claim for medical surveillance expenses, the court discussed the modes of compensation.¹⁷³ The majority determined that the payment of medical claims through a court-supervised fund, rather than a lump-sum award, provided a more effective and efficient method of compensating toxic tort plaintiffs.¹⁷⁴ The court articulated the following advantages of a court-supervised fund: the limitation of liability to amounts actually expended; the elimination of imprecise estimations of future medical costs; and the assurance that the money would be used as intended.¹⁷⁵

Despite its holding that the use of court-supervised funds should be the general rule in litigation involving government defendants, the court declined to modify the jury award of damages in this case.¹⁷⁶ Instead, the court concluded that the jury had

¹⁶⁸ *Ayers*, 106 N.J. at 599, 525 A.2d at 309.

¹⁶⁹ *Id.* at 603, 525 A.2d at 311.

¹⁷⁰ *Id.* at 604, 525 A.2d at 311-12.

¹⁷¹ *Id.*, 525 A.2d at 311.

¹⁷² *See id.* at 604-05, 525 A.2d at 312. The court held that the crucial factors to be considered in determining the reasonableness of medical surveillance costs include the extent of the exposure, the toxicity of the chemicals, the gravity of the potential diseases, and the utility of early diagnosis. *Id.* at 606, 525 A.2d at 312.

¹⁷³ *Id.* at 607-11, 525 A.2d at 313-15.

¹⁷⁴ *Id.* at 608, 525 A.2d at 313. The court premised this conclusion on the unique factors associated with toxic exposure. *See id.* at 610, 525 A.2d at 314. The fund would ensure that the money was actually used for medical costs and would also limit the defendant's liability to actual expenditures. *See id.* In the long run, the court reasoned that this restriction, placed on the plaintiff's recovery, would best promote the public interests involved in toxic tort cases. *See id.* The court further determined that a fund would eliminate the necessity of estimating future medical costs. *Id.* at 609, 525 A.2d at 314.

¹⁷⁵ *Id.* at 609-10, 525 A.2d at 314.

¹⁷⁶ *Id.* at 610, 525 A.2d at 314-15.

reached a reasonable verdict.¹⁷⁷ Moreover, since the fund mechanism represents a change in existing law, the court held that application was limited to future litigation.¹⁷⁸

Finally, the court affirmed the dismissal of the plaintiffs' claim under the Civil Rights Act of 1871.¹⁷⁹ The plaintiffs alleged that the defendant's conduct was tantamount to an unconstitutional taking of their wells.¹⁸⁰ The court relied on the recent United States Supreme Court decision of *Daniels v. Williams*,¹⁸¹ which held that no deprivation of property exists under the due process clause of the fourteenth amendment when the injury to property results from negligent rather than intentional conduct of state officials.¹⁸²

Justice Handler, concurring in part and dissenting in part, asserted that the court overemphasized the inability of quantifying the risk and diminished the significance of the proven fact of contamination.¹⁸³ Justice Handler declared that denial of recovery, simply because damages do not adhere to precise measurement, constitutes a deviation from fundamental principles of justice.¹⁸⁴ Examining the analogous claims of trespass, assault, invasion of privacy, defamation, and emotional distress, the justice found the difficulties of formulating equitable damage compensation in those cases indistinguishable from the difficulties presented by toxic tort claims.¹⁸⁵

¹⁷⁷ *Id.*, 525 A.2d at 315. The relevant factors considered in determining the individual amounts of medical surveillance damages consisted of age, and duration and degree of exposure to the toxic chemicals. *Id.*

¹⁷⁸ *Id.* at 611, 525 A.2d at 315 (citing *Coons v. American Honda Motor Co., Inc.*, 96 N.J. 419, 476 A.2d 763 (1984) (any change in existing law or new principle of law is to be applied prospectively), *cert. denied*, 469 U.S. 1123 (1985)).

¹⁷⁹ *Id.* at 612, 525 A.2d at 315 (citing 42 U.S.C. § 1983 (1982)).

¹⁸⁰ *Id.* at 611, 525 A.2d at 315.

¹⁸¹ 474 U.S. 327 (1986).

