



Digital Commons@
Loyola Marymount University
LMU Loyola Law School

Loyola of Los Angeles Law Review

Volume 44
Number 1 *Fall 2010 - Symposium: Injuries
without Remedies*

Article 9

9-22-2010

Fear of Cancer

S. Lochlann Jain
Stanford University, lochjain@stanford.edu

Follow this and additional works at: <https://digitalcommons.lmu.edu/llr>



Part of the [Law Commons](#)

Recommended Citation

S. L. Jain, *Fear of Cancer*, 44 Loy. L.A. L. Rev. 233 (2010).
Available at: <https://digitalcommons.lmu.edu/llr/vol44/iss1/9>

This Symposium is brought to you for free and open access by the Law Reviews at Digital Commons @ Loyola Marymount University and Loyola Law School. It has been accepted for inclusion in Loyola of Los Angeles Law Review by an authorized administrator of Digital Commons@Loyola Marymount University and Loyola Law School. For more information, please contact digitalcommons@lmu.edu.

FEAR OF CANCER

*S. Lochlann Jain**

While the cancer rate and related statistics remain remarkably high, people rarely consider the actual suffering of people living with and dying from cancer as the real sacrifice for, and structural result of, the everyday use of carcinogens such as those in gasoline, pesticides, and cosmetics. On the heels of the recently published President's Cancer Panel Report, "Reducing Environmental Cancer Risk: What We Can Do Now," this Article aims to better understand why "fear of cancer" litigation has failed to accomplish its intended purpose—to distribute the costs of known and potentially toxic chemicals—and examines how the relevant law justifies this failure from a legal standpoint. Because of cancer's long incubation period and the lack of knowledge about most chemicals in fear-of-cancer cases, plaintiffs must divert their claims for injuries resulting from toxic exposure toward the injury of "fear" of getting cancer as a result of such exposure. Through a review and analysis of the President's Cancer Panel Report and some of the main fear-of-cancer cases and literature, this Article suggests other ways of thinking about how the law might more effectively understand and represent toxic-exposure issues.

I. INTRODUCTION

There is a lot to fear with cancer: the causes are everywhere and nowhere, the treatments are horrific and largely inefficacious, and the statistics about recurrence and spread are as mysterious as knowing whose heads will surface in the icy sea when a ship meets an iceberg. Almost half of us will go through cancer treatment of

* S. Lochlann Jain (Ph.D., University of California, Santa Cruz; B.A., McGill University), Associate Professor at Stanford's Anthropology department, teaches medical and legal anthropology. Her research is devoted to understanding how the inevitable injuries of mass productions and consumption are distributed and justified in the United States. Jain's first book, *Injury* (Princeton University Press, 2006), analyzed the politics of tort law by examining how injuries and design are framed as legible legal concerns. Jain is the recipient of the Cultural Horizons Prize, an NEH, and fellowships at the National Center for the Humanities, the Stanford Humanities Center, and the Center for Advanced Study in the Behavioral Sciences at Stanford. Many thanks to all of the Symposium participants, editors of the journal, and in particular, to Anne Bloom.

some kind,¹ likely with toxic and horrible treatments such as chemotherapy and radiation. More than 20 percent of us will die of the disease.² Much as we would like to think of cancer as a disease of the elderly (everyone has to die of something), 70,000 adults under forty years old are diagnosed with it each year.³

Yet despite rising rates of cancer incidence, the American population has demonstrated a remarkable capacity to hold two utterly distinct mindsets regarding it at the same time. On the one hand, many Americans realize that carcinogens, such as those in gasoline, pesticides, and cosmetics, remain in everyday use. On the other hand, people rarely consider the actual suffering of people living with and dying from cancer as the real sacrifice to, and structural result of, the use of these toxins.⁴

Some of this disjuncture results from simple diversion. Active campaigns, such as those of the cosmetics industry, focus public attention away from the reality that cancer results from chemical exposures, such as exposure to cosmetic products themselves.⁵ Moreover, these campaigns actively suggest that cancer should be prevented through early detection; or that curing it is an issue of scientific progress and fundraising; or that avoiding selective products proven to be dangerous, such as alcohol and tobacco, is the best way to prevent the disease.⁶

Another cultural thread aiming public attention away from the structural causes of cancer is the push toward thinking of survivorship as a personal accomplishment. The campaigns that propagate the notion are led by diverse interests, such as hospital advertisements urging cancer patients that a particular hospital might

1. SUZANNE H. REUBEN, U.S. DEP'T OF HEALTH & HUMAN SERVS., PRESIDENT'S CANCER PANEL 2008–2009 REPORT ON REDUCING ENVIRONMENTAL CANCER RISK: WHAT WE CAN DO NOW 1 (2010), available at http://deainfo.nci.nih.gov/advisory/pcp/annualreports/pcp08-09rpt/PCP_Report_08-09_508.pdf.

2. *Id.*

3. *Stats & Facts, I'M TOO YOUNG FOR THIS! CANCER FOUND.*, <http://stupidcancer.com/about/stats.shtml> (last visited Nov. 18, 2010).

4. See REUBEN, *supra* note 1, at 51–61 (discussing the various types of carcinogens and toxins that the public is exposed to everyday).

