

# University of Michigan Journal of Law Reform

---

Volume 30  
Issues 2&3

---

1997

## Inadequate Product Warnings and Causation

Mark Geistfeld  
*New York University School of Law*

Follow this and additional works at: <https://repository.law.umich.edu/mjlr>



Part of the [Torts Commons](#)

---

### Recommended Citation

Mark Geistfeld, *Inadequate Product Warnings and Causation*, 30 U. MICH. J. L. REFORM 309 (1997).  
Available at: <https://repository.law.umich.edu/mjlr/vol30/iss2/8>

This Symposium Article is brought to you for free and open access by the University of Michigan Journal of Law Reform at University of Michigan Law School Scholarship Repository. It has been accepted for inclusion in University of Michigan Journal of Law Reform by an authorized editor of University of Michigan Law School Scholarship Repository. For more information, please contact [mlaw.repository@umich.edu](mailto:mlaw.repository@umich.edu).

# INADEQUATE PRODUCT WARNINGS AND CAUSATION<sup>†</sup>

---

Mark Geistfeld\*

*The market failure that provides an economic justification for imposing tort liability on product sellers for design and manufacturing defects also justifies tort liability for inadequate warnings. In general, the liability standards proposed in the most recent draft of the Restatement (Third) of Torts: Products Liability have the potential to remedy this market failure, although this purpose is not furthered by the Draft's requirement that plaintiffs prove that an adequate warning would have prevented the injury. Unless courts presume causation (as most currently do), sellers will not have sufficient incentive to warn about unavoidable product risks. Moreover, there is no persuasive reason to curtail liability for inadequate warnings by adopting a more stringent causation standard, because juries can resolve competently the issues involved in a determination of whether a warning is inadequate. The presumption of causation therefore should be retained by the Restatement (Third).*

## INTRODUCTION

Until recently, the tort rules that hold product sellers liable for inadequate product warnings have received little critical analysis from scholars.<sup>1</sup> Liability rules that require sellers to provide information about product risk seem acceptable to just about everyone, including the most ardent critics of the tort system.<sup>2</sup> The liability rules also involve issues that fit comfortably within established tort doctrine. Whether a product warning is adequate can be resolved by the risk-utility test. The question of causation—whether an adequate warning would

---

† Copyright © 1996 Mark A. Geistfeld.

\* Associate Professor, New York University School of Law. B.A. 1980, Lewis and Clark College; M.A. 1981, University of Pennsylvania; J.D. 1989, Ph.D. 1990, Columbia University. This research was supported by a generous grant from the Filomen D'Agostino and Max E. Greenberg Research Fund at New York University School of Law.

1. See James A. Henderson, Jr. & Aaron D. Twerski, *Doctrinal Collapse in Products Liability: The Empty Shell of Failure to Warn*, 65 N.Y.U. L. REV. 265, 269 (1990) (arguing that "the failure to warn claim has all but escaped searching analysis").

2. See, e.g., PETER HUBER, *LIABILITY: THE LEGAL REVOLUTION AND ITS CONSEQUENCES* 213 (1988) (proposing "the law of warning" that would make "reasonably full disclosure of safety-related information . . . a required part of fair dealing").

have prevented the injury—seems inconsequential because presumably the reasonable consumer reads and follows product warnings. The warning doctrine would thus appear to be immune from criticism.

Nevertheless, tort scholars recently have criticized the warning doctrine. Most notably, the Reporters to the *Restatement (Third) of Torts: Products Liability*, Professors James A. Henderson, Jr. and Aaron D. Twerski, have argued that courts and juries routinely make mistakes when evaluating the adequacy of product warnings.<sup>3</sup> They claim that these mistakes stem from the tendency of courts and juries to find that a warning is inadequate because it did not disclose more information or place enough emphasis on the risk that caused the plaintiff's injury, even though proper application of the risk-utility test would lead to a contrary conclusion.<sup>4</sup> This overenforcement of the liability standard provides an incentive to sellers to overwarn about product risks, which undermines the effectiveness of product warnings to the ultimate detriment of consumers.<sup>5</sup>

Henderson and Twerski do not think that the overenforcement problem can be remedied by tightening the liability standard, however, because, like other commentators, they believe that properly evaluating the adequacy of product warnings involves many "intractable" problems.<sup>6</sup> Consequently, they propose to limit liability by changing the causation inquiry. At present, the issue of causation does not limit liability significantly because courts either explicitly or as a practical matter have adopted a rebuttable presumption that an adequate warning would have prevented the injury.<sup>7</sup> Henderson and Twerski propose to replace

---

3. See Henderson & Twerski, *supra* note 1, at 296–303.

4. See *id.*

5. See *id.* at 296.

6. See *id.* at 297. For other views that courts necessarily will do a poor job of evaluating the adequacy of product warnings, see Michael S. Jacobs, *Toward A Process-Based Approach to Failure-to-Warn Law*, 71 N.C. L. REV. 121, 126 (1992) (arguing that the "important limiting concepts upon which the doctrine relies so heavily for its effective functioning are hollow constructs incapable of assuming useful shape"); Howard Latin, "Good" Warnings, Bad Products, and Cognitive Limitations, 41 UCLA L. REV. 1193, 1283 (1994) (claiming that "there is no reason to believe courts can assess the efficacy of warnings in a reliable manner"). See also George L. Priest, *The Modern Expansion of Tort Liability: Its Sources, Its Effects and Its Reform*, J. ECON. PERSP., Summer 1991, at 31, 41 (arguing that the liability standard for warning defects provides "no principled grounds for denying recovery").

7. The presumption is often called a "heeding presumption" because it presumes that the plaintiff would have heeded or followed a warning had the defendant given one. "A great many jurisdictions have adopted the heeding presumption in failure-to-warn cases." *Coffman v. Keene Corp.*, 628 A.2d 710, 719 (N.J. 1993); see also Thomas H. Lee,

the presumption of causation with a "fact-intensive" inquiry addressing whether the plaintiff would have avoided injury by heeding an adequate warning.<sup>8</sup> In many cases, plaintiffs will not be able to satisfy this evidentiary burden, so eliminating the presumption of causation would curtail liability for inadequate warnings.<sup>9</sup>

Henderson and Twerski's proposal to eliminate the presumption of causation is significant, as the proposal's essential features are codified in the most recent draft of the *Restatement (Third) of Torts: Products Liability*.<sup>10</sup> But whether we should eliminate the presumption of causation is a point of some contention. Some commentators have argued that the presumption of causation should be retained;<sup>11</sup> others have claimed that

---

Note, *A Purposeful Approach to Products Liability Warnings and Non-English-Speaking Consumers*, 47 VAND. L. REV. 1107, 1115 n.35 (1994) (stating that a majority of courts presume that a plaintiff would have read a warning had it been provided).

Other jurisdictions rely on a subjective standard for establishing causation. See Jacobs, *supra* note 6, at 162-63 (stating that almost all courts have adopted one or two approaches to causation, one that presumes causation and one that relies upon a subjective standard to prove causation). As this Article will show, the subjective standard is tantamount to a presumption of causation if the plaintiff can satisfy the standard merely by testifying that she would not have purchased the product had she known about an unavoidable risk that was not adequately disclosed in the product warning. See *infra* Part III.B. Because the subjective standard can be satisfied with such testimony, see Jacobs, *supra* note 6, at 162-63 & n.162, these jurisdictions as a practical matter presume causation when the inadequate warning claim pertains to the disclosure of unavoidable risks. For warning claims that involve disclosures regarding product use, the subjective standard ordinarily functions like a presumption because the plaintiff invariably testifies that she would have read and heeded the adequate warning, and the defendant faces substantial risks in attacking the plaintiff's testimony. See *id.* at 162-63. "In these jurisdictions, as in those adopting the pro-plaintiff presumption, most plaintiffs have practically proven causation before their trial even begins." *Id.* at 163.

8. See Henderson & Twerski, *supra* note 1, at 325-26.

9. See *id.* at 326 (arguing that a system such as this one would allow judges to dispose of weak claims more easily).

10. RESTATEMENT (THIRD) OF TORTS: PRODUCTS LIABILITY § 10 (Tentative Draft No. 2, 1995) [hereinafter Tentative Draft No. 2] (stating that the causation standard for products liability cases is the same as the causation standard used in other tort cases). The Draft also states: "Notwithstanding the defective condition of the product in the absence of adequate warnings, if it is determined that a particular user or consumer would have decided to use or consume even if warned, the lack of warnings is not a legal cause of that plaintiff's harm." *Id.* § 2 cmt. h. This outcome is consistent with the presumption, however, as the defendant can rebut the presumption.

11. One view is that the presumption of causation is desirable because "to require plaintiffs to prove that they would have followed clear warnings—to exculpate the manufacturer here because it did not cause the accident—seems unwise; liability should attach because it will encourage people to sue and thus police the adequacy of warnings." Alan Schwartz, *Causation in Private Tort Law: A Comment on Kelman*, 63 CHI.-KENT L. REV. 639, 644 (1987); see also 2 AMERICAN LAW INST., ENTERPRISE LIABILITY FOR PERSONAL INJURY—REPORTERS' STUDY 80 (1991) (arguing that the presumption of

the standard of causation, whatever its form, makes little practical difference.<sup>12</sup> Although these assessments are instructive, they are of limited usefulness because the role played by the causation element depends, as Henderson and Twerski have observed, on whether courts and juries tend to overenforce the liability standard.<sup>13</sup> If, for example, courts and juries improperly impose liability on sellers in the vast majority of cases, then it might make sense to limit the scope of liability with a more stringent causation inquiry. Thus, in order to decide whether the presumption of causation should be eliminated, we must first determine whether courts and juries can properly apply the liability standard for warning defects in the *Restatement (Third) Draft*.

Undertaking this analysis yields the conclusion that the presumption of causation should be retained. To establish this conclusion requires resolution of some basic issues: What is an adequate warning? Why are adequate warnings not provided by product sellers in unregulated market transactions? And if unregulated markets are inefficient because product sellers fail to provide adequate warnings, would the liability standards in the *Restatement (Third) Draft* remedy this market failure? This Article argues that the Draft proposes liability standards that can correct this market failure. But, if the presumption of causation is eliminated, tort liability would not give product sellers a sufficient incentive to provide adequate warnings.

Part I describes how product sellers in unregulated markets can supply products that are insufficiently safe and warnings that are insufficiently informative when consumers make decisions on the basis of imperfect information. Part I then

---

causation should be retained because it "maximizes the number of occasions on which firms that warn badly are called to account"). A different view is that eliminating the presumption "would eviscerate warning law drastically." Mark McLaughlin Hager, *Don't Say I Didn't Warn You (Even Though I Didn't): Why the Pro-Defendant Consensus on Warning Law is Wrong*, 61 TENN. L. REV. 1125, 1152 (1994).

In contrast to these views, this Article shows that the impact of the presumption of causation depends on the type of case. The presumption is necessary if tort liability is to give sellers a sufficient incentive to disclose information pertaining to unavoidable risks. The presumption is not necessary, however, in order for tort liability to give sellers a sufficient incentive to disclose information pertaining to product use, although the presumption promotes that objective as well. See *infra* Part III.

12. See Jacobs, *supra* note 6, at 160 (opining that "causation in warnings cases is peculiarly and innately a simple matter for plaintiffs. No amount of judicial tinkering can make it otherwise"). This conclusion is incorrect because the causation inquiry will affect the plaintiff's ability to recover for certain types of cases. See *infra* Part III.