¹⁸² *Ayers*, 106 N.J. at 612, 525 A.2d at 315 (citing *Daniels v. Williams*, 474 U.S. 327 (1986)).

¹⁸³ *See id.* at 613, 525 A.2d at 316 (Handler, J., concurring in part and dissenting in part).

¹⁸⁴ *Id.* at 617, 525 A.2d at 318 (Handler, J., concurring in part and dissenting in part) (quoting *Schroeder v. Perkel*, 87 N.J. 53, 77, 432 A.2d 834, 846 (1981) (Handler, J., concurring in part and dissenting in part) ("[E]ven where the pitfalls of measuring damages have been genuine, we have not refused to grapple with the complexities in order to recognize the justness and fairness of relief."); *Berman v. Allan*, 80 N.J. 421, 433, 404 A.2d 8, 15 (1979) ("[T]o deny . . . redress for . . . injuries merely because damages cannot be measured with precise exactitude would constitute a perversion of fundamental principles of justice.")).

¹⁸⁵ *See Ayers*, 106 N.J. at 617-18, 525 A.2d at 318 (Handler, J., concurring in part and dissenting in part). Justice Handler stated that when previously faced with novel forms of injury, the courts have always developed standards, procedures, and

Recognizing the enhanced risk of future disease as a present injury, Justice Handler posited that the plaintiffs' risk of developing cancer and other related conditions was, at that point in time, greater than the risk to persons not similarly exposed to toxic pollutants.¹⁸⁶ Additionally, the justice asserted that the majority failed to consider the long-term advantage of deterrence of negligent conduct which would be accomplished through present compensation.¹⁸⁷ In accord with this reasoning, Justice Handler rejected the majority's holding on the enhanced risk claim, concluding that it would have the effect of leaving injuries uncompensated and would excuse the negligence of tortfeasors.¹⁸⁸ Justice Handler further disagreed with the majority's ruling that a court-supervised fund would provide the most appropriate means of redress.¹⁸⁹ In his opinion, the court had deviated from the established purpose of damage awards by placing restrictions and conditions on the plaintiffs' recovery.¹⁹⁰ Justice Handler further posited that these limitations resulted in a discrimination of the specific class of toxic tort plaintiffs.¹⁹¹

Adhering to the bounds of conventional tort law, the court easily resolved the issue of diminished quality of life damages. The court's task of redressing the plaintiffs' injuries became more perplexing, however, when faced with the claims for emotional distress and enhanced risk of disease damages.

The court's analysis of the emotional distress claim is both confusing in its reasoning and inconsistent with the trend of prior case law. The court characterized the plaintiffs' emotional distress as a separate and distinct injury caused by the defendant's conduct.¹⁹² However, the court determined that the subject

formulas for determining equitable compensation. *Id.* at 618, 525 A.2d at 318 (Handler, J., concurring in part and dissenting in part).

¹⁸⁶ *Id.*, 525 A.2d at 318-19 (Handler, J., concurring in part and dissenting in part). "The injury involved is an actual event: exposure to toxic chemicals. . . . Among the consequences of this unconsented-to invasion are genetic damage and a tangible risk of a major disease, a peril that is real even though it cannot be precisely measured or weighed." *Id.*, 525 A.2d at 319.

¹⁸⁷ *Id.* at 619, 525 A.2d at 319 (Handler, J., concurring in part and dissenting in part) (citing *Weinberg v. Dinger*, 106 N.J. 469, 486-87, 524 A.2d 366, 375 (1987) (requiring tortfeasor to compensate for damage caused by his negligent actions provides incentive for reasonable conduct)).

¹⁸⁸ *Id.* at 620, 525 A.2d at 320 (Handler, J., concurring in part and dissenting in part).

¹⁸⁹ *Id.* at 622, 525 A.2d at 321 (1987) (Handler, J., concurring in part and dissenting in part).