5. See *id.* at 39 (mentioning the connection between cosmetic products and endocrine-disrupting chemicals).

6. See AVON WALK FOR BREAST CANCER, <http://www.avonwalk.org> (last visited Sept. 17, 2010); see also *Guidelines for the Early Detection of Cancer*, AM. CANCER SOC'Y, <http://www.cancer.org/Healthy/FindCancerEarly/CancerScreeningGuidelines/american-cancer-society-guidelines-for-the-early-detection-of-cancer> (last updated July 6, 2010).

make a life-or-death difference in their treatment⁷ and Lance Armstrong's organization LiveStrong.⁸ Similarly damaging to public awareness is physicians' failure to have taken an active role in advocacy either against known carcinogens or for environmental health.⁹ In short, the most powerful culture-makers—including industry, government, and medical associations—disavow the connections between environmental toxins and the actual disease, as well as the suffering they both cause.

For that reason, the recently published President's Cancer Panel Report provides a welcome relief.¹⁰ The Panel thoroughly examined the use of industrial, military, and agricultural carcinogens and showed in detail the depth of society's cultural disavowal and ignorance of the causes of cancer.¹¹ If acted upon, the Panel's conclusions may bring the real costs of society's continued ignorance and failure to reduce risks into the broader debate, in the same way that Luther Terry's Surgeon General Report of 1964 did when it finally admitted and publicized the long-demonstrated causal link between cigarette smoking and lung cancer and took a stand on tobacco as a matter of public health.¹²

The Cancer Panel Report provides an opportunity to revisit the ways that courts have understood and dealt with carcinogenic exposure cases—particularly those that deal with “fear of cancer.”¹³

7. See *U.S. News Best Hospitals 2010–2011: Cancer*, U.S. NEWS & WORLD REP., <http://health.usnews.com/best-hospitals/rankings/cancer> (last visited Aug. 25, 2010).

8. LIVESTRONG, <http://www.livestrong.com> (last visited Aug. 25, 2010).

9. See REUBEN, *supra* note 1, at 68 (discussing the suggestion that some physicians have financial incentives to give more CT scans than necessary, resulting in increased cancer exposure).

10. *Id.* at 1.

11. *Id.*

12. U.S. DEP'T OF HEALTH, EDUC. & WELFARE, SMOKING AND HEALTH: REPORT OF THE ADVISORY COMMITTEE TO THE SURGEON GENERAL OF THE PUBLIC HEALTH SERVICE (1964), available at http://profiles.nlm.nih.gov/NN/B/B/M/Q/_/nnbbmq.pdf.

13. Medical malpractice laws have offered one way to negotiate the costs of cancer injuries. Regardless of one's position on the efficacy of these laws in drawing attention to the problem of misdiagnosis, their ability to adequately adjudicate the distribution of cancer costs has been challenged by caps on damage awards, the high expenses of medical experts, and disagreements in the medical community resulting from uncertainties about the disease and prognoses. Furthermore, insurance companies have encouraged a defensive posture among oncologists that has cultivated a culture of fear of litigation, rather than an acknowledgement of the awful costs of widespread misdiagnosis. Thus, debate has centered around the micro-issue of the fairness of these laws, rather than the broader questions of the causes of cancer. In the broader scheme of cancer production, medical malpractice law can only ever address the micropolitics of cancer

These cases hold the potential to draw attention to the major issue of carcinogenic exposure and its widespread harm.¹⁴ In this short Article, I aim to better understand why fear of cancer litigation has failed to accomplish its intended purpose, to distribute the costs of known and potentially toxic chemicals, and how the relevant law justifies this failure from a legal standpoint.

Cancer provides unique legal challenges to law because of the uncertain nature of the disease. Issues such as what causes it, how it spreads, how it should be treated, when it is worth treating, and when and how treatment works remain medical mysteries. Law, with its focus on adjudicating fault and distributing costs, provides a fascinating perspective on scientific uncertainties, how such uncertainties are regarded, and how they sometimes gain solidity beyond their scientific meanings.

To give an example from another part of my cancer study of how this can happen, consider the issue of lost chance—an area of medical malpractice law dealing with missed cancer diagnoses. In some states, a plaintiff can argue that a patient missed the chance of a longer life because a doctor failed to diagnose a cancer at an earlier point in its development.¹⁵ Because no one can know how long an individual patient will live after diagnosis, proving life expectancy in such cases heavily relies on statistical data gathered from populations suffering from seemingly comparable cancers.¹⁶ Such statistics offer the courts a seemingly solid basis on which to make judgments about when missed diagnoses should count as compensable injuries. Yet such statistics can only form the most basic guide in considering the life and death of any given patient, except in the most extreme and dire situations.¹⁷

While physicians have developed means to take such uncertainties into account when treating individual patients (or at

diagnosis and whether a month or a year might have made a difference in any one individual's life.

14. See generally Michael D. Hultquist, *Fear of Cancer as a Compensable Cause of Action*, BRIEF, Spring 2001, at 8 (listing “fear of cancer” cases arising in multiple jurisdictions where the plaintiffs were exposed to carcinogens).

15. Sarah Lochlann Jain, *Living in Prognosis: Toward an Elegiac Politics*, 98 REPRESENTATIONS 77, 86–88 (2007).

16. See *id.* at 86 (explaining that oncology delivers prognoses and statistics as they appear in populations of individuals whose medical histories are more or less similar to the patient's).