13. Cf. *supra* note 7.

explains how the liability standards in the *Restatement (Third)* Draft can rectify this market failure. Tort liability for design defects gives manufacturers an incentive to provide products with the cost-effective amount of safety. This liability standard ordinarily does not address the question of whether the total utility of the product exceeds the risk it creates, leaving this aspect of product choice to the consumer. Imperfectly informed consumers therefore need the risk-related information that would enable them to decide which products are most appropriate for them and how they should use those products. Tort liability for inadequate warnings gives product sellers an incentive to provide such information.

Part II addresses the question of whether courts and juries can competently evaluate the adequacy of product warnings. It begins by analyzing the characteristics of an adequate warning and then uses these characteristics to derive a set of jury instructions that implement the requirements of the liability standard in the *Restatement (Third)* Draft. The proposed jury instructions require resolution of issues that are not particularly problematic, indicating that warning cases do not raise a unique set of concerns calling for special rules to limit liability.

As there is no special need to curtail any overenforcement of the liability standard, the various ways to establish causation can each be evaluated on their merits. Accordingly, Part III analyzes how different methods of establishing causation affect the ability of plaintiffs to recover for inadequate warnings. The analysis shows that if the plaintiff must rely on *credible* evidence to prove that an adequate warning would have prevented the injury, then product users will rarely establish causation for cases involving the nondisclosure or ineffective disclosure of "unavoidable risks"—those risks that remain in products that are designed, manufactured, and used properly. Any approach to causation that depends upon proof other than the plaintiff's self-serving testimony therefore will lead to an insufficient amount of tort liability and an insufficient amount of disclosure. Hence, if the purpose of this form of tort liability is to give sellers an incentive to disclose the efficient amount of risk-related information, the presumption of causation should be retained.

## I. THE ECONOMIC BASIS OF TORT LIABILITY FOR INADEQUATE WARNINGS

A fundamental premise of economics is that in making decisions about products, consumers seek to maximize their well-being or utility. Consumers maximize their utility by purchasing products that provide the greatest net benefit—the difference between the various benefits and costs of the product.<sup>14</sup> Consumers, however, are not always certain of a product's net benefit; instead, they often must estimate the benefits and costs of the product on the basis of limited information. As a result, imperfectly informed consumers purchase products they expect will give them the greatest net benefit, so sellers often supply products that conform to these expectations even when they know that consumers are mistaken in their expectations. Of course, a seller might let consumers know about the mistake, but that is unlikely if the seller profits from the mistake. In these market settings, then, imperfectly informed consumers frequently make choices that do not maximize their well-being.

The circumstances that create such inefficient outcomes—market failures—may justify regulating market transactions with tort rules. In particular, when consumers underestimate or are otherwise unaware of product risks, manufacturers in unregulated markets supply insufficiently safe products. The market failure caused by this form of imperfect information provides an economic justification for holding manufacturers liable in tort for injuries caused by products that have been designed or manufactured defectively. Similarly, product sellers in unregulated markets disclose an insufficient amount of risk-related information when consumers underestimate or are otherwise unaware of product risks. Thus, the same market failure that justifies tort liability for design and manufacturing defects also provides the economic rationale for making product sellers liable for inadequate product warnings. The *Restatement (Third)* Draft reflects this rationale for tort liability, as it promulgates liability standards that have the potential to give product sellers an incentive to provide optimally safe products accompanied by adequate warnings.

---

14. Net benefit is the utility a consumer derives from a product less the costs (or disutility) the product imposes on the consumer. Hence, to maximize utility the consumer must maximize the net benefit she derives from every product she purchases.

*A. Market Failure in Sellers' Provision of Product  
Safety and Information About Product Risk*

Consumer knowledge of product risk is perhaps the most important factor that determines the amount of product safety sellers provide in unregulated markets. To understand why, assume a one in one hundred risk that a product will cause a consumer to suffer one thousand dollars in damages. The expected value (average cost) of this risk is ten dollars, so it would be cost-effective for the manufacturer to spend five dollars per product on a safety feature that eliminates the risk. Nevertheless, manufacturers that are not liable for the injury may profit by selling the product without this safety feature. Omitting the safety feature lowers production costs by five dollars per product, enabling the manufacturer to sell the product at a lower price. Consumers who do not fully appreciate the risk posed by the less safe product may decide to buy it because of the lower price. Although the omitted safety feature decreases the net benefit of the product to consumers (as the five dollar reduction in price is less than the ten dollar increase in the consumer's expected injury costs), consumers who underestimate the risk of injury might mistakenly conclude otherwise. A consumer who is unaware of the risk, for example, attaches no benefit to the safety feature and therefore would be unwilling to pay an additional five dollars for a product that has this feature. Hence, consumers who are unaware of product risks or otherwise underestimate them will purchase insufficiently safe products, creating a market failure that may justify tort liability.<sup>15</sup>

Consumer knowledge of product risk also affects the amount of risk-related information that sellers will disclose in unregulated markets. A consumer's belief about the risk of injury stemming from product use can affect her estimate of the benefits or costs of the product. Consequently, imperfectly informed consumers might overestimate the net benefit of the product, thereby increasing consumer demand over the amount that

---

15. Tort liability is not necessarily efficient, because it creates costs that may exceed its benefits. See generally Mark Geistfeld, *Manufacturer Moral Hazard and the Tort-Contract Issue in Products Liability*, 15 INT'L REV. LAW & ECON. 241, 241 (1995) (defining the different types of imperfect information that render contracting inefficient and may create an efficiency-enhancing role for tort liability).



would occur if consumers were well informed of product risks. Because sellers profit from these mistakes, they are unlikely to give consumers the risk-related information that would enable them to estimate more accurately the net benefits of the product.

Consider how a consumer's knowledge of risk affects her assessment of product benefits. Any benefit the consumer would get from certain kinds of use will be outweighed by the risk of injury created by such use. A consumer who is aware of the risk would not plan to use the product in this manner and would not attach any benefit to such product use. Consumers who do not fully appreciate the risk, however, may plan to use the product in this way. These consumers therefore expect to get a benefit from an undesirable product use, and this benefit might provide the decisive reason why the consumer decides to purchase the product. Consequently, sellers have an incentive not to disclose the risk.

For example, an apartment dweller who enjoys barbecued foods may want to purchase an outdoor gas grill even though she cannot use the grill outdoors. There are obvious inconveniences created by barbecuing indoors (smoke), but it is plausible that some individuals would like to buy the grill despite these inconveniences. It is less obvious, however, that if the grill leaks gas in a confined area (an apartment), there is a significant risk of explosion. Apartment dwellers who know about the risk of explosion would decide not to buy the grill, but those who are unaware of this risk may purchase the product. Of course, the seller could tell consumers that the grill should not be used indoors because of the risk of explosion. This disclosure would have a negative impact on sales and profits, however, so sellers in an unregulated market have an incentive not to disclose information about the risks of using the grill indoors.

Risk-related information can also affect the consumer's estimate of product costs. Any cost that consumers know they will incur by using the product reduces their estimate of the net benefit they expect to derive from the product. Risk-related disclosures that cause consumers to increase their estimate of the cost of using the product therefore would reduce consumer demand, giving sellers an incentive not to make such disclosures. Two types of disclosures fall into this category.

The first type pertains to disclosures regarding precautions that consumers should take when using the product. Consumers benefit from precautions that enable them to reduce the risk of

product-caused injury in a cost-effective manner. Consumers who are not aware of the risk will not be aware of the need to take a precaution, however. Other consumers who are aware of the risk may not know that it can be reduced by certain precautions. Many consumers therefore would prefer to know about such precautions, but if using the product in a safe manner is costly for the consumer, the product seller may choose not to disclose this information. By making consumers aware of the desirable but costly precaution, the information reduces consumer demand by reducing consumer estimates of the net benefit they would derive from the product. Sellers therefore have an incentive to withhold information about the need for consumers to take costly safety precautions that reduce the risk of product-caused injury.<sup>16</sup>

Product sellers may also have an incentive not to disclose information about "unavoidable" product risks. Often, products that are designed, manufactured, and used properly still present a risk of injury to the consumer. Drugs, for example, can produce side effects for users.<sup>17</sup> Similarly, many products contain chemicals (such as carcinogens) that are hazardous to human health. If the seller is not liable for the injuries (such as cancer) that inevitably occur to some people who use these products, consumers need to account for the costs they will incur if injured.<sup>18</sup> For example, suppose there is an unavoidable one in

---

16. This concept is illustrated by a study involving a warning that informed users of a caustic drain opener about the need to wear rubber gloves in order to reduce by an average of .000061 the risk of hand burns severe enough to require medical treatment. The study is described in W. Kip Viscusi, *Toward a Proper Role for Hazard Warnings in Products Liability Cases*, 13 J. PROD. LIAB. 139, 153-56 (1991). It is plausible that most consumers know that caustic chemicals can be hard on the hands. It is also plausible that few people realize there is a small chance of suffering severe hand burns that require medical treatment. The study indicated that disclosure of this information would enhance consumer welfare because, once informed of the risk, 82% of the individuals studied said they would wear rubber gloves to reduce the risk of serious burn, even though the disutility, or cost, to users of wearing the gloves was \$.17 per bottle. Even though it would be desirable for the seller to disclose this information in a warning, there are strong reasons for believing that the seller would not do so willingly. The disclosure would increase a consumer's estimate of the cost of the product by up to \$.17 per bottle, and thus reduce by up to \$.17 the consumer's estimate of the product's net benefit. Hence, it is likely that consumer demand would be lower after disclosure. The decrease in demand is likely to decrease profits, which is why the seller has an incentive not to disclose. (If consumer demand were not affected significantly by the increased cost, the seller would find it more profitable to raise the price of the product by up to \$.17 per bottle rather than to make the disclosure.)

17. For example, it is estimated that for every 2000 women taking birth control pills each year, one woman suffers blood clotting requiring hospitalization. See MacDonald v. Ortho Pharm. Corp., 475 N.E.2d 65, 67 n.4 (Mass. 1985).

18. Although consumers often have other sources of insurance to compensate for the injury, first-party insurance rarely provides full compensation for the injury in

one hundred risk that the product will cause the consumer to suffer one thousand dollars in damages. At the time of purchase, the risk of injury imposes a cost on each consumer at least equal to ten dollars per product (the expected value of the risk), so consumers should factor this ten dollar cost into their estimate of the product's net benefit. Consumers who are unaware of the risk will not account for this cost, however, thereby inflating their estimate of the product's net benefit by ten dollars. Consequently, these consumers will buy more of the product than they would if they knew about the unavoidable risk. By disclosing information about the unavoidable product risk, sellers would reduce sales and profits, so they have an incentive not to make the disclosure.

As a general matter, then, product sellers have an incentive not to disclose risk-related information that would reduce consumer estimates of the product's net benefit. But why do consumers not acquire this information on their own? The reason is simple: If information were free, everyone would be perfectly informed about everything, making questions of disclosure irrelevant. Information about product risks, however, is often costly to obtain.<sup>19</sup> Moreover, given the low level of risk posed by most products and the widespread lack of consumer knowledge about the risk, any given individual often will find the benefits of acquiring the information about any one product are not worth the costs. Thus, unless product sellers disclose risk-related information, consumers are not likely to have such information available to them when they make decisions about the purchase and use of products.<sup>20</sup>

---

question. Deductibles and co-insurance provisions commonly result in the insured bearing from 20% to 40% of pecuniary losses under first-party insurance. See George L. Priest, *Can Absolute Manufacturer Liability be Defended?*, 9 YALE J. ON REG. 237, 242 (1992). Also, little, if any, first-party insurance coverage is available for pain and suffering. See *id.* at 245.

19. For example, the cost of gaining Food and Drug Administration (FDA) approval for pharmaceutical products (which involves determinations regarding the benefits and risks of drugs) has been estimated to be more than \$230 million in 1990. See Paul Abrahams, *A Tricky Balancing Act for Regulators*, FIN. TIMES (London), Nov. 15, 1991, § 1, at 19 (quoting a spokesperson of the Pharmaceutical Manufacturers Association of America).