¹⁹⁰ *Id.*

¹⁹¹ *Id.*

¹⁹² *Id.* at 575, 525 A.2d at 296.

tive symptoms experienced by the plaintiffs, such as depression, anxiety, fear and stress, were actually "pain and suffering" resulting from their emotional distress injury, for which recovery was barred under the New Jersey Tort Claims Act.¹⁹³ The court's recognition of emotional distress as a separate injury, while denying recovery for the manifestations of that injury, was wholly illogical in that it failed to acknowledge the subjective nature of emotional distress in general. In addition, the court provided no guidance concerning what types of objective symptoms would be required to substantiate a claim for emotional distress. This omission leaves unresolved the question of whether recovery would be permitted under the Tort Claims Act for emotional distress injuries with related physical symptoms.

The court's holding also marks a departure from the current trend of New Jersey case law. The direction of the court has recently been towards a recognition of emotional distress injuries without accompanying physical manifestations when the factual circumstances evidence the genuineness of the claim.¹⁹⁴ The toxicity of the various chemicals, the prolonged exposure period endured by these plaintiffs, as well as the seriousness of the potential diseases and the township's palpably unreasonable conduct clearly represent the type of special circumstances which would support a claim for emotional distress regardless of any accompanying physical injury.

The court similarly avoided the complexity of deciding fair compensation for an enhanced risk of disease injury. The majority recognized enhanced risk as an injury separate from the actual manifestations of disease.¹⁹⁵ The court's analysis of this issue, however, focused on the notion of compensation for a future event that may never occur, rather than concentrating on the theory of enhanced risk as a present injury. In so doing, it appears that the court has allowed the difficulties of quantifying injury to overshadow the primary purpose of tort law which is to compensate innocent victims for their injuries and to require those responsible to bear the cost.

The problem of calculating probabilities has consistently been an area of contention between the fields of science and law. The plaintiffs' toxicology expert was able to identify the various health risks linked to each specific chemical to which the plaintiffs

¹⁹³ *Id.* at 576-77, 525 A.2d at 296-97.

¹⁹⁴ *See supra* notes 72-85 and accompanying text.

¹⁹⁵ *Ayers*, 106 N.J. at 592, 525 A.2d at 305.

were exposed. However, because the toxicologist was unable to quantify the effect of the interaction of the various chemicals on future disease manifestations, the scientific knowledge in this area was deemed inadequate.¹⁹⁶ This determination has the result of placing an impossible burden on toxic tort plaintiffs. The court is, in essence, requiring scientific proof of the effect on human health of innumerable possible combinations of chemical substances. Scientific knowledge is not exact, however, it has been indisputably established that prolonged exposure to toxic chemicals significantly increases the risk of developing fatal diseases. Justice Handler, in his separate opinion, exemplified the gravity of the injury when he stated that "[n]o person in her right mind would trade places with any one of these plaintiffs."¹⁹⁷

Furthermore, the court placed an unrealistic emphasis on the fact that toxic tort plaintiffs would not be barred from litigating future claims if they actually developed the diseases. Those plaintiffs who attempt to litigate twenty years or more after the tortious event will be confronted with an almost insurmountable burden of establishing causation. The *Ayers* case presented the court with the opportunity to establish necessary standards and guidelines which would make causation proofs in future claims more manageable. The court, however, evaded the problem and merely stated that legislative intervention in this area was required.

The court's novel endorsement of the court-supervised fund, as the predominant means of handling medical-surveillance awards, represents a recognition of the extreme public health and safety interests involved in toxic chemical exposure cases. The fund not only ensures that individual plaintiffs will undergo the necessary periodic medical examinations but also provides for the compilation of clinical data regarding toxic chemical exposure and latent disease development. Although the court-supervised fund places limitations on the plaintiffs' recovery and deviates from established modes of compensation, the momentous public health interest present in toxic tort cases justifies the minimal restrictions.

The obstacles in toxic chemical exposures cases encountered by the court in *Ayers* will inevitably surface in future litigation. As scientific knowledge in this area increases, judicial resolution of

¹⁹⁶ *Id.* at 588-89, 598, 525 A.2d at 303, 308.

¹⁹⁷ *Id.* at 621, 525 A.2d at 320 (Handler, J., concurring in part and dissenting in part).

these difficult issues will have to develop accordingly. Absent the necessary statutory response, judicial resolution is required. The court's deficiency in dealing with the critical issues presented in this toxic chemical exposure case leaves the future of toxic tort litigation solely in the hands of the legislature.

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