17. See *id.* at 87.

least means of explaining these uncertainties to patients), courts must figure out how to account for uncertainties when applying population data to individual cases. Courts have typically done this by running such data through their own legal tests, such as the “more likely than not” test.¹⁸ But reliance on such data is necessarily misleading regardless of the legal test applied, for it is impossible to directly relate a population-based statistic to any particular individual who will either die or not die of that disease. Such attempts to use these statistics with little thought as to the broader implications of their use may even undermine the courts’ ability to protect Americans from an increasingly toxic environment.

Ironically, because of cancer’s long incubation period and the lack of knowledge about most chemicals in fear-of-cancer cases, plaintiffs must divert their claims for injuries resulting from toxic exposure toward the injury of “fear” of getting cancer as a result of such exposure. Commentators, however, fret that fear can be “trivial,” “easy to feign,” and “short-lived.”¹⁹ Cancer itself is none of those things, but the very fact that dangerous exposure to carcinogens can only be compensated through a claim of fear belies American legal anxieties and management strategies. It forces the establishment of tests, certainties, and rules where such positivist fantasies only add to, rather than resolve, the problem of cancer.

Under a fear analysis, the problem of exposure to carcinogens can too easily be reduced to questions of perception: to problems about fear and about how individuals understand risk. Such red-herring questions veer society’s attention away from the actual practical concern, which is to figure out who is responsible for the health effects of common chemicals—some toxic and most untested. Such questions pose a challenge to the legal system. Courts must develop strategies to address the unknown health consequences of mass exposure to everyday chemicals, as well as the individual injuries and unknown consequences suffered by particular plaintiffs as a result of exposure.

In this Article, I will first offer a short review and analysis of the latest President’s Cancer Panel Report “Reducing Environmental

18. RESTATEMENT (THIRD) OF TORTS: LIABILITY FOR PHYSICAL & EMOTIONAL HARM § 26 cmt. n (2010).

19. Keith J. Klein, *Fear of Cancer—A Legitimate Claim in Toxic Tort Cases?*, 33 A.F. L. REV. 193, 198 (1990).

Cancer Risk: What We Can Do Now” (“the Report”).²⁰ This document offers a thorough review of the challenges facing the widespread and increasing problem of environmentally caused cancers. I then review some of the main “fear of cancer” cases and literature, and conclude with some suggestions for other ways of thinking about how the law might more effectively understand and represent toxic exposure issues.

II. CANCER CAUSATION

The recently published report urges the President “most strongly to use the power of your office to remove the carcinogens and other toxins from our food, water, and air that needlessly increase health care costs, cripple our Nation’s productivity, and devastate American lives.”²¹

The report examines in detail the gross underestimation of the true burden of environmentally caused cancers, noting that of the 80,000 chemicals on the U.S. market and in daily use, only a few hundred have been studied for carcinogenicity.²²

The report indicates several key issues that have resulted in the high rates of and mortality from cancer in the United States—rates that remain higher than those of other industrialized nations. The primary challenges faced by Americans are the limited research on the environmental causes of cancer, the underfunding and scattered nature of such research, the reliance on animal studies, the lack of data on low-dose exposures and combinations of exposures, ineffective regulations, the medical radiation exposures that physicians often underestimate, and the military hazardous exposures that have been concealed by the military.²³

The report further suggests that medical cancer research focuses primarily on the genetic causes of cancer, while less than 5 percent of cancer diagnoses can be linked to inherited genetic traits.²⁴ Physicians rarely ask about exposures in patient interviews, even

20. REUBEN, *supra* note 1.

21. *Id.* at *Dear Mr. President*.

22. *Id.* at ii.

23. *Id.* at i–vi.

24. *Id.* at 1.

though cancer rates for certain types of cancer can be correlated to occupational exposures.²⁵

Unlike the process for enacting regulations in Europe, in the United States “a hazard must be incontrovertibly demonstrated before action to ameliorate it is initiated.”²⁶ In other words, while European governments regulate chemicals based on initial evidence of toxicity, the U.S. government will allow likely, potential, and actual carcinogens to be produced and used for many years while adequate “proof” of danger is being gathered and debated.

Thus, ironically, eighty million pounds of atrazine, a chemical manufactured by the European company Syngenta, is poured onto U.S. soil each year, while the chemical is illegal in many parts of Europe because of its toxicity.²⁷ This and similar chemicals do not leave the environment quickly.²⁸ For example, dichlorodiphenyl-trichloroethane (DDT), banned in 1973, is still ubiquitous in American bodies, foods, and environments.²⁹ A recent study of randomly sampled foods found DDT metabolites in 60 percent of heavy cream samples and 28 percent of carrots.³⁰ Similarly, polychlorinated biphenyls (PCBs), slow-degrading carcinogens banned in the late 1970s, are still found in human flesh, soil, water sources, and walls of buildings.³¹

The Report lists several known carcinogenic chemicals in common use that are legal and require no labeling or warnings, such as cadmium, phthalates, asbestos, chromium, diesel fuel, mercury, formaldehyde.³² Similarly, bisphenol A (BPA) is found at biologically active levels in 93 percent of Americans, and 130 studies have linked BPA to breast cancer, heart disease, and liver abnormalities.³³ It is still legal and commonly used in food

25. *Id.* at ix.