20. The issue of why consumer demand does not force product sellers to provide risk-related information remains. If consumers purchased only those products that contained warnings, sellers would have an incentive to supply a warning. But if imperfectly informed consumers cannot verify the veracity of these warnings, they would not find the warnings to be credible. For example, if a seller provided a warning that the product poses one small risk, then a consumer who knows that sellers benefit by not fully disclosing would believe this warning only if the seller guaranteed that the

### B. *The Role of Tort Liability*

When consumers underestimate or are unaware of product risks, unregulated market transactions will yield insufficiently safe products. To remedy this market failure, sellers must have a reason not to sell such products. The *Restatement (Third) Draft* creates such an incentive by making commercial sellers and distributors liable for injuries caused by defectively designed products.<sup>21</sup> To understand the incentives created by this liability standard, consider its impact on a manufacturer that currently has a defectively designed product. According to the *Restatement (Third) Draft*, a product is defectively designed if the cost of a safer design is less than the safety benefit (reduced injury costs) achieved by that design.<sup>22</sup> Thus, the increased cost the manufacturer would incur by adopting a nondefective design is necessarily less than the savings in liability (injury) costs that the manufacturer would experience were it to adopt the safer design.<sup>23</sup> The manufacturer therefore can minimize total costs, which is necessary if profits are to be maximized, by adopting a nondefective design.

---

warning adequately describes all the risks actually posed by the product. There is no way to determine whether the seller fulfilled this guarantee, however, without litigating the issue of whether the warning is adequate. Cf. Geistfeld, *supra* note 15, at 249–51 (describing how contractual guarantees of product quality operate like a tort rule of negligence).

21. See Tentative Draft No. 2, *supra* note 10, § 1.

22. The *Restatement (Third) Draft* states that “a product is defective in design when the foreseeable risks of harm posed by the product could have been reduced or avoided by the adoption of a reasonable alternative design . . . .” *Id.* § 2. According to the Reporters, “whether a preferred design is a reasonable alternative can be determined only after a comparison of the relative advantages and disadvantages of the competing designs, utilizing the various factors for risk-utility balancing . . . .” *Id.* reporters’ note cmt. e, at 99–100. In effect, then, a cost-benefit test determines whether a design is defective. See also *id.* § 2 cmt. a, at 15 (explaining that the design-defect liability emphasis “is on creating incentives for manufacturers to achieve optimal levels of safety in designing and marketing products”).

23. Strictly speaking, this statement is necessarily true only for the nondefective design that can be attained at the lowest cost for the manufacturer. Once the product design is nondefective, the manufacturer no longer is liable for injuries caused by the design. Hence, further safety improvements will increase the cost of production by more than the (nonexistent) decrease in the manufacturer’s liability costs, so the liability standard will not induce the manufacturer to make these additional safety improvements even though the resulting designs would also be nondefective.

In addition, design-defect liability will not lead to optimally safe products if courts and juries do not enforce the standard properly or if victims do not always pursue meritorious tort claims.

Tort liability for design defects, however, is not sufficient to remedy the market failure that occurs when consumers underestimate or are unaware of product risks. Consumers often must exercise care while using a properly designed product, so something other than design-defect liability is needed to give product sellers an incentive to provide information about product use. In addition, the liability standard for design defects ordinarily does not address the question of whether the utility of the product outweighs its risk.<sup>24</sup> As a result, even though the design-defect standard helps to ensure that the design of a product (such as a prescription drug) is sufficiently safe, consumers still must decide whether the utility of the product exceeds its costs, including those caused by unavoidable risks. (Do the health benefits of the drug outweigh its costs, including the risk of suffering side-effects?) As we have found, consumers who underestimate or who are unaware of product risks will tend to err by choosing overly risky products. Consequently, if consumers are to make the right decisions regarding product safety, tort liability must give product sellers a sufficient incentive to disclose risk-related information.<sup>25</sup>

The *Restatement (Third)* Draft may create such an incentive by making product sellers liable for injuries caused by

---

24. To establish a design defect, the plaintiff typically must show that there is a reasonable alternative design that would reduce the risk. See Tentative Draft No. 2, *supra* note 10, § 2 cmt. c, at 19–21. This requirement means that the plaintiff normally cannot establish a design defect by showing that the overall utility of the product is outweighed by its risks because such a showing is based upon “no alternative” as opposed to a reasonable alternative design. To be sure, “the designs of some products are so manifestly unreasonable, in that they have low social utility and high degree of danger, that liability should attach even absent proof of a reasonable alternative design.” *Id.* § 2 cmt. d. The circumstances in which courts are willing to impose liability on this basis are, however, rare. See *id.* § 2 reporters’ note cmt. d (noting that “a number of courts have suggested [imposing such liability] in rare instances”). For most products, then, the liability standard for design defects does not include consideration of whether the total utility of the product exceeds the risk it creates.

25. In contrast to the risks inherent in product design and use, disclosures regarding the risks inherent in the manufacturing process (due to manufacturing defects) may not be necessary. Commercial sellers are strictly liable for injuries caused by manufacturing defects. See Tentative Draft No. 2, *supra* note 10, § 2(a). The expected injury cost of manufacturing defects therefore may be contained already in the price of the product. If so, consumers need not estimate this injury cost in deriving their estimate of the product’s net benefit, so a disclosure is not needed. But to the extent that consumers bear some injury costs when injured by manufacturing defects (attorney fees, for example, often leave consumers with less than full compensation), then consumers might need to be warned about manufacturing defects in order to estimate accurately the product’s net benefit.

inadequate product warnings.<sup>26</sup> Suppose a disclosure would reduce the average consumer's estimate of the net benefit of the product by ten dollars. Although sellers in unregulated markets have an incentive not to make this disclosure, the threat of tort liability can give the seller an incentive to disclose. For example, if a seller's liability costs for nondisclosure would increase the product price by eleven dollars, the average consumer's estimate of the product's net benefit would decrease by that amount, an amount that exceeds the cost of disclosure. Under these circumstances, the seller is better off by disclosing the risk-related information and avoiding the liability costs (and concomitant price increase). Consequently, tort liability for inadequate product warnings might give sellers a sufficient incentive to disclose risk-related information because of the impact of liability costs on product price.

## II. DETERMINING THE ADEQUACY OF WARNINGS

A seller can avoid tort liability by providing a warning that is "adequate" according to the liability standard in the *Restatement (Third)* Draft. But what constitutes an "adequate" warning as a matter of tort law will not be adequate for consumers if courts and juries improperly apply the liability standard and give sellers an incentive to provide product warnings that do not best promote consumer welfare. Thus, even though tort liability for inadequate warnings can give sellers an incentive to provide warnings that consumers prefer, whether tort liability attains this objective depends on how courts and juries apply the liability standard.

To determine whether tort liability is likely to lead to the provision of warnings preferred by consumers, we must first understand the characteristics of such a warning. These characteristics can then be used to derive the set of questions that juries must resolve when evaluating the adequacy of a warning. An examination of these issues indicates that a jury is well suited to evaluate the adequacy of a warning. Consequently, courts and juries should be able to apply the liability standard so that sellers have an incentive to provide warnings that maximize consumer welfare.

---

26. See *id.* § 2(c) (imposing liability if "reasonable instructions or warnings" could have lessened the "foreseeable risks" associated with a product).

### A. Conceptualizing an Adequate Warning

Although consumers try to maximize the net benefit they expect to derive from products, the cost of acquiring information often forces them to make these decisions on the basis of imperfect information. Product warnings enhance consumer welfare by enabling consumers to avoid mistakes caused by imperfect information. Hence an adequate product warning—that is, a warning which best promotes consumer welfare—is one that enables consumers to make the best estimate of the product's net benefit.

Whether a warning is adequate cannot be determined without reference to its cost. The cost an individual faces in order to acquire information creates the need for disclosure in the first instance (because if information were free, then presumably everyone would be perfectly informed and would know the risks without having a warning). Although this cost is reduced by product warnings, it does not disappear. Every consumer incurs a cost (in the form of time and attention) by reading and remembering the various disclosures in a warning.<sup>27</sup> If we ignore this information cost, we will undermine the efficacy of product warnings for most individuals. According to two of the leading experts in risk assessment, "A major practical problem is ensuring that individuals read the warning label or acquire information in some other form, since there is no general assurance that individuals will do so."<sup>28</sup> Individuals will stop reading a warning if they find that the benefit of reading is not worth the effort.<sup>29</sup> Indeed, product users might ignore warnings altogether if they find that warnings in general are not worth reading. A warning will promote informed consumer decisionmaking, then, only if the cost consumers incur to acquire the information from the warning does not exceed the benefit consumers derive from their more well-informed product choices.

---

27. See, e.g., WESLEY A. MAGAT & W. KIP VISCUSI, INFORMATIONAL APPROACHES TO REGULATION 87-105 (1992) (describing a study finding that a cost is created by any new item of information on a product warning, due to the effect that additional information has on the consumer's ability to recall other information contained in the warning).

28. *Id.* at 8. For a discussion of the various reasons product users may not digest all the risk-related information in a warning, see Latin, *supra* note 6, at 1206-48.

29. See Latin, *supra* note 6, at 1210-12 (arguing that consumers may not consider it worthwhile to read warnings if they can rely on their own knowledge and/or if the warning creates an "information overload").

Due to the information cost created by disclosures, the efficacy of a warning necessarily depends upon how well it performs on average. Consumers vary widely in terms of their knowledge, background, physical characteristics, and other traits that determine the kind of information an individual wants in a product warning. A warning cannot be tailored to satisfy each individual's needs, however, because the same warning is given to all product users. For example, even if a warning specified all information that could conceivably be relevant to some individual, the length of such a warning would render it unsatisfactory for most individuals. Hence, due to the information cost that warnings create for each consumer, any given warning is unlikely to satisfy the needs of every product user. Instead, at best a warning can maximize informed decisionmaking for consumers as a group. An adequate warning therefore performs better on average than alternative (and inadequate) warnings, even though any given alternative might be beneficial for some individuals; that is, an adequate warning satisfies the needs of the average consumer.<sup>30</sup>

The average consumer wants the warning to contain any disclosures that would significantly affect her decisions about product purchases or use. Consequently, an adequate warning need not disclose a risk that is easily observed and comprehended by the average consumer, as a disclosure about this risk does not affect the average consumer's decisionmaking and accordingly is immaterial.<sup>31</sup> Indeed, if the disclosure is not material for the average consumer, the warning should not contain it. A nonmaterial disclosure for the average consumer necessarily creates costs for all consumers that exceed the benefit some consumers might derive from the disclosure.<sup>32</sup> A warning that

---

30. Under certain conditions, the preferences of a fictional "representative consumer" can be used as a measure of social welfare, so that maximization of this consumer's utility would result in the maximization of social welfare. See ANDREU MAS-COLEL ET AL., *MICROECONOMIC THEORY* 116-22 (1995).

31. Merely because consumers are aware of a risk does not imply that there should be no disclosure. Consumers can underestimate the risk, leading to the market failure described in Part I, so there is a potential benefit that may make such disclosure desirable. The relevant question, then, is whether consumers are sufficiently well informed of the risk's nature.

32. The cost of reading and comprehending a nonmaterial disclosure is some positive amount for the average consumer, so it necessarily exceeds the nonexistent benefit that the nonmaterial disclosure provides to the average consumer. Because such a disclosure actually makes the average consumer worse off, and the average consumer merely reflects an averaging of the total costs and total benefits for the group, it follows that the total costs of the disclosure for the group exceed the benefit some consumers might derive from the disclosure.



maximizes consumer welfare therefore contains only those disclosures of risk-related information material to the average consumer.

As this discussion suggests, whether any given disclosure is "material" depends upon how much risk-related information is otherwise available to the average consumer. By definition, the average consumer has the average amount of information. To understand what this means, consider a case in which 50% of all consumers fully understand a risk and the remaining 50% do not adequately comprehend the risk. A consumer with the average amount of information can be thought of as someone who knows there is a 50% chance that he fully understands the risk and a 50% chance that he does not.<sup>33</sup> The average consumer would want the warning to disclose the risk if the 50% chance of benefitting from the disclosure exceeds the cost of reading the disclosure. Materiality therefore depends upon the chance that an individual will benefit from disclosure (that is, the proportion of uninformed consumers in the group) and the amount of benefit an uninformed individual derives from the disclosure. Two implications follow from this conclusion.

First, an adequate warning does not contain information about insignificant risks, because the insignificant benefit created by the disclosure is outweighed by the cost consumers incur in order to digest the disclosure. Second, if a large enough proportion of consumers are aware of the risk, an adequate warning need not disclose it. Suppose that 99% of consumers fully understand the risk. In determining whether disclosure is desirable, the average consumer compares the 1% chance of benefitting from disclosure to the cost of reading the disclosure. For many risks the slight benefit will not be worth the cost. Moreover, the consumer can easily find out about the risk from other sources given the widespread knowledge of the risk in the community. It would be cheaper for uninformed individuals to learn about the risk from these other sources than it would be to force 99% of all consumers to read a disclosure that is

---

33. A person with these odds expects to have information available to him equal to the average amount of information among all consumers. Formulating the problem in this manner is consistent with the assumption that consumers are not perfectly informed of risk, because even those consumers who have some knowledge of risk often do not know whether they are sufficiently well informed. That knowledge can be obtained only from an adequate warning, which in effect enables the consumer to compare his knowledge with the manufacturer's knowledge of product risk.

superfluous for them.<sup>34</sup> A risk that is commonly understood in the community therefore need not be disclosed in an adequate warning because the disclosure offers a minor benefit to the average individual, and there are less costly ways for uninformed individuals to acquire the information.

Whether a warning is adequate also depends upon the method of disclosure, because the form of communication affects the likelihood that consumers will benefit from the information. The disclosure must be written in a manner that is commonly understood.<sup>35</sup> The warning also should not be overly long, as such warnings impose unnecessary costs on consumers and therefore make it less likely that product users will read the entire warning.<sup>36</sup>

The design of the warning also affects the likelihood that the warning will improve consumer decisionmaking. Consider a poorly designed warning that has no apparent organization and tends to place the least significant risks at the beginning. Because product users cannot discern the organization of the information, they are likely to start reading the warning from the beginning. As the risks described initially are the least

---

34. See Carol Rogerson & Michael Trebilcock, *Products Liability and the Allergic Consumer: A Study in the Problems of Framing an Efficient Liability Regime*, 36 U. TORONTO L.J. 52, 89-94 (1986).

35. Suppose the average consumer has a 50% chance of understanding a disclosure and a 50% chance of not understanding it. Suppose the disclosure could be rewritten so that 90% of all consumers would understand it. The average consumer would prefer that the disclosure be rewritten in this manner if the 40% chance of benefitting from the rewritten disclosure exceeds an additional cost created by the rewritten disclosure. If, for example, the disclosure can be rewritten without significantly increasing the average consumer's cost of digesting the information, then the average consumer would prefer that the disclosure be rewritten. Disclosures rewritten in foreign languages may be of this type, assuming that someone who understands English does not need to read warnings written in other languages. But if the disclosure can only be rewritten in a manner that increases the average consumer's cost of digesting the information, then we also need to consider whether there are cheaper ways for the consumer to understand the warning. For cases in which a large proportion of consumers understand a warning as written, it is also likely to be true that someone who does not understand the warning could easily get that information from other sources. See *id.* at 91. Warnings that are commonly understood therefore need not be rewritten because the average consumer derives little benefit from a different formulation and uninformed consumers can rely on relatively less costly sources in order to understand the warning.

36. The possibility that too much disclosure may undermine informed decisionmaking has been recognized by the U.S. Supreme Court, albeit in a context different from the one discussed here. See, e.g., *TSC Indus., Inc. v. Northway, Inc.*, 426 U.S. 438, 448-49 (1976) (ruling that a disclosure standard which might bring an overabundance of information within the reach of shareholders is not desirable, since it could lead management "simply to bury the shareholders in an avalanche of trivial information—a result that is hardly conducive to informed decisionmaking").

significant, most product users might decide that reading the entire warning is not worth the effort.<sup>37</sup> This outcome harms the average consumer—and the warning therefore is inadequate—because product users may not get to the disclosures regarding the most significant risks. A better format would give more significant risks greater emphasis, making it more likely that product users will pay attention to the most significant risks. An adequately designed warning therefore emphasizes risks in proportion to their significance.<sup>38</sup>

Thus, the characteristics of an adequate warning reflect the conditions that create the need for disclosure. In the same way that the cost of acquiring information prevents consumers from being well informed about product risks, this cost can also prevent consumers from digesting all the information contained in a product warning. Too much information might harm consumers by reducing the likelihood that consumers will read and consider the warning. To ensure that more information will lead to better decisionmaking, an adequate warning maximizes the likelihood that consumers will read the warning by minimizing the cost that consumers incur to acquire the information. An adequate warning achieves this objective by conveying concisely only that information which would be material to the average consumer in a manner that can be understood commonly and in a format that emphasizes risks according to their significance.

---

37. "Sequencing inevitably denotes relative importance and will have an impact on the weight a consumer attaches to the risk." Henderson & Twerski, *supra* note 1, at 308 (citations omitted).

38. According to Wesley Magat and Kip Viscusi:

The efficacy of the approach [to disclosure] will depend in large part upon its prominence. Thus a hazard warning that is not in a prominent location on a product, or that ranks low in terms of the overall priority of the messages conveyed by the product label, is much less likely to be read than a warning that ranks high in this priority.

*B. The Liability Standard for Inadequate Warnings  
in the Restatement (Third) Draft*

The liability standard for inadequate product warnings in the *Restatement (Third) Draft* reflects the principles that define an "adequate" warning from the consumer's perspective. The standard for evaluating a warning is based on the risk-utility test.<sup>39</sup> To recover, the plaintiff must show that the seller did not provide a specific warning or instruction that satisfies this test. In evaluating the "risk," or cost, of the plaintiff's requested disclosure, the finder of fact must consider that warnings which are "too numerous or detailed may be ignored [by consumers] and [are] thus ineffective. . . . [P]otentially useful instructions and warnings can be debased if attention must also be directed to trivial or far-fetched risks."<sup>40</sup> The cost of disclosure must then be compared to the utility or benefit the additional information creates by enabling consumers to make better decisions about product safety.<sup>41</sup> By showing that the extant warning does not contain a disclosure that satisfies the risk-utility test, the plaintiff in effect shows that the warning is inadequate because it does not make a disclosure with a cost less than its benefit. Consequently, the risk-utility test requires the type of disclosures that maximize consumer welfare.<sup>42</sup>

The risk-utility test can also resolve the issue of whether the manufacturer has designed the warning properly. A poorly designed warning does not emphasize risks in proportion to their significance. A new design alters the emphasis given to risk disclosures in the warning, creating a benefit from the greater emphasis of some risks and a cost due to the reduced emphasis of other risks. Thus, an alternative design that properly emphasizes risks in terms of their significance will pass the risk-utility test, because greater emphasis of more significant risks

---

39. The test for judging the adequacy of warnings "parallels" the standard for evaluating the safety of product designs. Tentative Draft No. 2, *supra* note 10, § 2 cmt. h. Hence, the risk-utility test provides the standard of inadequate warnings. *See id.* § 1 (describing the liability standard for design defects).

40. *Id.* § 2 cmt. h.

41. *See id.*

42. This conclusion assumes that the risk-utility test is defined by reference to the needs of the average consumer. *Cf. supra* notes 30-33 and accompanying text. Courts typically require that the product warning should be directed to the attention of the average user or consumer. *See Jacobs, supra* note 6, at 127 & n.21.

necessarily creates a benefit that exceeds the cost stemming from the reduced emphasis of less significant risks. Designs that satisfy the risk-utility test therefore maximize consumer welfare.

Even though the risk-utility test promotes consumer welfare, some argue that the test is inappropriate because courts do not find the information cost of warnings to be relevant.<sup>43</sup> To be sure, some courts have claimed that the information cost created by warnings is not a significant consideration that should limit liability.<sup>44</sup> This claim, however, is inconsistent with the underlying premise of tort liability in this area: that information costs prevent consumers from being well informed of product risks. Moreover, courts commonly recognize that an adequate warning should be directed to the average consumer;<sup>45</sup> that an adequate warning need not disclose commonly known or insignificant risks;<sup>46</sup> and that a warning can be inadequate because of its design.<sup>47</sup> These aspects of an adequate warning stem from the need to minimize the cost consumers must incur in order to digest the information contained in a warning,<sup>48</sup> so there is ample precedent for a liability standard such as the risk-utility test that relies upon information costs to determine the adequacy of a product warning.

A more fundamental problem with the risk-utility test is highlighted by the *Restatement (Third) Draft*, which raises questions about the ability of courts and juries to apply the test. First, it notes that the risk-utility test "is more difficult to apply

---

43. See Paul D. Rheingold & Susan B. Feinglass, *Risk-Utility Analysis in the Failure to Warn Context*, 30 U. MICH. J.L. REFORM 353 (1997).

44. See, e.g., *Moran v. Faberge, Inc.*, 332 A.2d 11, 15 (Md. 1975). The court observed

that in cases such as this the cost of giving an adequate warning is usually so minimal, amounting only to the expense of adding some more printing to a label, that this balancing process will almost always weigh in favor of an obligation to warn of latent dangers, if the manufacturer is otherwise required to do so.

*Id.*; see also Henderson & Twerski, *supra* note 1, at 296-97 (claiming that judges and juries tend "to assume erroneously that warnings are virtually costless").

45. See *supra* notes 30-33 and accompanying text; see also M. Stuart Madden, *The Duty to Warn in Products Liability: Contours and Criticism*, 89 W. VA. L. REV. 221, 299-301 (1987) (discussing cases in which a duty arises only where an "appreciable number" of users will be affected). *But see id.* at 301-03 (discussing cases in which a duty was found to exist even to an "idiosyncratic" consumer).

46. See Madden, *supra* note 45, at 253-57 (arguing that obvious risks create no duty to warn).

47. See *id.* at 312 (noting that the physical characteristics of warnings are criteria of adequacy).

48. See *supra* Part II.A.

in the warnings context" than in the context of product design.<sup>49</sup> Given the serious problems that allegedly arise when courts and juries evaluate product designs with the risk-utility test,<sup>50</sup> the assertion that warnings present even more difficult problems is troubling. The Draft also claims that it is "difficult to determine the appropriate degree of intensity with which warnings should be transmitted."<sup>51</sup> If this is true, the lack of well-defined guidelines may create implementation problems that render the risk-utility test undesirable in practice.

*C. Implementing the Risk-Utility Test for Inadequate Warnings in the Restatement (Third) Draft:  
Is There a Particular Cause for Concern?*

To ascertain whether the risk-utility test would be particularly difficult for courts and juries to apply, we need to evaluate how the test would work for the different types of warning claims—those involving the disclosure of unavoidable risks, the disclosure of instructions regarding product use, and the design or format of the warning. Each type of claim involves a number of distinct issues. As a result, each issue must be defined before we can determine whether courts and juries can competently evaluate the claim as a whole. Breaking a warning claim down into its component parts indicates that resolution of the claim involves issues which juries are well equipped to resolve.