26. *Id.* at ii.

27. *Id.* at 46.

28. See Frank Ackerman, *The Economics of Atrazine*, 13 INT'L J. OCCUPATIONAL ENVTL. HEALTH 441, 441 (2007).

29. REUBEN, *supra* note 1, at 46.

30. *Id.* at 47.

31. *Id.* at 30.

32. *Id.* at 22–23.

33. *Id.* at 18.

packaging and children's chewable toys and bottles, and it requires no labeling or warning.³⁴

Americans are often ignorant of known carcinogens, even when the carcinogens have garnered press. But industries, such as cosmetics, paint, and plastics, have also consistently lobbied to disallow ingredient lists on products, or even, as in the recent California Safe Cosmetics Act,³⁵ to disclose the carcinogens used in its proprietary ingredients.³⁶

The report continues for nearly 150 pages, detailing the hazards of living and dying in America and the ways and reasons that the risks continue to be underestimated, unknown, and covered up. But two points emerge as critical for thinking about toxic exposure cases.

First, we simply do not have ways to understand toxic body burdens. Studies have shown that virtually all Americans carry and are now born with body burdens of known toxic chemicals.³⁷ However, ten years after the Environmental Protection Agency (EPA) was mandated to develop a program to identify human exposures to endocrine disruptors, it has yet to develop screening tests.³⁸

Second, U.S. regulatory agencies tacitly permit the use of toxic chemicals if their benefits outweigh the risks they pose.³⁹ Approximately forty chemicals classified as known, probable, or possible human carcinogens are used in EPA-registered pesticides, and many more pesticide ingredients are not tested.⁴⁰ Such carcinogens end up in the water, in the soil, and on food. For example, over 75 percent of food in American grocery stores has residues of one or more pesticide chemicals.⁴¹

The EPA allows chemicals that do not pose an "unreasonable risk to man or the environment, taking into account the economic, social, and environmental costs and benefits of the use of any

34. *Id.*

35. CAL. HEALTH & SAFETY CODE § 111791 (West 2006).

36. Ann G. Grimaldi, *California Goes Green(er) Through New Chemical Initiative*, LEGAL BACKGROUNDER, Aug. 14, 2009, at 1.

37. *Body Burden—The Pollution in Newborns*, ENVTL. WORKING GROUP, (July 14, 2005), <http://www.ewg.org/reports/bodyburden2/execsumm.php>; see also REUBEN, *supra* note 1, at 5.

38. REUBEN, *supra* note 1, at 38.

39. *Id.* at 45.

40. *Id.*

41. See *id.* at 46.

pesticide.”⁴² Such risks, costs, and benefits are unequally distributed among and borne by members of the public depending on factors such as occupation, gender, age, and geographic location.⁴³

Historically, the role of tort law has precisely been to ensure that all costs—including the costs of injury—are visible and taken into account. The role of law is to protect citizens from the dangers of products that are beyond their ken.⁴⁴

But literature on fear of cancer does not address the multiple uncertainties of science and politics that are specific to cancer, despite—or perhaps because of—its potential to change the patterns of human exposure to carcinogens in the United States.

III. FEAR-OF-CANCER CLAIMS

Tort law developed in the twentieth century as a means to protect consumers and bystanders from the inevitable injuries of capitalism.⁴⁵ Throughout that century, tort law placed responsibility on the design and manufacturing processes as a way to protect consumers from predictable injuries and, where such injuries were impossible to avoid, to spread their costs.⁴⁶ Thus, the development of product liability law can be read as a contest between manufacturers’ arguments—that people should be responsible for the products they use—and plaintiffs’ claims—that manufacturers should take into consideration the probable and possible injuries that result from use of their products.

Tort law has both reflected and made policy, albeit in a piecemeal way, that has dramatically affected American injury patterns and quality of life. Also, it has tended to follow broader political shifts. For example, in the early 1960s, automobile drivers bore the full responsibility of crash injuries; then, after a decade of safety activism, courts decided that manufacturers were uniquely positioned to understand predictable crash injuries and to develop at least minimally crashworthy designs.⁴⁷ Similarly, tobacco consumers

42. *Id.* at 45.

43. *Id.* at 25–26.

44. 74 AM. JUR. 2D *Torts* § 8 (2010).

45. MARC A. FRANKLIN ET AL., *TORT LAW AND ALTERNATIVES* 31 (8th ed. 2001).

46. See THOMAS H. KOENIG & MICHAEL L. RUSTAD, *IN DEFENSE OF TORT LAW* 57 (2001).

47. See *United States v. Ford Motor Co.*, 574 F.2d 534, 539 (D.C. Cir. 1978) (holding that Congress desired to “protect the public against the unreasonable risk of accidents which might be

were responsible for tobacco-related injuries, despite ample evidence of deceit in advertising, causal links between smoking and lung cancer, and nicotine's addictive nature.⁴⁸ In both of these cases, the policy changes were not based on new science, but on different political views of how the science should be understood.