1. *Disclosure of Unavoidable Risks*—For cases in which the plaintiff claims that the warning is inadequate because it does not disclose an unavoidable risk (such as the risk of suffering an allergic reaction), the initial question is whether the average consumer would benefit from the disclosure; that is, the disclosure must pertain to a risk that is significant and not commonly understood. If the average consumer would not derive a significant benefit from the disclosure, the utility of the disclosure is necessarily less than its information cost.<sup>52</sup> Thus, unless the

---

49. Tentative Draft No. 2, *supra* note 10, § 2 cmt. h.

50. See, e.g., James A. Henderson, Jr., *Judicial Review of Manufacturers' Conscious Design Choices: The Limits of Adjudication*, 73 COLUM. L. REV. 1531, 1558 (1973) (discussing the myriad problems involved in the process).

51. Tentative Draft No. 2, *supra* note 10, at § 2 cmt. h.

52. See *supra* note 32.

plaintiff can show that the requested disclosure would be material to the average consumer, there is no need to proceed further.

Assume the jury concludes that the requested disclosure would significantly influence the average consumer's decision to buy a product. Although the jury must then weigh the benefit of improved decisionmaking against the disclosure's cost, the jury may not have to evaluate the disclosure with a full-blown risk-utility analysis. If sellers are held accountable for the warnings they provide, the plaintiff can rely upon a presumption that the disclosures already contained in the warning satisfy the risk-utility test. On the basis of this presumption, the jury may be able to evaluate the disclosure requested by the plaintiff without having to engage in a cost-benefit analysis. Simply put, as an alternative to the extant warning, the plaintiff proposes a warning in which a more significant risk replaces a less significant risk. Given a presumption that the less significant risk already disclosed in the warning satisfies the risk-utility test, it follows that disclosure of a more significant risk would also satisfy the risk-utility test. The jury therefore can find for the plaintiff if it concludes that the disclosure requested by the plaintiff involves a risk that is more significant to the average consumer than any other risk already disclosed in the warning.<sup>53</sup>

If the jury concludes that the disclosure requested by the plaintiff does not involve a risk of greater significance than any other risk already described in the warning, it needs to decide whether the additional disclosure would undermine the effectiveness of the other, more important disclosures already contained in the warning. Space constraints, for example, may create an undesirable crowding-out effect. If the additional disclosure would significantly undermine the effectiveness of more important disclosures, it probably creates a cost that exceeds any benefit it might offer to consumers. Thus, if the jury concludes that the disclosure requested by the plaintiff would significantly diminish the effectiveness of other disclosures already in the warning, it can conclude that the plaintiff has not satisfied the risk-utility test.

---

53. In addition, a presumption that a warning contains only material disclosures of risk-related information would create beneficial incentives. If plaintiffs can show that the warning should contain a nondisclosed risk because it is more significant than a risk already contained in the warning, product sellers have an incentive not to disclose insignificant risks in a product warning, which is desirable because such disclosures are detrimental to consumers as a group.

Suppose the plaintiff clears this hurdle. What happens next? The situation is one in which the additional disclosure requested by the plaintiff is not more significant than any disclosure already contained in the warning. Consequently, the additional disclosure cannot receive greater emphasis than the previously disclosed risks (otherwise it would significantly diminish the effectiveness of these other disclosures, which is not permissible for reasons just given). A disclosure that receives the least emphasis is one that will be read last by the consumer. Thus, if the disclosure requested by the plaintiff is to satisfy the risk-utility test, the jury must decide that the average consumer would find it worthwhile to read the entire warning to get the information in the disclosure requested by the plaintiff.

The requirements of the risk-utility test therefore yield the following set of issues (framed as jury questions) that the jury must decide in order to resolve the question of whether the warning provided by the seller is inadequate because it does not contain the disclosure requested by the plaintiff:

1. The plaintiff claims that the defendant should warn consumers about the risk of [\_\_\_\_]. Would the average consumer find this risk to be significant or important in deciding whether to buy the product? If the answer to this question is yes, you must answer the next question. If the answer is no, you must find for the defendant.

2. Is the risk of [\_\_\_\_] so commonly understood or otherwise obvious to consumers that a warning about the risk is not likely to change significantly the average consumer's understanding of the risk? If the answer to this question is yes, you must find for the defendant. If the answer is no, you must answer the next question.

3. The warning provided by the defendant already contains disclosures about other risks. Would the average consumer attach greater significance to the risk disclosure requested by the plaintiff than to any other risk disclosure already contained in the warning? If the answer to this question is yes, you must find for the plaintiff. If the answer is no, you must answer the next question.

4. If the risk disclosure requested by the plaintiff were put onto the warning, would it significantly diminish the effectiveness of other disclosures already contained in the warning? If the answer to this question is yes, you must find for the



defendant. If the answer is no, you must answer the next question.

5. Do you think the average consumer would find it worthwhile to read the entire warning already provided by the defendant to get the information requested by the plaintiff? If the answer to this question is yes, you must find for the plaintiff. Otherwise, you must find for the defendant.

*2. Disclosure of Instructions Regarding Product Use*—In most respects, evaluating a claim that a warning is inadequate because it does not disclose information about precautions parallels the evaluation of a claim that a warning is inadequate because it does not disclose information about unavoidable risks. The primary difference is that the benefit of disclosure is defined differently. There are many ways to reduce risk (not using the product, for example), but consumers would choose to take a precaution only if it costs less than the benefit of risk reduction. Hence disclosures regarding precautions can be material—that is, beneficial—only if the precaution is cost-effective.

Once we take this difference into account, the prior analysis of unavoidable risks can be used to derive a set of questions that the jury must answer to decide whether the warning is inadequate because it does not contain the instruction regarding product use requested by the plaintiff:

1. The plaintiff claims that the defendant should warn consumers about the need to [ ] when using the product. Would the average consumer find it worthwhile to take this precaution? If the answer to this question is yes, you must answer the next question. If the answer is no, you must find for the defendant.

2. Is the need to take the precaution so commonly understood or otherwise obvious to consumers that describing the precaution in the product warning is not likely to change significantly the average consumer's understanding of the need to take the precaution? If the answer to this question is yes, you must find for the defendant. If the answer is no, you must answer the next question.

3. The warning provided by the defendant already contains disclosures about other risks. Would the average consumer attach greater significance to the instruction requested by the plaintiff than to any other risk disclosure already contained in the warning? If the answer to this question is yes,

you must find for the plaintiff. If the answer is no, you must answer the next question.

4. If the instruction requested by the plaintiff were put onto the warning, would it significantly diminish the effectiveness of other disclosures already contained in the warning? If the answer to this question is yes, you must find for the defendant. If the answer is no, you must answer the next question.

5. Do you think the average consumer would find it worthwhile to read the entire warning already provided by the defendant in order to get the information requested by the plaintiff? If the answer to this question is yes, you must find for the plaintiff. Otherwise, you must find for the defendant.

3. *The Method of Disclosure*—A plaintiff can claim that the warning is inadequate because it does not emphasize adequately an unavoidable risk or instruction regarding product use. There are two types of claims that fall into this category.

First, the plaintiff may allege that the warning does not prioritize risks properly as it gives less significant risks greater emphasis than more significant risks. To establish that the warning is inadequate in this respect, the plaintiff must show that the risk which caused her injury is more significant than a different risk that is given greater emphasis in the warning. In other words, the plaintiff proposes a warning identical to the current warning with the exception that the two risk disclosures change places. If the change results in the greater emphasis of a more significant risk and a reduced emphasis of a less significant risk, the new format necessarily passes the risk-utility test.<sup>54</sup>

A potential problem with this claim is that there may be such a small difference between the significance of the risks in question that a minor restructuring of the warning is likely to offer little or no benefit.<sup>55</sup> Consequently, it is important to ensure that the jury considers whether the proposed alteration is likely to be beneficial.

These considerations suggest that in applying the risk-utility test to this type of claim, the jury needs to answer the following questions:

---

54. See *supra* notes 37–38 and accompanying text.

55. Cf. Henderson & Twerski, *supra* note 1, at 308 n.180 (asserting that where “the disparity between one risk and another is not gross, it is folly to pretend that risks can be ordered by performing a risk-utility analysis for each individual harm to be avoided”).

1. The warning provided by the defendant already contains a disclosure about the risk that caused the plaintiff's injury. The warning also contains a disclosure pertaining to the risk of [\_\_\_\_]. Would the average consumer attach greater significance to the disclosure of the risk that caused the plaintiff's injury than to the disclosure pertaining to the risk of [\_\_\_\_]? If the answer to this question is yes, you must answer the following question. If the answer is no, you must find for the defendant.

2. Consider a warning identical to the warning supplied by the defendant except for one change in the format of the warning: the risk that caused the plaintiff's injury is described in the same place and manner as the disclosure pertaining to the risk of [\_\_\_\_]. The disclosure pertaining to the risk of [\_\_\_\_] is then described in the same place and manner as the disclosure pertaining to the risk that caused the plaintiff's injury. Now, if you consider this warning in its entirety, would this change in the format of the warning give the average consumer a significantly better understanding of the risks posed by the product and the need to take precautions while using it? If the answer to this question is yes, you must find for the plaintiff. If the answer is no, you must find for the defendant.

The second type of claim in which the plaintiff challenges the method of disclosure is based on the allegation that the warning does not adequately describe the risk which caused the plaintiff's injury. As the plaintiff is not challenging the way in which the warning prioritizes risks, the modification proposed by the plaintiff cannot give the risk in question greater emphasis than more significant risks described in the warning. In addition, because the plaintiff may be proposing an insignificant modification of the warning, it is important for the jury to consider whether the change offers significant benefits. These considerations suggest that the requirements of the risk-utility test would be satisfied for these cases if the jury were to answer the following questions:

1. The plaintiff proposes that the warning be modified so that it describes the risk that caused her injury in the following way: [\_\_\_\_]. Would the modification proposed by the plaintiff give the risk that caused her injury greater emphasis than other disclosures regarding more significant risks? If the answer to this question is yes, you must find for the defendant. If the answer is no, you must answer the following question.

2. Consider a warning that is identical to the warning supplied by the defendant except for the modification proposed by the plaintiff. Now, if you consider this warning in its entirety, would this change in the formatting of the warning give the average consumer a significantly better understanding of the risks posed by the product and the need to take precautions while using it? If the answer to this question is yes, you must find for the plaintiff. If the answer is no, you must find for the defendant.

4. *The Ability of Courts and Juries to Apply the Risk-Utility Test*—Henderson and Twerski, among others, have argued that the risk-utility test as applied in the warnings context often results in erroneous findings of liability.<sup>56</sup> No doubt, some courts and juries have not properly applied the risk-utility test to warning claims. These cases do not imply, however, that juries cannot properly apply the risk-utility test. Moreover, even if juries are likely to make mistakes in applying the risk-utility test, it does not follow that the causation element should be altered to fix that problem, as Henderson and Twerski propose.

Some courts have underestimated or ignored the cost (or risk) created by warnings,<sup>57</sup> so juries that applied the risk-utility test in these jurisdictions were in fact applying a one-sided test that favored liability. Any inappropriate outcomes in these cases therefore do not support the claim that properly instructed juries cannot competently apply the risk-utility test.

Of course, even if courts tell juries to consider the information cost created by warnings, it is plausible that juries will still tend to make mistakes. Each type of warning claim involves a number of distinct issues. Consequently, juries might be prone to err if they attempt to address the various issues by answering the single question of whether the warning passes the risk-utility test. But if this is true, the requirements of the risk-utility test should be reduced to jury instructions that separately address the different issues involved in a warning claim. If the risk-utility test is implemented in this way, it should not be particularly difficult for juries to evaluate the adequacy of a warning because the jury instructions involve issues that juries can competently resolve.

---

56. See *supra* notes 6–9 and accompanying text.

57. Cf. *supra* note 44.

Most of the issues contained in the jury instructions described earlier involve consideration of the average consumer. All jurors typically will have extensive personal experience as consumers, so collectively they should be competent to pass judgment on consumer issues.<sup>58</sup> For example, the jury should have a good feel for whether the risk is commonly known in the community or otherwise sufficiently obvious to the average consumer. The jury should also be able to assess whether the disclosure is likely to enhance the average consumer's understanding of product risk, and whether alterations in the warning enhance or undermine the effectiveness of its message.<sup>59</sup>

Indeed, if we consider the issues that commonly arise in other cases, it is hard to understand why we should be particularly concerned about the jury's ability to evaluate product warnings. Other kinds of cases involving the disclosure of information require the jury to resolve issues similar to those involved in warning cases.<sup>60</sup> Ordinary negligence actions also involve issues that are at least as difficult as those involved in warning cases.<sup>61</sup>

---

58. Cf. Mark Geistfeld, *Placing A Price on Pain and Suffering: A Method for Helping Juries Determine Tort Damages for Nonmonetary Injuries*, 83 CAL. L. REV. 773, 839-40 (1995) (arguing that juries give more reliable responses to consumer issues than do surveys based on the responses of a large number of lay individuals).

59. Howard Latin has argued that the lack of scientific data and the absence of industry standards prevents courts and juries from competently evaluating whether a warning contains too much information, leading to information "overload" that renders consumers unable to remember everything disclosed in the warning. See Latin, *supra* note 6, at 1284. The jury instructions I have proposed do not focus on this aspect of the cost created by warnings, however. Instead, the instructions rely on reading costs and the way in which the plaintiff's proposed modification of the warning affects the average consumer's understanding of other disclosures in the warning by altering their emphasis.

60. Questions of disclosure arise in cases involving fraud, informed consent to medical procedures, and communications governed by the federal securities laws. In fraud cases, the plaintiff must show that the defendant's misrepresentation pertained to a material fact. A fact is material "when a reasonable man would attach importance to its existence or nonexistence in determining his choice of action in the transaction in question." RESTATEMENT (SECOND) OF TORTS § 538(2)(a) (1977). Similarly, the doctrine of informed consent imposes a duty on physicians to disclose to the patient the material risks of a proposed treatment. A risk is material "when a reasonable person, in what the physician knows or should know to be the patient's position, would be likely to attach significance to the risk or cluster of risks in deciding whether or not to forego the proposed therapy." *Canterbury v. Spence*, 464 F.2d 772, 787 (D.C. Cir. 1972) (quoting John R. Waltz & Thomas W. Scheuneman, *Informed Consent to Therapy*, 64 NW. U. L. REV. 628, 640). Finally, in cases brought under the federal securities law, plaintiffs must show that the nondisclosure is material. As applied to nondisclosures in proxy statements, for example, "[a]n omitted fact is material if there is a substantial likelihood that a reasonable shareholder would consider it important in deciding how to vote." *TSC Indus. v. Northway, Inc.*, 426 U.S. 438, 449 (1976).

61. Consider the factors a jury must consider in deciding whether the defendant was negligent:

Given the difficult technical issues that arise in design-defect litigation (Should the gas tank be located on the side or rear of a pickup truck?), it is hard to understand why the *Restatement (Third)* Draft asserts that the risk-utility test "is more difficult to apply in the warnings context" than in the context of product design.<sup>62</sup>

These observations do not show that the jury can competently apply the risk-utility test when evaluating product warnings, but they do suggest that any problem in this regard is not limited to warning cases. If such a problem exists—and the analysis here does not support that conclusion—then it stems from the difficult issues raised by the underlying liability standard. Consequently, the appropriate solution is to replace the unworkable liability standard with simple rules that are easy to apply.<sup>63</sup> Modifying the causation element, as Henderson and Twerski propose,<sup>64</sup> is not an acceptable solution because it bears no logical relationship to the underlying problem. There is no reason to expect that a more stringent causation standard tends to eliminate liability only in those cases where it is most appropriate to do so. Indeed, an analysis of the causation element shows why it would be unsatisfactory to modify the causation element in order to address problems with the underlying liability standard.

### III. THE ROLE OF CAUSATION

As is true in other tort actions, the plaintiff must show that the defendant's tortious conduct—the sale of a product with an inadequate warning—caused the injury. Three different approaches are available to implement this requirement. One approach relies upon an objective standard and requires the

---

(a) the social value which the law attaches to the interest which is to be advanced or protected by the conduct;

(b) the extent of the chance that this interest will be advanced or protected by the particular course of conduct;

(c) the extent of the chance that such interest can be adequately advanced or protected by another and less dangerous course of conduct.

RESTATEMENT (SECOND) OF TORTS § 292 (1965).

62. Tentative Draft No. 2, *supra* note 10, § 2 cmt. h.

63. For an argument along these lines, see Richard A. Epstein, *The Risks of Risk/Utility*, 48 OHIO ST. L.J. 469 (1987).

64. See *supra* notes 6–9 and accompanying text.

plaintiff to show that a reasonable person, upon reading the adequate warning, would have acted to avoid the injury suffered by the plaintiff. This type of approach is commonly used in medical malpractice actions involving informed consent.<sup>65</sup> A second approach relies upon a subjective standard: The inquiry is whether the plaintiff, upon reading the adequate warning, would have acted in a manner that would have avoided the injury. This type of approach is commonly used in tort actions involving fraud.<sup>66</sup> A third approach presumes causation once the plaintiff has shown that the warning was defective because it did not disclose adequately the risk that caused the injury. Although a number of courts have adopted this approach for failure-to-warn claims, outside of the warnings context tort law eliminates the plaintiff's burden of proving causation only in a few special situations.<sup>67</sup>

The *Restatement (Third)* Draft rejects the third approach,<sup>68</sup> reasoning that "[t]here are no significant differences in the general concept of causation as applied in products liability cases and causation in cases based on negligence."<sup>69</sup> Whatever the merits of this position, it does not reflect the approach to causation that most courts have adopted.<sup>70</sup> It does not follow, however, that the *Restatement (Third)* Draft relies upon the wrong approach to causation, as the appropriate approach is the one that best furthers the purpose of this form of tort liability. There are rationales for tort liability that justify elimination of the presumption of causation, but if the purpose of the warning doctrine is to give sellers an incentive to disclose adequate product warnings, the Draft adopts the wrong approach. Instead, the approach most likely to lead to the disclosure of the optimal amount of risk-related information is to presume causation once the plaintiff has shown the warning did not disclose adequately the risk that caused her injury.

---

65. See W. PAGE KEETON ET AL., PROSSER AND KEETON ON TORTS § 32, at 191 (5th ed. 1984) (noting that "most courts have adopted an objective standard of causation: whether a reasonable patient in the plaintiff's position would have withheld consent to the treatment or procedure had the material risks been disclosed").

66. "[T]he person deceived is not held to the standard of precaution, or of minimum knowledge, or of intelligent judgment, of the hypothetical reasonable man . . ." *Id.* § 108, at 751.

67. See *id.* § 41, at 270-71 (describing situation in which liability is found against multiple defendants when it is clear that one of them is guilty, even if it is not clear which one).

68. See *supra* note 10 and accompanying text.

69. Tentative Draft No. 2, *supra* note 10, § 10 cmt. a.

70. See *supra* note 7 and accompanying text.

### A. *The Objective Standard*

The way in which the objective standard of causation affects the plaintiff's ability to recover depends upon the type of warning claim. First, consider cases involving the disclosure of unavoidable risks such as allergic reactions. As all users of the product necessarily are exposed to these risks, the plaintiff could avoid being injured by such a risk only if she would not have purchased the product upon being warned of the risk. Thus, to satisfy the objective standard of causation, the plaintiff must show that the average consumer, upon reading the warning requested by the plaintiff, would have decided not to purchase the product. The plaintiff will be unable to satisfy this burden in all but the most extreme cases.

Suppose the disclosure requested by the plaintiff would increase the average consumer's estimate of the cost of the product by ten percent. A ten percent increase in the cost of a product after the disclosure is analytically equivalent to a ten percent increase in the price of an otherwise identical product that does not pose the risk in question.<sup>71</sup> Clearly, this disclosure is material to the average consumer, yet it is doubtful the plaintiff could show that the average consumer would have decided not to purchase the product following the disclosure. How many products are there for which a ten percent increase in price would cause the average consumer to forego purchasing the product? Indeed, if the typical consumer would choose not to purchase the product after disclosure, then the disclosure likely would drive the product off the market. Although this may be true for some extreme cases (for example, disclosures pertaining to the health risks of asbestos), in general the disclosure of unavoidable risks is unlikely to change the average consumer's decision of whether to purchase the product.

For most unavoidable risks, then, the plaintiff will not be able to satisfy the objective standard of causation by showing that the disclosure would have resulted in the average consumer avoiding the injury by choosing not to purchase the product. This outcome is problematic. After all, if the price of the product increases by ten percent, total demand for the product ordinarily

---

71. In both cases, the net benefit of the product remains the same to the consumer, so the consumer would view each product as being equivalent.



will decline. Within the market as a whole, some consumers will choose not to purchase the product following the disclosure. The question is, which ones?

Because this question cannot be resolved satisfactorily by asking how the average consumer would respond to the disclosure, it might seem that a better approach is to ask what a reasonable person in the plaintiff's position would have done following disclosure. This approach would enable the plaintiff to recover if she can prove that she has the characteristics of a marginal consumer—that is, a consumer whose decision about whether to purchase the product is sensitive to a price increase of ten percent. The problem with this approach is that the plaintiff cannot show that she has the characteristics of the marginal consumer. Consumers decide what products to buy based upon the intensity of their preferences for the product, subject to the constraint imposed by the product price and the consumer's income or wealth.<sup>72</sup> Price, as we have found, can resolve the causation issue only in the most extreme cases. Income or wealth are not relevant as they only influence demand; they do not determine whether an individual is a marginal consumer.<sup>73</sup> The determinant of whether someone is a marginal consumer depends, rather, upon the intensity of that person's preferences for the product. The less intense someone's preferences—that is, the less utility or benefit a person derives from the product—the more likely the person will decide not to buy the product after a price increase. The plaintiff ordinarily will be unable to show that she has the preferences of the marginal consumer, however, because the intensity of consumer preferences usually is not observable and thus not provable in court.

Economic theory has little to say about how we can determine the intensity of an individual's preferences: "Unless we provide our consumer with a questionnaire or otherwise directly inquire as to her preferences, the only signs we will see of her preferences are the choices she makes."<sup>74</sup> The choices that the plaintiff

---

72. See DAVID M. KREPS, A COURSE IN MICROECONOMIC THEORY 38 (1990) (stating that the consumer's objective is choosing "the consumption bundle  $x$  that is best according to preferences, subject to the constraint that total cost of  $x$  is no greater than the consumer's income").

73. Some rich people, for example, may decide not to purchase the product following a 10% price increase because they do not get enough benefit out of the product. Similarly, poor people who get a great deal of use from the product would still buy it even if its price increased by 10%.

74. KREPS, *supra* note 72, at 26.

has made previously with respect to the product will typically be of little help in resolving a counterfactual inquiry into how she would have acted if the product price had been increased by ten percent. The only proof that remains, then, is the plaintiff's testimony concerning her preferences for the product. There is nothing objective about an approach to causation that depends entirely on the plaintiff's testimony concerning her unobservable preferences.