Emotional harm has been taken seriously as an injury itself, in some cases as a corollary to physical injury and in others—such as in loss of consortium cases—as an injury itself.⁴⁹ Fear-of-cancer cases, which are typically brought after an exposure to a carcinogen, fall into the category of emotional harm. Courts have further sub-divided these cases into sub-categories of “cancerphobia” and “fear of cancer.”⁵⁰

A cancerphobia plaintiff case needs to prove that a medical phobia resulted from an exposure to a carcinogen and has become its own psychological injury, aside from any physical injury that the exposure has or will cause.⁵¹ On the other hand, fear of cancer cases typically arise after a plaintiff has been exposed to a carcinogen and is afraid of developing cancer.⁵² In a case where it is more likely than not that cancer develop as a result of the exposure, a plaintiff typically must prove varying degrees of risk and current physical injury, depending on the jurisdiction.⁵³

Courts have varied widely on the requisite level of actual risk of cancer and the standard of proof for the physical likelihood and evidence of potential cancer (such as pre-cancerous lesions or pleural thickening).⁵⁴ Many courts worry that emotional injury is easy to

caused by defects in the design, construction, or performance of motor vehicles and against the unreasonable risk of death or injury in the event of such accidents”).

48. See U.S. DEP'T OF HEALTH, EDUC. & WELFARE, *supra* note 12, at 30.

49. 38 AM. JUR. 2D *Fright, Shock, Etc.* § 2 (2010).

50. Hultquist, *supra* note 14, at 9 (discussing the difference between “cancer-phobia” and “fear of cancer” cases).

51. *Id.* (explaining that cancer-phobia is a defined medical condition that is “used to describe a phobic reaction or apprehension that was experienced by the plaintiff, due to her fear of contracting cancer in the future”).

52. *Id.*

53. See, e.g., *Potter v. Firestone Tire & Rubber Co.*, 863 P.2d 795, 811 (Cal. 1993).

54. Compare *Simmons v. Pacor, Inc.*, 674 A.2d 232, 238 (Pa. 1996) (adopting the view that damages for fear of cancer are speculative and requiring the fear of cancer to be the result of present physical injury to be compensable), with Edward M. Slaughter, *AIDS Phobia: The Infliction of Emotional Distress and the Fear of AIDS*, 16 U. HAW. L. REV. 143, 155 (1994) (presenting cases where no present physical injury was required: *Gideon v. John-Mansfield Sales Corp.*—plaintiff allowed recovery for fear of future cancer as a result of inhaling asbestos fibers

feign or is trivial,⁵⁵ but generally all courts agree that the fear of cancer must be both reasonable and causally related to the defendant's negligence.⁵⁶

I will comment here on *Potter v. Firestone*,⁵⁷ in which the California Supreme Court recognized a genuine fear-of-cancer claim but gave four public policy reasons for "refusing to establish a reasonableness standard" in allowing fear-of-cancer claims.⁵⁸ Firestone's negligence was never at issue,⁵⁹ and thus this analysis will focus on the question of how courts should allocate the potential costs of an exposure to toxic substances.

Between 1967 and 1980, Firestone disposed of toxic chemicals and known human carcinogens at the Crazy Horse dump in Salinas, California.⁶⁰ Because of the dump's proximity to local residents' drinking water sources, the dump required Firestone to abide by its strict environmental standards.⁶¹ However, in 1984, benzene, toluene, chloroform, and vinyl chloride were found in local drinking water wells, along with other suspected carcinogens.⁶² About 6,200 people within three miles of the site had consumed contaminated drinking water, and in 1987 the City of Salinas bought the houses and bulldozed them.⁶³

Two families sued Firestone, and Firestone internal documents revealed that plant managers knew that the company was illegally dumping the chemical wastes from its vulcanization processes since

while working on defendant's defective products—and *Anderson v. Welding Testing Lab., Inc.*—plaintiff compensated for fear of losing fingers even though the probability of future harm was minimal).

55. See Slaughter, *supra* note 54, at 146.

56. See generally Klein, *supra* note 19 (indicating that fear of cancer must be reasonable and causally related to defendant's negligence). See also Jay E. Znaniecki, Note, *Cancerphobia Damages in Medical Malpractice Claims*, 1997 U. ILL. L. REV. 639 (1997) (explaining the same requirement).

57. 863 P.2d 795.

58. *Id.*

59. *Id.* at 804.

60. *Id.* at 801.

61. *Id.*

62. *Id.* at 801–02.

63. National Service Center for Environmental Publications Simple Search, U.S. ENVTL. PROT. AGENCY, <http://nepis.epa.gov> (last visited Sept. 29, 2010) (check "1986–1990" and search for "Salinas"; follow "Descriptions of 187 Sites Proposed for the National Priorities List as of February 1990"; scroll down to 13th Site).

1977.⁶⁴ Initially, the plaintiffs were awarded over \$1.3 million in compensatory and \$2.6 million in punitive damages.⁶⁵ However, the California Supreme Court reversed the judgment and remanded the case on the issue of emotional distress and fear of cancer.⁶⁶

The “fingerprint” of the residents’ water was later found to be identical to the various chemicals that Firestone had dumped, and thus plaintiffs brought a fear-of-cancer suit.⁶⁷ Plaintiffs were required to prove: (1) that their fear was a result of the defendant’s negligent breach of duty owed to the plaintiff; and (2) that they were exposed to a toxic substance that threatens cancer.⁶⁸ Furthermore, they were to prove that the fear stemmed from knowledge, corroborated by reliable medical or scientific opinion, that it was *more likely than not* that the plaintiff would develop the cancer in the future due to the toxic exposure.⁶⁹

The court decided that despite Firestone’s clear negligence, which even the company did not dispute, plaintiffs could not show that they were more likely than not to develop cancer as a result of the exposure.⁷⁰ Such proof, were it to produce the kind of statistical data requested by the court, would require exposing a population to a similar panel of chemicals and comparing it over time to a group that was unexposed to the chemicals. Such a test is both unethical and impossible to do given the short span of human lives and the newness of many of the chemicals.