As there is no objectively verifiable evidence whether the plaintiff is a marginal consumer, the only way the plaintiff can satisfy the objective standard of causation is to show that the average consumer would not have purchased the product upon being warned of the risk that caused the plaintiff's injury. Consequently, the plaintiff will not be able to recover except for the most egregious cases involving risk disclosures that would drive the product off the market. Plaintiffs will also confront this problem when they claim the warning is inadequate because it does not emphasize properly unavoidable risks that were already disclosed in the warning. Thus, if courts were to adopt the objective standard of causation, it is likely that plaintiffs would not prevail for most claims involving the disclosure of unavoidable product risks.

By contrast, the objective standard of causation ordinarily will present no obstacle to recovery when the plaintiff claims the warning does not adequately disclose instructions regarding product use. To show that the warning should contain a disclosure regarding product use, the plaintiff must show that the average consumer would find it worthwhile to take the precaution but is not sufficiently aware of that need.<sup>75</sup> Hence, by establishing that the disclosure is material, the plaintiff also demonstrates that the average consumer would have taken the precaution—and avoided the injury—had the warning adequately disclosed instructions regarding the precaution in question.

### *B. The Subjective Standard*

For warning claims involving unavoidable risks, the same problem that plagues the objective standard also undermines

---

75. See *supra* Part II.C.3.

the subjective standard for establishing causation. To determine whether a particular individual would decide not to purchase the product after a price increase requires some proof that the individual has the characteristics of a marginal consumer. For most disclosures of unavoidable risks, no evidence would establish this fact other than the plaintiff's testimony that she would not have purchased the product had she known of the risk in question.

Making the liability determination turn on the plaintiff's testimony is problematic for a number of reasons. As the plaintiff is testifying about her own, unobservable preferences for the product in question, there is no way to tell whether the plaintiff is lying. Given the obviously self-serving nature of the plaintiff's testimony, juries typically will have no basis for deciding whether the plaintiff is telling the truth. The jury accordingly has virtually unfettered discretion to decide whether the plaintiff should recover. The possibility that jurors would make their decision by relying upon extralegal factors such as gender, race, socioeconomic status, or physical appearance is a significant concern. Studies have shown that such factors become more influential in jury decisionmaking when the legal standards are most ambiguous.<sup>76</sup> And even if jurors are not influenced by extralegal factors, their unfettered discretion makes it virtually impossible to rationalize any decision they do make.

To be sure, the subjective standard for determining causation is used in tort actions involving fraud, but it is much easier for juries to determine whether an individual has been duped by a fraudulent scheme than it is to determine whether someone has the preferences of a marginal consumer. In fraud cases, "people who are exceptionally gullible, superstitious, ignorant, stupid, dim-witted, or illiterate, have been allowed to recover when the defendant knew it, and deliberately took advantage of it."<sup>77</sup> These characteristics of the plaintiff are subject to proof, unlike the preferences of a marginal consumer. Moreover, the subjective standard of causation in fraud cases can be limited by facts that are also subject to proof. "The plaintiff's conduct must not be so utterly unreasonable, in the light of information apparent

---

76. See Martin F. Kaplan & Charles E. Miller, *Group Decision Making and Normative Versus Informational Influence: Effects of Type of Issue and Assigned Decision Rule*, 53 J. PERSONALITY & SOC. PSYCHOL. 306, 310 (1987) (describing study showing that mock juror discussions regarding punitive damages are more likely to involve normative, value-laden judgments than references to the evidence presented at trial).

77. KEETON ET AL., *supra* note 65, § 108, at 751.

to him, that the law may properly say that his loss is his own responsibility."<sup>78</sup> The information available to the plaintiff in a fraud case can be established by credible evidence. For example, often there is evidence, such as facts that were observed by the plaintiff, showing that the plaintiff could not have been fooled by the misrepresentation unless he closed his eyes to the truth. Hence, even if the plaintiff testifies otherwise, the court or jury is not compelled to believe him. In addition, if the plaintiff is of normal intelligence, experience, and education, then his testimony about relying upon the misrepresentation can be disregarded if the jury concludes that a person with similar characteristics would recognize the falsity of the representation. By contrast, the concept of the marginal consumer does not depend upon observable traits such as intelligence, experience, or education that can be compared to the plaintiff's traits, so the jury has no basis to reject the plaintiff's testimony on the ground that he has the characteristics of a consumer who would have acted differently.

Thus, as compared to the objective standard for establishing causation in warning cases, the subjective standard is unlikely to ease the plaintiff's burden of proof if courts require that plaintiffs satisfy this standard with credible evidence. If, however, courts do not require such evidence—that is, if the plaintiff can prove causation merely by testifying that he would not have purchased the product had he known about the risk—then in effect the courts are doing nothing other than presuming causation. Hence, for warning claims involving unavoidable risks, the only true choice for the causation standard is between the objective standard and the standard that presumes causation.

For warning claims that involve instructions regarding product use, the standard of causation, once again, has a different effect. Although the average consumer would use the product as instructed, the plaintiff might not. The defendant can offer evidence regarding the plaintiff's tendency to follow warnings, and this evidence might enable the jury to evaluate the veracity of the plaintiff's testimony that he would have followed the instructions had they been given to him. Thus, as compared to the objective standard, the subjective standard makes it harder for the plaintiff to recover in these cases.

---

78. *Id.* at 750. The ensuing discussion about the limits to the subjective standard in fraud cases is drawn from this source.

### C. *The Presumption of Causation*

For warning cases involving unavoidable risks, the choice among causation standards reduces to a choice between the objective standard and a presumption of causation. The objective standard would bar the plaintiff from recovery except for the most egregious cases involving risk disclosures that would drive the product off the market. A rebuttable presumption of causation, by contrast, would enable the plaintiff to recover merely by showing that the warning inadequately disclosed the risk that caused her injury. The choice between these two approaches to causation depends, then, upon the desirability of holding product sellers liable for risk disclosures that are material but not significant enough to drive the product off the market.

If products liability law must be justified in terms of corrective justice, the presumption of causation is difficult to defend. Although there are different formulations of the theory, corrective justice involves the “undoing, by means of an award of damages, the wrong suffered by the plaintiff at the hands of the defendant.”<sup>79</sup> Hence, unless the plaintiff can establish causation—the element that links her injury to the defendant’s wrongful conduct—she has not established a right grounded in corrective justice to receive compensation from the defendant.<sup>80</sup>

It might seem that the *Restatement (Third) Draft* endorses a corrective-justice conception of products liability. The Draft refers to the “fairness” of its proposed liability rules,<sup>81</sup> and corrective justice is the “simplest and most venerable justification for tort liability.”<sup>82</sup> Yet a corrective-justice rationale for products liability is difficult to understand. Indeed, many tort scholars, including corrective-justice theorists, do not believe that this rationale is appropriate for cases in which the plaintiff and defendant are in a contractual relationship.<sup>83</sup> The reason is

79. IZHAK ENGLAND, *THE PHILOSOPHY OF TORT LAW* 12 (1993).

80. See, e.g., Ernest Weinrib, *Understanding Tort Law*, 23 VAL. U. L. REV. 485, 511 (1989) (“[T]he justifications applicable to the plaintiff’s claim must treat the causation as essential to their normative force.”).

81. Tentative Draft No. 2, *supra* note 10, § 2 cmt. a (describing why it is fair to require “individual users and consumers to bear appropriate responsibility for proper product use”).

82. 2 AMERICAN LAW INSTITUTE, *supra* note 11, at 24.

83. See, e.g., JULES L. COLEMAN, *RISKS AND WRONGS* 407–29 (1992) (arguing that while corrective justice best explains tort law, products liability rules, like contract law,

that the injury is caused by a good or service the injurer has sold to the victim. The cost of tort liability faced by the seller therefore is passed onto buyers in the form of higher prices. Because potential victims pay for and receive the benefits of tort liability, their preference for tort rules that maximize the net benefit of tort liability should govern. Consequently, many scholars agree that tort rules ought to promote efficiency for cases in which the injurer and victim are in a contractual relationship.<sup>84</sup>

The *Restatement (Third) Draft* does recognize the need to justify its liability rules with efficiency considerations.<sup>85</sup> Indeed, the Draft indicates that efficiency considerations should dominate, at least in the context of design and warning defects, by stating that the emphasis for imposing liability on products which are defectively designed or sold without adequate warnings "is on creating incentives for manufacturers to achieve optimal levels of safety in designing and marketing products. . . . Society benefits most when the right, or optimal, amount of product safety is achieved."<sup>86</sup> This emphasis on efficiency is reflected in the liability standards proposed by the Draft, as they have the potential to remedy the market failure in the provision of product safety and risk-related information.<sup>87</sup>

There are good reasons, then, for concluding that the choice of causation standard should depend upon efficiency considerations. If tort liability is to give product sellers an incentive to disclose risk-related information to consumers, the cause of action must be formulated so that the seller would find it more cost-effective to disclose rather than to incur liability costs stemming from the nondisclosure. The presumption of causation is needed to accomplish this result.

---

should promote efficiency); George Fletcher, *Fairness and Utility in Tort Theory*, 85 HARV. L. REV. 537, 544 & n.24 (1972) (noting that strict liability in the area of defective products has the added attribute of insurance, thereby complicating the fairness issue). *But see* ERNEST WEINRIB, *THE IDEA OF PRIVATE LAW* 20 (1995) (claiming that corrective justice applies to the entire domain of private law—tort, contract, and unjust enrichment).

84. *See, e.g.*, 1 AMERICAN LAW INST., *supra* note 11, at 30–32 (1991) (asserting that "the generally prevailing scholarly theory about the appropriate role of tort law" is based on the efficient control of accident costs); George L. Priest, *Products Liability Law and the Accident Rate*, in *LIABILITY: PERSPECTIVES AND POLICY* 184, 185 (Robert E. Litan & Clifford Winston eds., 1988) ("Virtually all courts and commentators have embraced the goals of accident reduction and insurance that correspond to the principal economic effects of the law.").

85. *See, e.g.*, Tentative Draft No. 2, *supra* note 10, § 2 cmt. a.

86. *Id.*

87. *See supra* Parts I.B, II.B.

Suppose consumers are unaware of a two in 100,000 risk of suffering \$50,000 in damages. As the expected value of this injury is one dollar, if the seller discloses and consumers pay for the injury, the expected cost of the product to consumers increases by one dollar. Suppose that this one dollar increase in cost for consumers is equivalent to a ten percent increase in the price of an otherwise identical product that does not pose the risk in question. Clearly, the risk is material and should be disclosed in the warning. But a ten percent increase in price is unlikely to cause the average consumer to forego purchasing the product, so the objective standard of causation accordingly would bar the plaintiff from recovery. As a result, the seller would not incur any liability costs and has no incentive to disclose. The objective standard therefore leads to an inefficient outcome. Indeed, even if the seller were liable for one-half of the injuries, it still would not have an incentive to disclose. By disclosing, the seller raises the average consumer's estimate of the cost of the product by one dollar. By not disclosing and paying for one-half of the injuries, the seller incurs an expected liability cost per product of fifty cents (as the expected liability pertains to a one in 100,000 risk of paying \$50,000 in damages). The seller is better off by not disclosing, since doing so increases product price by fifty cents as opposed to an equivalent increase of one dollar resulting from the disclosure. Thus, in order for the seller to have an incentive to disclose, it must be liable for all injuries caused by the nondisclosed risk. In that case, the seller's expected liability costs stemming from nondisclosure at minimum equal one dollar per product (the two in 100,000 risk of paying \$50,000 in damages), and is likely to exceed one dollar due to litigation costs. The seller therefore has an incentive to disclose, because the cost of nondisclosure is equal to or greater than the cost of disclosure (the price increase of one dollar that consumers would infer from the disclosure). The seller must be liable for all injuries caused by the nondisclosed risk, then, if it is to have a sufficient incentive to disclose this unavoidable risk. The only way to accomplish this result is to presume causation.<sup>88</sup>

---

88. This example is of limited generality because it assumes consumers are completely unaware of the nondisclosed risk and always read warnings. If consumers are somewhat aware of the risk, efficient outcomes could occur even though the seller does not pay for every injury caused by the nondisclosed risk. For example, if the average consumer thinks the risk is one in 100,000 when in fact it is two in 100,000, then the seller would have to pay for only one-half of the injuries caused by the nondisclosed risk in order to have an incentive to disclose. This same outcome occurs

It should not be surprising that causation must be presumed if product sellers are to have a sufficient incentive to disclose risk-related information. Causation or reliance is presumed in actions involving the adequacy of disclosures governed by the federal securities law,<sup>89</sup> and the underlying disclosure problem is similar in the two settings. Just as potential investors need information about a company in order to properly price its securities, consumers need information about product risks to make good decisions about the net benefit of a product. The purpose of mandated disclosure, then, is the same in the two contexts: to help investors (consumers) accurately price the security (product).<sup>90</sup> Moreover, like the products liability setting, a plaintiff in securities actions would face a very difficult burden in establishing reliance on the basis of price effects alone. This difficulty makes it necessary to presume causation from the fact of a material misstatement or omission.<sup>91</sup>

Because the presumption of causation can be rebutted by the defendant, the element of causation might still limit liability in a salutary way. Although a warning must disclose significant risks of which the *average* consumer is not well informed, the defendant can rebut the presumption of causation by showing that the *plaintiff* knew about the nondisclosed risk.<sup>92</sup> Limiting liability in this manner may be desirable, since if the plaintiff

---

if all consumers are completely unaware of the risk but only one-half of them read warnings. Nevertheless, the seller totally escapes liability under the objective standard, so the presumption of causation remains as the only defensible approach that would give the seller an incentive to disclose.

89. See, e.g., *Basic Inc. v. Levinson*, 485 U.S. 224, 247 (1988) (stating that in an action arising under SEC Rule 10b-5, 17 C.F.R. § 240.10b-5 (1987), "an investor's reliance on any public material misrepresentations" may be presumed); *Affiliated Ute Citizens v. United States*, 406 U.S. 128, 153 (1972) (holding that to establish fraud under § 10(b) of the Securities Exchange Act, 15 U.S.C. § 78j(b) (1994), "positive proof of reliance is not a prerequisite to recovery. All that is necessary is that the facts withheld be material . . ."); *Mills v. Electric Auto-Lite Co.*, 396 U.S. 375, 384-85 (1970) (explaining that a stockholder can challenge successfully the results of a stockholder vote by demonstrating a material misstatement or omission in proxy materials because causation is presumed from materiality).

90. Cf. *Marcel Kahan, Securities Laws and the Social Costs of "Inaccurate" Stock Prices*, 41 DUKE L.J. 977, 979 (1992) (explaining that the "one principal goal of securities laws [is] to create stock markets in which the market price of a stock corresponds to its fundamental value").

91. See *Basic Inc.*, 485 U.S. at 245 (opining that requiring a plaintiff to "show a speculative state of facts, i.e., how he would have acted if omitted material information had been disclosed, or if the misrepresentation had not been made, would place an unnecessarily unrealistic evidentiary burden on the Rule 10b-5 plaintiff who has traded on an impersonal market") (citations omitted).

92. See, e.g., *Coffman v. Keene Corp.*, 628 A.2d 710, 720-21 (N.J. 1993).



knew of the risk, it is plausible that the average consumer is also well informed of the risk.<sup>93</sup> The presumption may thus rectify any mistakes that juries make in finding that the average consumer is not well informed of the nondisclosed risk.

With respect to warning cases involving the disclosure of instructions regarding product use, the analysis, once again, is different. Suppose consumers are unaware of a two in 100,000 risk of suffering \$50,000 in damages. As the expected value of injury caused by this risk is one dollar, the warning should instruct users to take a precaution that eliminates the risk if that precaution over the product life costs users something less than one dollar. Suppose there is such a precaution that costs fifty cents to the average consumer. If the seller instructs users to take this precaution, the expected cost of the product to consumers increases by fifty cents. In this case, the seller has an incentive to disclose even if it pays for only one-half of all injuries caused by the nondisclosed risk. Liability costs would increase price by at least fifty cents per product (due to the one in 100,000 risk of paying \$50,000 in damages) whereas disclosure would increase the price of the product by fifty cents for the ordinary consumer. Sellers have an incentive to disclose even though they do not pay for all injuries caused by the nondisclosed risk, because their decision to disclose depends upon the cost of the precaution in question (fifty cents) rather than upon the risk of injury (which costs one dollar on average but is eliminated by the precaution).

As the risk of injury no longer plays a role in the seller's decision of whether to disclose, the causation standard no longer needs to ensure that the seller is liable for all injuries caused by the nondisclosed risk. Consequently, each of the approaches to causation can lead to the efficient outcome. The presumption of causation, however, is the most defensible.

The objective standard would always lead to liability in these cases, but that standard works poorly for warning cases involving unavoidable risks. The choice, then, is between the subjective standard and a rebuttable presumption. Each of these approaches is likely to lead to the same outcome in most cases. Under the subjective standard, the plaintiff almost always testifies that she would have followed the warning, so the

---

93. Limiting liability in this fashion is not likely to undermine the seller's incentive to disclose because the presumption allows for more claims than are necessary in this respect. *See supra* note 88.

defendant bears the burden of rebutting the plaintiff's testimony.<sup>94</sup> The defendant also bears the burden of rebutting the presumption of causation. Whatever evidence shows that the plaintiff would not have followed the warning therefore will tend to have the same effect under the two approaches. The subjective standard is problematic, however, because it requires self-serving and potentially speculative testimony by the plaintiff. A rebuttable presumption therefore is more desirable as it eliminates the need for such testimony.<sup>95</sup>

## CONCLUSION

The tort system has recognized previously the difficulty of establishing individualized causation for injuries caused by mass-marketed products, and it responded by creating a special rule of causation based on market share.<sup>96</sup> A similar difficulty arises in products liability cases involving inadequate warnings, although the source of the identification problem is different: the disclosure of unavoidable risks will predictably lead to a decline in the market demand for most products, but there is no good way to identify the consumers who would leave the market following disclosure. Moreover, there is no good reason for

---

94. See Jacobs, *supra* note 6, at 162-63 ("Rare indeed are cases involving the admitted failure by plaintiff to read an allegedly inadequate warning. . . . Plaintiffs invariably say that they would have read the missing or inadequate warning and that they would have heeded it as well.") (citations omitted).

95. See Reyes v. Wyeth Lab., 498 F.2d 1264, 1281 (5th Cir. 1974) (following the presumption test and noting that the victim's mother's testimony "as to what she would have done, had proper warnings been provided, would have been both speculative and self-serving"); Coffman, 628 A.2d at 719 ("The use of the presumption will be conducive to determinations of causation that are not based on extraneous, speculative considerations and unreliable or self-serving evidence.").

It might seem that the presumption of causation could be rejected on the ground that it would enable manufacturers to argue that consumers or product users always follow warnings, thereby obviating the need for a design change. Cf. Latin, *supra* note 6, at 1295 (concluding that consumers do not always read and follow warnings, so warnings should not be substitutes for design changes). The presumption of causation is based on public policy, however, rather than on the empirical premise that consumers in fact always read and follow warnings. See Coffman, 628 A.2d at 718 (grounding use of the presumption in public policy). Thus, it is not inconsistent to rely upon the presumption of causation for policy reasons while also recognizing that as an empirical matter design changes may be better than warnings because consumers do not always read and follow warnings.

96. See Tentative Draft No. 2, *supra* note 10, § 10 cmt. c (describing the proportional liability approach but taking no position on its merits).

limiting liability to this group, as the nondisclosure or misstatements in the warning adversely affect all consumers. Consequently, any attempt to require that a plaintiff prove that an inadequate product warning caused her injury is likely to result in one of two outcomes, each of which is undesirable.

When confronted with cases involving the nondisclosure of unavoidable risks, courts could apply a very lax standard that can be satisfied by the plaintiff's self-serving testimony. A lax subjective standard of this sort is very problematic, however. Such a standard gives further credence to the claim that tort liability does not depend upon well-defined standards and accordingly requires reform by legislative action.<sup>97</sup> Such an outcome would be unfortunate, as good reasons exist for doubting that the legislative process will produce good reforms.<sup>98</sup> A very lax subjective standard also undermines the rule of law. The development of strict products liability was strongly influenced by Justice Traynor's observation that the doctrine of *res ipsa loquitur* almost always led to liability no matter what proof the manufacturer offered in its defense.<sup>99</sup> Rather than undermine the rule of law, Traynor thought it more desirable to call the rule as practiced by its proper name—strict liability. So too, if the *Restatement (Third)* Draft contemplates a relaxed subjective standard for causation, then it is better to acknowledge expressly that causation is presumed for all practical purposes.

I strongly doubt that the *Restatement (Third)* Draft contemplates that courts will be unduly lax in enforcing the requirement that plaintiffs prove that an inadequate warning caused their injury. Yet a well-enforced standard of causation is also problematic. Most likely, problems of proof effectively would eliminate tort liability for the nondisclosure or ineffective disclosure of many unavoidable risks. The presumption of causation is necessary, then, if tort liability is to give product sellers a sufficient incentive to provide the type of warnings that maximize consumer welfare.

---

97. For a discussion of how the lack of well-defined standards has motivated the legislative reform of pain and suffering damages, see Geistfeld, *supra* note 58, at 776–77.

98. See Mark Geistfeld, *The Political Economy of Neocontractual Proposals for Products Liability Reform*, 72 TEX. L. REV. 803, 836–42 (1994) (describing how interest-group politics is likely to result in the enactment of inefficient legislative reforms that reduce the scope of tort liability for product-caused injuries).

99. See *Escola v. Coca Cola Bottling Co.*, 150 P.2d 436, 441 (Cal. 1944) (Traynor, J., concurring) (“It is needlessly circuitous to make negligence the basis of recovery and impose what is in reality liability without negligence.”).

Tort liability will not induce sellers to provide such warnings, however, if courts and juries do not determine properly whether a warning is inadequate. Some courts do not recognize that the amount of information disclosed in a warning should be limited by the cost created by each disclosure, such as the potential for the disclosure to detract from more significant warnings. No doubt, judicial practice in this regard is influenced by the desire to compensate an injured party. Courts may also think that the additional information will help someone else. But, the desire to help a few individuals is likely to do more harm to the entire group, because sellers must overwarn in order to avoid tort liability. By doing so, sellers create the impression that warnings are written to protect them from liability rather than to promote informed decisionmaking. But once consumers feel this way, the efficacy of warnings—their ability to reduce risk by improving consumer decisionmaking—has been significantly compromised.<sup>100</sup> Overwarning may ultimately harm consumers, then, by reducing the likelihood that individuals read or follow warnings.

The *Restatement (Third)* Draft makes substantial improvements over current practice by emphasizing the need for courts and juries to pay greater attention to the information cost of disclosure. Greater emphasis on information costs is the best way to curtail liability, as it limits the liability inquiry in the appropriate manner. It therefore is not necessary to eliminate the presumption of causation in order to reduce any overwarning that presently occurs. Moreover, without the presumption of causation, we will be confronted with the problem of warnings that do not disclose enough information.

---

100. See Latin, *supra* note 6, at 1247–48 (discussing *Temple v. Velcro USA, Inc.*, 196 Cal. Rptr. 531, 532 (Ct. App. 1983), where the plaintiffs disregarded a warning because they felt that the defendant was “just trying to protect itself”).