Be that as it may, the majority opinion offers a lengthy defense of its failure to find reasonable fear of cancer-based public policy concerns far beyond the specific incidents of this case.

Primarily, the court gave four policy reasons to oppose fear of cancer cases:

1. The class of potential plaintiff is potentially unlimited. The court stated: “[A]ll of us are potential fear of cancer plaintiffs, provided we are sufficiently aware of and worried about the

64. *Potter*, 863 P.2d at 801–02.

65. *Id.* at 803.

66. *Id.* at 827.

67. *Id.* at 802.

68. *Id.* at 816.

69. *Id.*

70. *Id.* at 811.

possibility of developing cancer from exposure to or ingestion of a carcinogenic substance.”⁷¹

2. The development of new and advantageous drug therapies would be inhibited if recovery for fear of cancer were allowed for anyone who could testify to reasonably fearing subsequently developed harmful effects.⁷²
3. Court resources should be devoted to those who actually do develop cancer. To allow damages for fear of cancer would lead to inequitable results since those who never contract cancer would obtain damages even though the disease never came to fruition. The actual compensation due to the plaintiff can be more accurately assessed when the disease has manifested.⁷³
4. To ensure consistency in verdicts, the court called for a “definite and predictable threshold for recovery.”⁷⁴

Obvious bad faith pervades these rationales. For example, with respect to reason number two, drug-testing regulation requires that risk-benefit assessments be made in light of people’s diseases, that drugs have some possibility of offering aid, and that initial drug testing be performed on small groups.⁷⁵ If anything, the recent litigation on hormone-replacement therapies demonstrates that the opposite is true—that is, that drugs on the market have not been adequately tested for carcinogenic effect and that we should be as wary about drugs as we are about other industrial products.⁷⁶

The third point begs itself, because the injury being claimed is the fear of cancer, not cancer itself. Thus, the accurate assessment of compensation must be made on the basis of fear and not on the basis

71. *Id.* at 812.

72. *Id.* at 812–13.

73. *Id.* at 813.

74. *Id.*

75. See generally *Drugs*, U.S. FOOD & DRUG ADMIN., <http://www.fda.gov/Drugs/default.htm> (last visited Nov. 18, 2010) (outlining procedures and precautions taken when new drugs are being considered for FDA approval).

76. See *Menopausal Hormone Replacement Therapy and Cancer Risk*, AM. CANCER SOC’Y, <http://www.cancer.org/Cancer/CancerCauses/OtherCarcinogens/MedicalTreatments/menopausal-hormone-replacement-therapy-and-cancer-risk> (last updated Sept. 29, 2010).

of actual cancer. However, the more pertinent point is that when cancer does develop, it is extremely difficult to causally link a specific exposure to a resulting cancer.⁷⁷ Cancers can appear decades after an initial exposure,⁷⁸ and except in a very few cases of rare cancers, causation is virtually impossible to prove conclusively.⁷⁹ Therefore, this claim about what court resources “should” be used for seems evasive, at best.

The first and fourth claims raise the question of uncertainty and how to approach legal decisions given the scientific uncertainty and the impossibility of data requirements in courts for claims regarding cancer.

In making its policy claims, the court relied heavily on an article by Robert Willmore, a defense attorney who, according to his website, “supervised the defense of over \$100 billion in tort claims against the federal government involving such areas as asbestos, Agent Orange, radiation exposure, environmental and toxic torts, and aviation disasters.”⁸⁰

Willmore considers fear-of-cancer cases under the rubric of cancerphobia, claiming that such cases threaten to get out of control.⁸¹ In a unique spin on the personal responsibility arguments of the tort reform movement, he states that the legitimacy of such claims would “make it much more likely that a person exposed to small amounts of a carcinogen will sue rather than shrug off the risk as one more of the numerous small cancer-causing risks to which we are all constantly exposed.”⁸² Here, Willmore asks us to accept all exposures as equivalent—and to shrug them off as normal, everyday occurrences.

Furthermore, rather than demonstrating that large awards may act as a deterrent to companies such as Firestone, which are searching for inexpensive means of disposing of chemical hazards, Willmore is concerned with deception by plaintiffs.⁸³ Willmore

77. See *Potter*, 863 P.2d at 811–12, 826.

78. *Id.* at 805.

79. See *id.* at 811–12.

80. Robert L. Willmore, CROWELL & MORING, <http://www.crowell.com/Professionals/Robert-Willmore> (last visited Aug. 31, 2010).

81. See Robert L. Willmore, *In Fear of Cancerphobia*, 56 DEF. COUNS. J. 50, 50 (1989).

82. *Id.* at 53.

83. *Id.*

claims without support that large awards are more likely to increase the number of plaintiffs who are willing to deceive; he writes that “[t]hey may feel, after all, that they are entitled to something for having been exposed in the first place.”⁸⁴

Indeed, we are asked to shrug off exposures every day from plastics, oil and gas, cosmetics, and other everyday products, as the Report demonstrates.⁸⁵ If individuals and regulatory agencies did not shrug off exposures to known carcinogens, perhaps there would be more stringent regulations of such products—as there are in Canada and Europe.⁸⁶

The United States has consistently refused to create standards for negligent exposure, including standards relating to warning about or compensating for toxic exposures.⁸⁷ Willmore’s argument presents a classic example of the displacement of fear that operates at the political level. Willmore argues that “the understandable fear of a surge of cancerphobia liability was one of the issues that led to the ultimate defeat by filibuster in 1988 in the Senate of a Worker High-Risk Notification Bill (S. 79)” (a bill introduced that would have enabled exposed workers to have been informed about their exposures).⁸⁸

While the court initially used the uncertainty about whether a cancer would arise following an exposure to refuse the fear-of-cancer claim, now the threat of being able to collect evidence linking exposures and disease is being used to maintain the state of ignorance. Cancerphobia is made to sound irrational and is being used to serve those interests that maintain a state of ignorance, when in fact it presents a rhetorical trope.

In making its third point, the *Potter* court misquotes the Willmore article. Willmore writes: “It would be a regrettable irony if in the rush to compensate the psychically injured we make it impossible to compensate those suffering from permanent and serious physical injuries.”⁸⁹ While seeming to present a real trade-off

84. *Id.*

85. See REUBEN, *supra* note 1, at 39.

86. See, e.g., *id.* at 22 (“[I]n 1976, the EU prohibited the use of approximately 1,100 chemicals in cosmetics.”); *id.* at 18 (noting that Canada banned the use of BPA, a known carcinogen, in the manufacture of baby bottles).

87. REUBEN, *supra* note 1.

88. Willmore, *supra* note 81, at 54.

89. *Id.* at 55.

here (of course one would want to compensate those suffering from cancer), the statement is actually an idly speculative trade-off since it remains virtually impossible for people exposed to toxins to prove causation—or even to know the specificities of their exposures in most cases (as the filibuster of bill S. 79 demonstrates).⁹⁰

In fact, Willmore's prior sentence is completely speculative: "One of the difficult questions courts adjudicating cancerphobia claims must ask themselves is whether cancerphobia liability will undermine the ability of the insurance industry [whatever that is] to provide insurance arrangements for adequate compensation for persons who actually suffer physical injuries caused by toxic exposures."⁹¹

The court's fourth policy concern worries about the "appropriate balance between the interests of toxic exposure litigants and the burdens on society and judicial administration."⁹² The court is "satisfied that the more likely than not threshold for fear of cancer claims in negligent actions" strikes the appropriate balance.⁹³

Two points deserve mention here. First, such data are simply impossible to collect given the current knowledge of chemical carcinogens.⁹⁴ Recall that the court denied the fear-of-cancer claim on the basis that plaintiffs could not show that they were more likely than not to develop cancer as a result of the exposure, and it is impossible to tell what such data would consist of or how it would be gathered.⁹⁵

Second, the pseudoscientific language of a "more likely than not threshold" makes this rule seem as if it makes sense. Yet closer scrutiny reveals that in fact the court's language makes it perfectly acceptable to allow a chemical exposure that will kill off 20, 30, 40, or even 49 percent of a population.⁹⁶ For if each person can claim only that he or she is 49 percent likely to develop cancer, and in a class of one hundred, forty-nine sicken and die, *none* will be able to meet the more-likely-than-not threshold. Even after a cancer

90. *Id.* at 54.

91. *Id.* at 55.

92. *Potter v. Firestone Tire & Rubber Co.*, 863 P.2d 795, 816 (Cal. 1993).

93. *Id.*

94. *See* REUBEN, *supra* note 1, at ii.

95. *Potter*, 863 P.2d at 803.

96. *See id.* at 800.

diagnosis, each individual would more likely than not *not* have developed cancer.

Courts have struggled over two main problems in fear-of-cancer claims: scientific uncertainty in causation and the potential number of plaintiffs in light of the ubiquity of carcinogens.⁹⁷ But the vast numbers of people injured by chemical exposures mitigates in favor of reducing such exposures, rather than allowing them.⁹⁸

Furthermore, courts have a real opportunity here to admit to uncertainty, rather than pretending there is or could be certainty where there is none or creating their own linguistic diversions. Courts could expand the category of injury to include exposures to carcinogens and potential carcinogens. They have the potential to encourage, rather than discourage, the conditions for increased scientific knowledge, monitoring, and data collection.

The fear-of-cancer claims offer a potential avenue to curb the use of carcinogens as well as their mishandling in an immediate way. The theory of these cases, however, suggests waiting for decades, until cancers have developed and more people are exposed, before doing anything.

IV. CONCLUSION

The Oxford English Dictionary (OED) describes fear as: “The emotion of pain or uneasiness caused by the sense of impending danger, or by the prospect of some possible evil.”⁹⁹ The dictionary offers a rather vague definition here; after all, “impending danger” differs significantly from some “possible evil”—how possible? How evil? How impending? Similarly, the modifiers “some possible” and “sense of” add a subjective dimension to what otherwise might indicate a wave to statistical data: is a 50 percent chance of dying of cancer to be considered as an actual impending danger, or does it merely give one a *sense* of impending danger? Such rhetorical hedges indeed reflect the scientific language of cancer itself. Chemotherapy treatment may increase the chance of survival by between 3 and 5 percent over a few years.¹⁰⁰ Such an increase is

97. *See id.* at 811.

98. *See* REUBEN, *supra* note 1, at 1–2.

99. 5 OXFORD ENGLISH DICTIONARY 780–81 (J.A. Simpson et al. eds., 2d ed. 1989).

100. Jain, *supra* note 15, at 79.

scientifically significant and is personally significant enough that many people choose to undergo it. However, it definitely does not “more likely than not” lead to one’s survival.

Fear and statistics can combine to do important economic and political work. Consider, for example, the recent campaign for the HPV vaccine Gardasil. Its jingle of “one less” implied that each young woman vaccinated with Gardasil would become one less person who would develop cervical cancer.¹⁰¹ The ad played on parents’ fears that their daughters were at risk for cervical cancer; the ad exacerbated parents’ fears that their daughters were at risk for cervical cancer, making these fears seem reasonable, while downplaying the risks of the vaccine itself.¹⁰² The advertising campaign worked, as many do, by provoking a fear and then offering a way to eradicate it.

But fear relates to many things that have seemingly little bearing on any actual impending danger. Many people who fear cancer will never get it, and many people who do not fear it will get it. People will let lumps and bumps grow huge and not even think of cancer, while others will go to a doctor for small bumps. Many people I have interviewed have had their cancer misdiagnosed, for months and sometimes years, with claims that they should not worry. Bumps may be gendered—as a gross stereotype that may be as misleading as true, women may see doctors more than men, but also have their complaints dismissed more blatantly.¹⁰³ Such stereotypes in combination underlie the fact that missed breast cancer diagnoses are among the most common medical malpractice claims.¹⁰⁴

The history of tobacco offers another way to understand how manipulable anxiety has been and how people may stretch toward disavowing or performing fear as part of other identities. After all, how many billions of dollars has it taken to manage, erase, and hide the anxieties caused by the increasing knowledge about the causal links between smoking and cancer? How much did it cost to make the risks of smoking seem hip and cool?

101. See GARDASIL, <http://www.gardasil.com> (displaying the “one less” advertisement) (last visited Sept. 5, 2010).

102. *Id.*

103. See Jain, *supra* note 15, at 85–86.

104. Saul Weingart et al., *Process of Care Failures in Breast Cancer Diagnosis*, 24 J. GEN. INTERNAL MED. 702, 702–09 (2009).

These examples show the complexity of understanding fear—both its subjectivity and the extent to which American capitalist and military interests manipulate it.

On a cultural level, organizations in the United Kingdom and United States have constantly been at work in negotiating and managing fear of cancer by developing early-detection campaigns.¹⁰⁵ Historians, for example, have closely traced how such management has manifested in campaigns that ultimately have not informed the populace about carcinogens or how to advocate and communicate in medical situations.¹⁰⁶ One early study, finding that doctors were at fault in over half of terminal cases in which early signs of the disease were missed and discussing the necessity for early-detection campaigns, concluded that,

Cancerphobia or hysteria must be avoided, of course, and grewsome [sic] discussions of neglected cases are not usually helpful. In general a calm, rational, thoughtful statement is more effectual than hysterical or alarmist appeals. After all, patients are quite reasonable in their views or health and disease if only given a fair insight into conditions.¹⁰⁷

Yet the American Cancer Society has never taken a role in educating people about the prevalence of misdiagnosis, how to communicate with doctors, or the environmental, military, medical, and agricultural causes of cancer. Early-detection campaigns thus remain of questionable use.

Cancerphobia, here linked with hysteria, indicates some less reasonable fear—or fear taken into the realm of fear in itself rather than of some other possible future. Here again the OED is helpful, describing a phobia as “[a] fear, horror, strong dislike, or aversion; *esp.* an extreme or irrational fear or dread aroused by a particular object or circumstance.”¹⁰⁸ *No one* likes or is not averse to cancer, so cancerphobia must indicate an irrational fear.

Ultimately, a legal focus on fear, when it comes to cancer, is bound for a dark hole of inexplicability and rhetorical manipulation.

105. See AM. CANCER SOC'Y, *supra* note 6.

106. See Charles E. Farr, *Delay in the Treatment of Cancer*, 164 AM. J. MED. SCI. 712 (1922).

107. *Id.* at 714.

108. 11 OXFORD ENGLISH DICTIONARY 693 (J.A. Simpson et al. eds., 2d ed. 1989).

The logic of fear will always come down to an individuated experience, one difficult to link to the powerful forces at play in cancer production in America. To turn the question of toxic exposure into one about figuring out whether an individual fear is legitimate offers an example of the kind of bad-faith sleight of hand all too common in American legal practice.

It is unlikely that the United States will adopt a preventative European model of assessing chemical use. Rather, legal minds need to set to work to figure out how to make up for the limits of science, how to distribute the costs of unknowns, and how to make cancer-causation a part of the cost of doing business with carcinogens. Some of the costs of causing cancer could be rolled into the costs of doing business if legal practitioners can figure out a way for exposures themselves to count as injuries, especially in cases where the data have not yet been collected.